As filed with the Securities and Exchange Commission on January 31, 2022.

Registration No. 333-260492

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

AMENDMENT NO. 5
TO
FORM F-1

REGISTRATION STATEMENT UNDER SECURITIES ACT OF 1933

TC BIOPHARM (HOLDINGS) PLC
(Exact name of registrant as specified in its charter)

Scotland	**8731**	**Not Applicable**
(State or other jurisdiction of incorporation or organization)	(Primary Standard Industrial Classification Code Number)	(I.R.S. Employer Identification No.)

Maxim 1, 2 Parklands Way
Holytown, Motherwell, ML1 4WR
Scotland, United Kingdom
+44 (0) 141 433 7557
(Address, including zip code, and telephone number, including area code, of Registrant's principal executive offices)

TC BioPharm (North America) Inc.
c/o Business Filings, Inc.
108 West 13th Street
Wilmington, Delaware 19801
(800) 981-7183

(Name, address, including zip code, and telephone number, including area code, of agent for service)

Copy of all communications including communications sent to agent for service, should be sent to:

Andrew D. Hudders, Esq. **Golenbock Eiseman Assor Bell & Peskoe LLP** **711 Third Avenue – 17th Floor** **New York, NY 10017** **(212) 907-7300** **ahudders@golenbock.com**	**Joseph Lucosky, Esq.** **Lucosky Brookman LLP** **101 Wood Avenue South** **5th Floor** **Woodbridge, NJ 08830** **(732) 395-4402** **jlucosky@lucbro.com**

Approximate date of commencement of proposed sale to the public: As soon as practicable after this Registration Statement becomes effective.

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, check the following box. [X]

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. [ ]

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. [ ]

If this Form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. [ ]

Indicate by check mark whether the registrant is an emerging growth company.

Emerging Growth Company [X]

If an emerging growth company that prepares its financial statements in accordance with U.S. GAAP, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards† provided pursuant to Section 7(a)(2)(B) of the Securities Act. [ ]

† The term "new or revised financial accounting standard" refers to any update issued by the Financial Accounting Standards Board to its Accounting Standards Codification after April 5, 2012.

CALCULATION OF REGISTRATION FEE

Title of each class of securities to be registered		Proposed maximum aggregate offering price (1)		Amount of Registration Fee
Ordinary shares, £0.01 par value (2)	$	25,240,471	$	2,339.79
Warrants to purchase ordinary shares (2) (3)	$	59,529	$	5.52
Ordinary shares, £0.01 par value, issuable upon exercise of the warrants to purchase ordinary shares, at 125% of the public offering price (2) (4)	$	39,438,235	$	3,655.92
Ordinary shares, £0.01 par value, issuable to selling shareholders (2) (5)	$	19,653,994	$	1,821.93
Warrants to purchase ordinary shares (2) (3) (5)	$	46,354	$	4.30
Ordinary shares, £0.01 par value, issuable upon exercise of the warrants to purchase ordinary shares, issuable to selling shareholders at 125% of the public- offering price (2) (4) (5)	$	30,709,366	$	2,846.76
Representative's warrants for ordinary shares (2) (3)		- nil		-nil
Ordinary shares, £0.01 par value, issuable upon exercise of the representative's warrants at 100% of the public offering price (2) (4)	$	1,265,000	$	117.27
Total fee due			$	10,791.48
Amount of fee previously paid			$	12,973.31
Additional fee paid with Amendment No. 5			$	-nil

(1) Estimated solely for purposes of calculating the amount of the registration fee pursuant to Rule 457(o) under the Securities Act of 1933, as amended, or the Securities Act. Includes the offering price of ordinary shares represented by American Depositary Shares, or ADSs, that the Underwriters have the option to purchase to cover over-allotments, if any.

(2) These ordinary shares are represented by ADSs, each of which represents one ordinary share of the registrant. ADSs issuable upon deposit of the ordinary shares registered hereby are being registered pursuant to a separate registration statement on Form F-6 (File No. 333-262149). In addition, pursuant to Rule 416 under the Securities Act of 1933, as amended ("Securities Act"), the securities being registered hereunder include such indeterminate number of ordinary shares as may be issuable with respect to the ordinary shares being registered hereunder as a result of stock splits, stock dividends or similar anti-dilutive transactions.

(3) The registration fee pursuant to Rule 457(g) under the Securities Act is paid with the ordinary shares as the warrants are only sold in tandem with an ordinary share.

(4) Estimated solely for the purpose of calculating the registration fee pursuant to Rule 457(g) under the Securities Act.

(5) These ordinary shares are represented by ADSs, each of which represents one ordinary share of the registrant. ADSs issuable upon deposit of the ordinary shares registered hereby are being registered pursuant to a separate registration statement on Form F-6 (File No. 333-262149). In addition, pursuant to Rule 416 under the Securities Act of 1933, as amended ("Securities Act"), the securities being registered hereunder include such indeterminate number of ordinary shares as may be issuable with respect to the ordinary shares being registered hereunder as a result of stock splits, stock dividends or similar anti-dilutive transactions. Includes ADSs that may be issued from time to time in payment of interest. Represents shares of the ADSs being offered for distribution by the security holders named in this registration statement.

The Registrant hereby amends this registration statement on such date or dates as may be necessary to delay its effective date until the Registrant shall file a further amendment which specifically states that this registration statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act or until the registration statement shall become effective on such date as the Securities and Exchange Commission, acting pursuant to said Section 8(a), may determine.

EXPLANATORY NOTE

This registration statement contains two forms of prospectus, as set forth below.

- *Public Offering Prospectus.* A prospectus to be used for the initial public offering by the registrant of ADSs (the "Public Offering Prospectus"), through the underwriter named on the cover page of the Public Offering Prospectus.

- *Security Holder Prospectus*. A prospectus to be used in connection with the potential distribution by the Security Holders of American Depositary Shares, or ADSs and Warrants, obtained on conversion of certain loan principal and interest. (the "Security Holder Prospectus").

The Public Offering Prospectus and the Security Holder Prospectus will be identical in all respects except for the following principal points:

- they contain different front covers;
- they contain different tables of contents;
- the Prospectus Summary is deleted from the Security Holder Prospectus;
- they contain different Use of Proceeds sections;
- the "Dilution" section in the Public Offering Prospectus is deleted from the Security Holder Prospectus;
- an "ADSs and Warrants Registered for Distribution" section is included in the Security Holder Prospectus;
- the "Underwriting" section from the Public Offering Prospectus is deleted and replaced by a "Plan of Distribution" section in the Security Holder Prospectus;
- The "Legal Matters" section in the Security Holder Prospectus deletes the reference to counsel for the underwriter; and
- they contain different back covers.

The registrant has included in this registration statement, after the financial statements, a set of alternate pages to reflect the foregoing differences between the Public Offering Prospectus and the Security Holder Prospectus.

The information in this preliminary prospectus is not complete and may be changed. These securities may not be sold until the registration statement filed with the Securities and Exchange Commission is effective. This preliminary prospectus is not an offer to sell nor does it seek an offer to buy these securities in any jurisdiction where the offer or sale is not permitted.

SUBJECT TO COMPLETION DATED JANUARY 31, 2022

PRELIMINARY PROSPECTUS

5,176,468 AMERICAN DEPOSITARY SHARES

REPRESENTING 5,176,468 ORDINARY SHARES

WARRANTS TO PURCHASE 6,470,585 AMERICAN DEPOSITARY SHARES

TC BIOPHARM (HOLDINGS) PLC

$22,000,000

This is the initial public offering of American Depositary Shares, or ADSs, representing ordinary shares, of TC BioPharm (Holdings) plc, and warrants to purchase ADSs, or Warrants. Each ADS represents one ordinary share, and each Warrant represents the right to purchase one ADS. We are offering an aggregate of 5,176,468 ADSs and 6,470,585 Warrants. The ADSs and Warrants will be separately issued but the ADSs and Warrants will be sold to purchasers only in a combination of one ADS and 1.25 Warrants, for a combined aggregate offering price of $4.25. Warrants will be issued only for the purchase of whole ADSs, and will not be issued to purchase fractional ADSs. Only whole ADSs and Warrants will trade. Each Warrant will be immediately exercisable for one ordinary share, that will then be deposited with the custodian for the issuance of corresponding ADS at an exercise price of US$5.30 per ADS and expire five years after the issuance date.

Prior to this offering, there has been no public market for our ADSs or Warrants. We have applied to list our ADSs and Warrants on The Nasdaq Global Market under the symbols “TCBP” and “TCBPW”, respectively. No assurance can be given that our application will be approved or that an active trading market for the ADSs or Warrants will develop.

We are a “foreign private issuer,” and an “emerging growth company” each as defined under the federal securities laws, and, as such, we will be subject to reduced public company reporting requirements. See the section entitled “Prospectus Summary—Implications of Being an Emerging Growth Company and a Foreign Private Issuer” for additional information.

Investing in our securities involves a high degree of risk. Before buying any ADSs and Warrants, you should carefully read the discussion of material risks of investing in the ADSs, Warrants and the company. See “Risk Factors” beginning on page 13 for a discussion of information that should be considered in connection with an investment in our securities.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

	Per ADS	Per 1.25 Warrants	Total
Initial public offering price	$ 4.24	$ 0.01	$ 22,000,000
Underwriting discounts and commissions (1)	$ 0.3392	$ 0.0008	$ 1,760,000
Proceeds to us (before expenses) (2)	$ 3.9008	$ 0.0092	$ 20,240,000

(1) In addition, we have agreed to reimburse the underwriters for certain expenses not exceeding $150,000 and to issue warrants to the Representative, or the Representative’s Warrants, to purchase a number of ADSs equal to 5% of the ADSs sold in this public offering. The Representative’s Warrants will be exercisable at an exercise price per ADS equal to 100% of the public offering price during the period commencing six (6) months from the effective date of this registration statement and ending five years after the effective date of this registration statement. See the section titled “Underwriting” beginning on page 136 of this prospectus for additional disclosure regarding underwriter compensation and offering expenses.

(2) Does not include proceeds from the exercise of the Warrants, if any.

We have granted the underwriters an option to purchase from us, at the public offering price, up to 776,470 additional ADSs and 970,588 Warrants, less the underwriting discounts and commissions, within 45 days from the date of this prospectus to cover over-allotments, if any. If the underwriters exercise the option in full, the total underwriting discounts and commissions payable will be $2,024,000 and the total proceeds to us, before expenses, will be $23,276,000.

The underwriters expect to deliver the ADSs and Warrants to purchasers in the offering on or about _____________, 2022.

EF HUTTON
division of Benchmark Investments, LLC

The date of this prospectus is ______ , 2022

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Neither we nor the underwriters have authorized anyone to provide information different from that contained in this prospectus, any amendment or supplement to this prospectus or in any free writing prospectus prepared by us or on our behalf. Neither we nor the underwriters take any responsibility for, and can provide no assurance as to the reliability of, any information other than the information in this prospectus, any amendment or supplement to this prospectus, and any free writing prospectus prepared by us or on our behalf. Neither the delivery of this prospectus nor the sale of the ADSs and Warrants means that information contained in this prospectus is correct after the date of this prospectus. This prospectus is not an offer to sell or the solicitation of an offer to buy the ADSs and Warrants in any circumstances under which such offer or solicitation is unlawful.

You should rely only on the information contained in this prospectus and any free writing prospectus prepared by or on behalf of us or to which we have referred you. We or the underwriters have not authorized anyone to provide you with information that is different. We and the underwriters are offering to sell the ADSs and Warrants, and seeking offers to buy the ADSs and Warrants, only in jurisdictions where offers and sales are permitted. The information in this prospectus is accurate only as of the date of this prospectus, regardless of the time of delivery of this prospectus or any sale of the ADSs and Warrants.

For investors outside of the United States: Neither we nor the underwriters have done anything that would permit this offering or possession or distribution of this prospectus in any jurisdiction where action for that purpose is required, other than in the United States. Persons outside the United States who come into possession of this prospectus must inform themselves about and observe any restrictions relating to this offering and the distribution of this prospectus outside the United States.

ABOUT THIS PROSPECTUS

Unless the context requires otherwise, in this prospectus TC BioPharm (Holdings) plc (formerly TC BioPharm (Holdings) Limited, which was re-registered as a public limited company on January 10, 2022) and its subsidiaries (“Subsidiar(y/ies)”), and TC BioPharm Limited (our principal trading subsidiary) shall collectively be referred to as “TCB,” “the Company,” “the Group”, “we,” “us,” and “our” unless otherwise noted.

Prior to the re-registration process to qualify as a public limited company, the Company undertook a corporate reorganization pursuant to which TC BioPharm (Holdings) Limited became the group holding company. The Company in turn effected a forward split of its ordinary shares on a 10 for 1 basis (further details are included in the Corporate Reorganization section of this prospectus) and on January 10, 2022 re-registered as a public limited company in preparation for the offering.

As a result of the ten for one forward share split, all references in these financial statements and accompanying notes to units of ordinary shares or per share amounts are reflective of the forward share split for all periods presented.

The prospectus includes the audited Inception Statement of Financial Position of TC BioPharm (Holdings) Limited as at October 25, 2021.We have historically conducted our business through TC BioPharm Limited and therefore this prospectus also includes audited consolidated financial statements of TC BioPharm Limited as of and for the fiscal years ended December 31, 2019 and 2020 and the unaudited condensed consolidated financial statements of TC BioPharm Limited for the nine-month periods ended September 30, 2020 and 2021, each prepared in accordance with International Financial Reporting Standards (“IFRS”), as issued by the International Accounting

Standards Board ("IASB"). We refer to these consolidated financial statements collectively as our "annual consolidated financial statements" or "interim consolidated financial statements." None of our financial statements were prepared in accordance with U.S. GAAP. Our financial information is presented in pounds sterling. For the convenience of the reader, in this prospectus, unless otherwise indicated, translations from pounds sterling into U.S. dollars were made at the rate of £1.00 to $1.3470 for our annual consolidated financial statements and the rate of £1.00 to $1.3470 for our interim consolidated financial statements, which was the noon buying rate of the Federal Reserve Bank of New York on September 30, 2021. Such U.S. dollar amounts are not necessarily indicative of the amounts of U.S. dollars that could actually have been purchased upon exchange of pounds sterling at the dates indicated. All references in this prospectus to "$" mean U.S. dollars and all references to "£" and "GBP" mean British pounds sterling. Our fiscal year begins on January 1 and ends on December 31 of the same year. All references to fiscal year 2019 relate to the year ended December 31, 2019 and fiscal year 2020 relate to the year ended December 31, 2020.

We have made rounding adjustments to reach some of the figures included in this prospectus. As a result, numerical figures shown as totals in some tables may not be an arithmetic aggregation of the figures that precede them.

This prospectus includes statistical, market and industry data and forecasts which we obtained from publicly available information and independent industry publications and reports that we believe to be reliable sources. These publicly available industry publications and reports generally state that they obtain their information from sources that they believe to be reliable, but they do not guarantee the accuracy or completeness of the information. Although we believe that these sources are reliable, we have not independently verified the information contained in such publications. In addition, assumptions and estimates of our and our industry's future performance are necessarily subject to a high degree of uncertainty and risk due to a variety of factors, including those described in "Risk Factors." These and other factors could cause our future performance to differ materially from our assumptions and estimates.

Some of our trademarks and trade names are used in this prospectus, which are intellectual property owned by the Company. This prospectus also includes trademarks, trade names, and service marks that are the property of other organizations. Solely for convenience, our trademarks and trade names referred to in this prospectus appear without the ™ symbol, but those references are not intended to indicate, in any way, that we will not assert, to the fullest extent under applicable law, our rights, or the right of the applicable licensor to these trademarks and trade names.

ENFORCEABILITY OF CIVIL LIABILITIES

TCB is a corporation organized under the laws of Scotland. Substantially all of TCB's assets and the majority of its directors and executive officers are located and reside, respectively, outside the United States. Because of the location of TCB's assets and board members, it may not be possible for investors to serve process within the United States upon TCB or those persons with respect to matters arising under the United States federal securities laws or to enforce against TCB or persons located outside the United States judgments of United States courts asserted under the civil liability provisions of the United States federal securities laws.

TCB understands that there is doubt as to the enforceability in Scotland and the United Kingdom, in original actions or in actions for enforcement of judgments of United States courts, of civil liabilities predicated solely upon the federal securities laws of the United States insofar as they are fines or penalties. In addition, awards of punitive damages in actions brought in the United States or elsewhere may be unenforceable in Scotland and the United Kingdom by reason of being a penalty.

TC BioPharm (North America) Inc., a Delaware corporation, with a registered office at Business Filings, Inc. 108 West 13th Street, Wilmington, Delaware 19801, has been appointed agent to receive service of process in any action against TC BioPharm (Holdings) plc in any state or federal court in the State of New York.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

TCB discusses in this prospectus its business strategy, market opportunity, capital requirements, product introductions and development plans and the adequacy of the Company's funding. Other statements contained in this prospectus, which are not historical facts, are also forward-looking statements. TCB has tried, wherever possible, to identify forward-looking statements by terminology such as "may," "will," "could," "should," "expects," "anticipates," "intends," "plans," "believes," "seeks," "estimates" and other comparable terminology.

TCB cautions investors that any forward-looking statements presented in this prospectus, or that TCB may make orally or in writing from time to time, are based on the beliefs of, assumptions made by, and information currently available to, TCB. These statements are based on assumptions, and the actual outcome will be affected by known and unknown risks, trends, uncertainties and factors that are beyond its control or ability to predict. Although TCB believes that its assumptions are reasonable, they are not a guarantee of future performance, and some will inevitably prove to be incorrect. As a result, its actual future results can be expected to differ from its expectations, and those differences may be material. Accordingly, investors should use caution in relying on forward-looking statements, which are based only on known results and trends at the time they are made, to anticipate future results or trends. Certain risks are discussed in this prospectus and also from time to time in TCB's other filings with the Securities and Exchange Commission ("SEC").

This prospectus and all subsequent written and oral forward-looking statements attributable to the Company or any person acting on its behalf are expressly qualified in their entirety by the cautionary statements contained or referred to in this section. The Company does not undertake any obligation to release publicly any revisions to its forward-looking statements to reflect events or circumstances after the date of this prospectus.

PROSPECTUS SUMMARY

The following summary highlights selected information contained elsewhere in this prospectus. This summary does not contain all the information you should consider before investing in our securities. You should carefully read this prospectus in its entirety before investing in our securities, including the sections entitled "Risk Factors" and "Management's Discussion and Analysis of Financial Condition and Results of Operations" and our consolidated financial statements and related notes included elsewhere in this prospectus.

The Company

Corporate Overview

TCB based in Scotland, is a clinical-stage biopharmaceutical company focused on developing novel immunotherapy products that are based on its proprietary allogeneic gamma delta T (abbreviated as GD-T) cell platform. Harnessing the innate ability of GD-Ts has enabled TCB to develop a range of clinical-stage cell therapies designed to combat identified cancers and viral infections.

TCB is embarking on phase II-into-pivotal (phase III) clinical studies, which are expected to commence in the fourth quarter of 2021, following United Kingdom and European Union regulations, with a view to launching its first oncology product, which will be for the treatment of acute myeloid leukemia (abbreviated as AML). The Company plans to conduct similar clinical trials in the United States in 2022 for the treatment of AML following an application to the FDA in H1 2022. Clinical results generated thus far have enabled TCB to obtain FDA orphan drug status for its method of treatment of AML.

In addition to unmodified allogenic GD-Ts for treatment of blood cancers, TCB is also developing an innovative range of genetically modified chimeric antigen receptor modified T cell (abbreviated as CAR-T) products for treatment of solid cancers. TCB believes that solid cancers are more difficult to treat than blood cancers and may require addition of a chimeric antigen receptor (abbreviated as CAR) to (i) help therapeutic cells 'navigate' into diseased cancerous tissue, and (ii) retain therapeutic cells in-situ at the lesion for maximum efficacy.

In response to the recent pandemic, because GD-Ts are natural killers of virally infected cells, as well as cancerous cells, TCB is planning clinical studies to treat patients with both acute and long term COVID-19 symptoms. We believe acute COVID-19 trials will start in the fourth quarter of 2021.

Patent Portfolio and Intellectual Property

We believe TCB has a strong portfolio of patents and licenses covering the manufacture and commercialization of GD-T cell products and their modification via CAR-T. We own two granted patents and 48 patent applications in six families and have an exclusive license to an additional one family of one granted patent application and 13 patent applications. We protect our proprietary position, generally, by filing an initial priority filing at the United Kingdom Intellectual Property Office, or UKIPO, followed by patent applications under the Patent Co-operation Treaty claiming priority from the initial application(s) and then progressing to national applications in, for example, the United States, Europe, Japan, China, Australia, New Zealand, South Korea, Israel and Canada.

As a platform technology, we believe the co-stimulatory CAR-T GD-T cell system has a wealth of potential options to build added functionality. We plan to continue to innovate and partner in the field to augment our drug products and introduce next generation attributes. We will also continue to innovate our manufacturing and supply chains to efficiently scale our processes and simplify the interface with patients and healthcare professionals, whilst continually seeking to reduce manufacturing costs to improve patient access.

We intend to continue building on our technology platform, comprised of intellectual property, proprietary methods and know-how in the field of GD-T cells. These assets form the foundation for our ability, not only to strengthen our product pipeline, but also to successfully defend and expand our position as a leader in the field of GD-T based immuno-oncology.

Our Product Strategy

Our strategic objective is to build a global therapeutic business with an extensive portfolio of the two principal sub-types of GD-T (GD-T1 & GD-T2) cell-based products with the potential to significantly improve the outcomes of patients with cancer and infectious disease. As each of the above GD-T subtypes have different biological characteristics, we believe that specific subsets may provide favorable therapeutic benefits when used to treat specific cancer types.

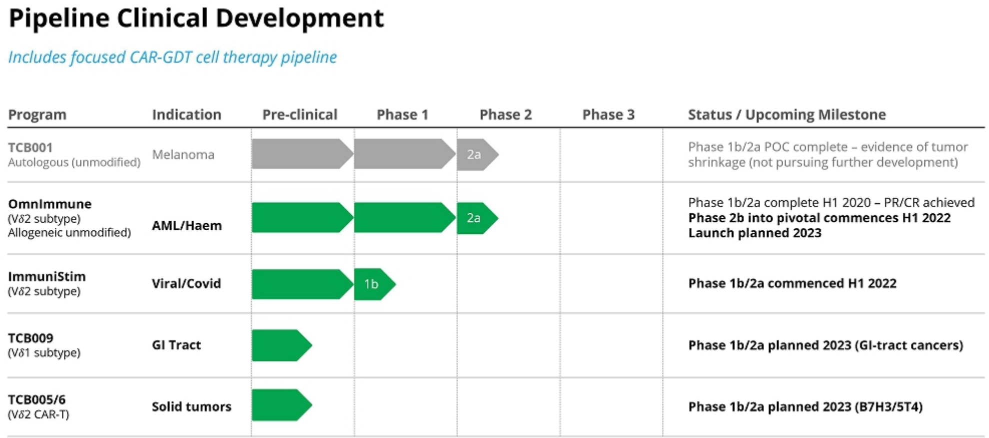
Our strategy is to take a step-wise approach to clinical development and commercialization. After our inception, we made clinical transitions from autologous GD-Ts to allogeneic GD-Ts to CAR-modified allogeneic GD-Ts. Our commercialization strategy is to introduce clinical studies for products firstly in blood cancers (AML initially) and then solid tumor indications in the 2022 and 2023 timeframe. The latter will initially be focused on gut-related solid cancers. Complementarily, since GD-T cells are dysfunctional in patients with severe viral diseases, TCB plans to commence development of treatment for COVID-19, with phase I/II clinical studies in the UK commencing in the fourth quarter of 2021, with potential preliminary efficacy data available in the first half of 2022, and thereafter co-develop the COVID-19 treatment with one or more pharmaceutical companies for phase II/III studies and later commercialization.

Since 2015, TCB has built and maintained cell therapy medicinal product manufacturing facilities for Investigational Medicinal Products MIA (abbreviated IMP), operated under license from the United Kingdom Medicines and Healthcare Products Regulatory Agency (abbreviated MHRA). In April 2016, the MHRA granted a 'Specials' license to TCB, which allows it to treat patients under supervision of a qualified doctor outside a clinical trial, and approved the company's facility for ongoing Good Manufacturing Process ("GMP") compliance, which permits the manufacture and release of Advanced Therapy Medicinal Products (abbreviated ATMPs) for use in clinical trials. TCB maintains a rigorous Quality Management System, which is based on the principles of the current GMP of the European and UK law and regulation and EudraLex Volume 4, as revised. The Company complies with the two directives laying down principles and guidelines of GMP for medicinal products adopted by the Commission. Directive 2003/94/EC applies to medicinal products for human use and Directive 91/412/EEC for veterinary use. Detailed guidelines in accordance with those principles are published in the Guide to Good Manufacturing Practice which will be used in assessing applications for manufacturing authorizations and as a basis for inspection of manufacturers of medicinal products.

Regulatory approval of all aspects of medicinal therapy development, testing, manufacture and commercialization always is of concern. In the case of treatment for AML, TCB has developed the novel approach of antibody-based immunotherapy and adoptive cell therapy with the aim to improve anti-leukemia T cell function. Therefore, TCB is able to take advantage of orphan medicine regulation provided by the European Medicines Agency (abbreviated EMA) and the United States Federal Drug Administration (abbreviated FDA), which are designed to encourage medicine development for small numbers of patients where there is little commercial incentive under normal market conditions.

Part of our strategy is to collaborate with appropriate partners. We have a relationship with NIPRO Corporation (Osaka, Japan), both as a strategic investor and in collaboration to progress certain proof of concept work in relation to GD-T therapies. TCB also has a collaboration with bluebird bio, inc. (Cambridge, Massachusetts, USA) to advance our CAR engineered products into clinical development in multiple cancer antigens.

Our current products in our pipeline are:



Note: Programs indicated by grey bars do not involve any current development or clinical activity by the Company.

Our unmodified cell therapy, used in the treatment of Acute Myeloid Leukemia, is supplied under the name OmnImmune®; and our unmodified cell therapy, used to treat COVID-19, is supplied under the name ImmuniStim®.

TCB's Strengths

TCB believes it has certain identified strengths. These include:

- Clinical trials that have provided strong evidence of safety and some preliminary indications of clinical benefit;
- A proprietary co-stimulatory CAR-T technology platform which we believe allows solid cancers to be treated without toxic side-effects;
- Identification of a large pool of cancer targets for which we believe we can develop therapeutic candidates;
- Retention of key business elements, especially in-house ability to manufacture cell-based product and conduct our own clinical research;
- Robust, and growing intellectual property portfolio protecting our products and proprietary platform;
- Our policy is to develop strategic collaborations with leading, international companies to work together with us to develop certain GD-T CAR-T products into clinic. We believe that existing and future collaborations will provide us with experience in scale-up and automation, and post-authorization sales and marketing;

- A highly knowledgeable and experienced management team with extensive industry experience and expertise in the United States and in Europe; and
- Ability to treat of patients under the 'Specials' regulatory framework in Europe.

Corporate Information

Our principal executive offices are located in Scotland, United Kingdom, with a mailing address of Maxim 1, 2 Parklands Way, Holytown, Motherwell, ML1 4WR, United Kingdom and our telephone number at that location is +44 (0) 141 433 7557. Our website address is https://www.tcbiopharm.com. The information contained on, or that can be accessed through, our website is not part of this prospectus. We have included our website address in this prospectus solely as an inactive textual reference.

Corporate Reorganization

We have completed a corporate reorganization pursuant to which TC BioPharm (Holdings) plc has become the direct holding company of TC BioPharm Limited and its subsidiaries. Pursuant to the terms of the corporate reorganization, the shareholders of TC BioPharm Limited exchanged each of the shares held by them in TC BioPharm Limited for the same number and class of newly issued shares of TC BioPharm (Holdings) Limited. The Company in turn effected a forward split of its ordinary shares on a 10 for 1 basis. TC BioPharm (Holdings) Limited has re-registered as a public limited company under the name of TC BioPharm (Holdings) plc. Following the reorganization, all of the outstanding series A ordinary shares and ordinary shares of TC BioPharm Limited will become a single class of ordinary shares and TC BioPharm (Holdings) plc will adopt new articles of association and governance appropriate for a public limited company. Please see "Corporate Reorganization" in this prospectus for more information.

Implications of Being an "Emerging Growth Company"

We are an "emerging growth company," as defined in Section 2(a) of the Securities Act of 1933, as amended, or the Securities Act. As such, we are eligible to, and intend to, take advantage of certain exemptions from various reporting requirements applicable to other public companies that are not "emerging growth companies" such as not being required to comply with the auditor attestation requirements in the assessment of our internal control over financial reporting of Section 404 of the Sarbanes-Oxley Act of 2002, or the Sarbanes-Oxley Act. We could remain an "emerging growth company" for up to five years, or until the earliest of (a) the last day of the first fiscal year in which our annual gross revenue exceeds $1.07 billion, (b) the date that we become a "large accelerated filer" as defined in Rule 12b-2 under the Securities Exchange Act of 1934, as amended, or the Exchange Act, which would occur if the market value of all our ordinary shares, including those represented by the ADSs, that are held by non-affiliates exceeds $700 million as of the last business day of our most recently completed second fiscal quarter, or (c) the date on which we have issued more than $1 billion in nonconvertible debt during the preceding three-year period.

Implications of being a "Foreign Private Issuer"

We are subject to the information reporting requirements of the Securities and Exchange Act of 1934, as amended, the Exchange Act, that are applicable to "foreign private issuers," and under those requirements we file reports with the SEC. As a foreign private issuer, we are not subject to the same requirements of the SEC applicable to U.S. domestic issuers. Under the Exchange Act, we are subject to reporting obligations that, in certain respects, are less detailed and less frequent than those of U.S. domestic reporting companies. For example, we are not required to issue quarterly reports, proxy statements that comply with the requirements applicable to U.S. domestic reporting companies, or individual executive compensation information that is as detailed as that required of U.S. domestic reporting companies. We also have four months after the end of each fiscal year to file our annual report with the SEC and are not required to file current reports as frequently or promptly as U.S. domestic reporting companies. Our officers, directors and principal shareholders are exempt from the requirements to report transactions in our equity securities and from the short-swing profit liability provisions contained in Section 16 of the Exchange Act. As a foreign private issuer, we are not subject to the requirements of Regulation FD (Fair

Disclosure) promulgated under the Exchange Act. In addition, as a foreign private issuer, we are permitted to follow certain home country corporate governance practices instead of those otherwise required under the Nasdaq Stock Market rules for domestic U.S. issuers and are not required to be compliant with all Nasdaq Stock Market rules as of the date of our initial listing on Nasdaq as would domestic U.S. issuers These exemptions and leniencies will reduce the frequency and scope of information and protections available to you in comparison to those applicable to a U.S. domestic reporting company. We intend to take advantage of the exemptions available to us as a foreign private issuer during and after the period we qualify as an "emerging growth company."

The Offering

The following is a brief summary of certain terms of this offering.

Offering price	$4.25 for one ADS and 1.25 Warrants, each Warrant entitling the holder to purchase one ADS. The ADSs and Warrants are sold in combination for a combined aggregate offering price of $4.25 which comprises of $4.24 for one ADS and $0.01 for 1.25 Warrants; however they will trade separately and immediately. Warrants will be issued only for the purchase of whole ADSs, and will not be issued to purchase fractional ADSs. Only whole ADSs will trade.
American depositary shares, or ADSs, offered by us	5,176,468 ADSs, (or 5,952,938 ADSs if the underwriter exercises its over-allotment option to purchase such additional ADSs in full).
Warrants offered by us	Warrants to purchase 6,470,585 of our ADSs (or 7,441,173 ADSs if the underwriter exercises its over-allotment option to purchase such additional Warrants in full). Each Warrant is freely transferrable and exercisable immediately after the date of issuance for one ordinary share, that will then be deposited with the custodian for the issuance of corresponding ADSs at an exercise price of $5.30 per ADS, and will expire in five years from the date of issuance. The terms of the Warrants will be governed by a warrant agent agreement, dated as of the effective date of the registration statement of which this prospectus forms a part, to be entered into among us, Computershare Inc. and Computershare Trust Company, N.A. In this prospectus Computershare Inc. and Computershare Trust Company, N.A. are collectively referred to as the Warrant Agent. This prospectus also relates to the offering of the ordinary shares issuable upon exercise of the Warrants. For additional information regarding the Warrants, see "Description of American Depositary Shares and Warrants." The ADSs and Warrants will be separately issued, but the ADSs and Warrants will be sold to purchasers in a combination of one ADS and 1.25 Warrants for a combined aggregate offering price of $4.25. Warrants will be issued only for the purchase of whole ADSs, and will not be issued to purchase fractional ADSs. Only whole ADSs will trade.
Over-allotment option	The underwriters have an option for a period of 45 days to purchase up to 776,470 additional ADSs, representing 776,470 ordinary shares and up to an additional 970,588 Warrants from us to cover over-allotments, at the $4.24 per ADS and $0.01 per 1.25 Warrants offering price. The over-allotment option may be exercised for any number of ADSs or Warrants, as determined by the underwriters.
Ordinary shares outstanding before this offering	20,782,246 ordinary shares, following completion of the corporate reorganization ahead of the completion of the offering, as described in this prospectus
Concurrent issue of ADSs and Warrants upon conversion of convertible loan notes	Under the terms of the convertible loan notes ("Convertible Loan Notes") entered into during 2021, 50% of the face value ($17,707,808) of the convertible loan outstanding and interest accrued to date will automatically convert into ADSs and Warrants. In addition, holders of Convertible Loan notes may convert more than 50% of the face value at the date of the offering and the prospectus reflects noteholders' elections and commitments to convert a further 24% of the face value. At the date of the offering loan notes totaling $13,423,642, will convert into 3,158,508 ADSs and 3,948,135 Warrants at a combined issue price of $4.25, which is calculated under the terms of such notes and assumes an aggregate combined $4.25 offering price for one ADS and 1.25 Warrants. Warrants will be issued only for the purchase of whole ADSs, and will not be issued to purchase fractional ADSs. The conversion will take place upon the closing of the offering to which this prospectus relates.
Ordinary shares to be outstanding after this offering, including ordinary shares represented by ADSs and the issue of ordinary shares upon conversion of the convertible loan	29,117,222 ordinary shares (or 29,893,694 ordinary shares if the underwriters exercise their option in full to purchase an additional 776,470 ADSs representing ordinary shares).
Warrants to be outstanding after this offering including Warrants issued upon conversion of convertible loan notes	6,470,585 Warrants (or 7,441,173 Warrants if the underwriters exercise their over-allotment option to purchase such additional Warrants in full).
Representative's warrants	We will issue to the Representative warrants to purchase up to 258,824 ADSs (or 297,647 ADSs if the underwriters exercise their over-allotment option in full). The Representative's warrants will be exercisable at an exercise price per ADS equal to 100% of the public offering price and will be exercisable from 6 months after the date of issuance and will expire five years from the effective date of the registration statement of which this prospectus forms a part.
American depositary shares	Each ADS represents one ordinary share. As a holder of ADSs, we will not treat you as one of our shareholders. The depositary, through its custodian, will be the holder of the ordinary shares underlying the ADSs, and you will have the rights of a holder of ADSs or beneficial owner (as applicable) as provided in the deposit agreement among us, the depositary and owners and holders of ADSs from time to time. To better understand the terms of the ADSs, see "Description of American Depositary Shares and Warrants." We also encourage you to read the deposit agreement, the form of which is filed as an exhibit to the registration statement of which this prospectus forms a part.

Use of proceeds	We estimate that the net proceeds from our sale of the ADSs and Warrants in this offering will be approximately $18.8 million assuming an aggregate combined offering price of $4.25 per one ADS and 1.25 Warrants and after deducting underwriting discounts and commissions and offering expenses payable by us. If the underwriters exercise the over-allotment option in full, we estimate that the net proceeds from this offering will be approximately $21.8 million after deducting underwriting discounts and commissions and offering expenses payable by us. We currently expect to use the net proceeds from this offering primarily to finance the cost of treating patients under our proposed clinical trials OmnImmune® (TCB 008-001), a phase 2b-into-pivotal (phase 3) trial for the treatment of acute myeloid leukemia) and ImmuniStim® (TCB 008-002) (for the treatment of COVID-19 infections) and to continue the research and development of our proposed GD-T CAR therapies to treat sold cancers, as well as financing our operating overhead costs, capital expenditure and limited repayment of convertible loan notes. The exact amounts and timing of these expenditures will depend on a number of factors, such as the timing, scope, progress and results of our research and development efforts, the regulatory and competitive environment and the extent to which the holders of our CLNs choose to convert rather than opt for repayment of the balance due. See “Use of Proceeds” for more a complete description of the intended use of proceeds from this offering.
Risk factors	You should read the “Risk Factors” section within this prospectus for a discussion of factors to consider carefully before deciding to invest in our securities.
Proposed Nasdaq trading symbol for the ADSs and Warrants	We intend to apply to list the ADSs on the Nasdaq Global Market under the symbol “TCBP” and the Warrants under the symbol “TCBPW” No assurance can be given that a liquid trading market will develop for the ADSs or Warrants in the United States.

The number of our ordinary shares (including shares represented by ADSs) to be outstanding after this offering is based on 19,547,600 ordinary shares outstanding as of September 30, 2021, which gives effect to our corporate reorganization (including the exchange of all issued shares into ordinary shares on a 10-for-1 basis), and the issue of up to a further 1,234,646 ordinary shares issuable, immediately prior to the IPO, under the terms of our Articles of Association to certain shareholders who, prior to the IPO, owned certain ordinary share which carried the right, to subscribe at nominal value for a certain number of additional shares, calculated by reference to the pre-money valuation of the IPO and excludes:

- Any exercise by the underwriters of the over-allotment option to purchase up to 776,470 ADSs and 970,588 Warrants or exercise of the Representative’s Warrants for 258,824 ADSs (or 297,647 ADSs, if the over-allotment option is exercised);
- 5,329,230 ordinary shares issuable upon the exercise of options outstanding under our 2014 Share Option Scheme (as amended) as of September 30, 2021, with a weighted-average exercise price of £0.46 per share.
- Effective at the date of this offering, 4,166,411 ordinary shares issuable upon the exercise of options outstanding under our 2021 Share Option Scheme, as more fully described in the section titled “Management—Equity Incentive Plans”;
- 794,540 ordinary shares issuable upon the exercise of options outstanding, at a future date based on the achievement of certain clinical and commercial milestones with an exercise price of £4.30 per share.
- Any ordinary share issuable upon exercise of a Warrant; and
- With respect to the Convertible Loan Notes, the potential further issuances of up to 1,117,034 ADSs and 1,396,293 Warrants, at the option of the holders of Convertible Loan Notes.

Unless otherwise stated, all information in this prospectus assumes (i) no exercise of the outstanding options into ordinary shares or ADSs as described above, (ii) no exercise of the underwriter’s over-allotment option to purchase additional securities, and (iii) no exercise of the Warrants or the Representative’s Warrants, and treats all restricted shares issued with outstanding restrictions to be vested as issued and outstanding shares.

Before the date of this prospectus, in connection with the re-registration of the Company as a public limited company, we will file new Articles of Association. Except as otherwise indicated all references to our articles of association in this prospectus refer to our articles of association as currently expected to be in force for TC BioPharm (Holdings) plc at the date of this prospectus.

Summary Consolidated Financial Data

We prepare our consolidated financial statements in accordance with IFRS as issued by the IASB. The following summary consolidated financial data as at and for the years ended December 31, 2020 and 2019 of TC BioPharm Limited have been derived from our audited consolidated financial statements, which are included elsewhere in this prospectus. The summary consolidated financial data for the nine months ended September 30, 2021 and 2020 and as at September 30, 2021, for TC BioPharm Limited are derived from our unaudited condensed consolidated financial statements included elsewhere in this prospectus. We have prepared the unaudited condensed consolidated financial statements in accordance with International Accounting Standard 34, “Interim Financial Reporting” (IAS 34) and on the same basis as the audited consolidated financial statements. We have included, in our opinion, all adjustments, consisting only of normal recurring adjustments, that we consider necessary for a fair presentation of the financial information set forth in those statements. Our historical results for any prior period are not necessarily indicative of results expected in any future period.

On December 17, 2021, the Company undertook a group reorganization and a share split such that one issued share was exchanged for ten new shares. All references in these financial statements and accompanying notes to units of ordinary shares or per share amounts are reflective of the forward share split for all periods presented. In addition, the exercise prices and the numbers of shares issuable upon the exercise of any outstanding options to purchase ordinary shares were proportionally adjusted pursuant to the respective anti-dilution terms of the share-based payment plans.

The financial data set forth below should be read in conjunction with, and is qualified by reference to, “Management’s Discussion and Analysis of Financial Condition and Results of Operations” and the consolidated financial statements and notes thereto included elsewhere in this prospectus.

We maintain our books and records and report our financial results in pounds sterling (£). For the convenience of the reader, in these tables below, unless otherwise indicated, translations from pounds sterling into U.S. dollars were made at the rate of £1.00 to $1.3470, for our consolidated financial data as at and for the year ended December 31, 2020, and for our consolidated financial data as at and for the nine-month period ended September 30, 2021, which was the noon buying rate of the Federal Reserve Bank of New York on September 30, 2021. These translations are solely for illustration and convenience and should not be considered representations that any amounts have been, could have been or could be converted into U.S. dollars at that or any other exchange rate as of that or any other date.

	Nine Months Ended September 30,		
	2021	2021	2020
	(in thousands, except per share data)		
Consolidated Statement of Comprehensive Loss:			
Revenue	£ 1,484	$ 1,999	£ 1,484
Research and development expenses	(4,511)	(6,076)	(5,112)
Administrative expenses	(1,382)	(1,861)	(1,651)
Administrative expenses – costs related to preparing for a listing	(550)	(741)	-
Change in fair value of convertible loan derivatives	(3,890)	(5,240)	-
Other (expenses)/income	(97)	(131)	555
Finance income – interest	-	-	1
Finance costs	(1,517)	(2,043)	(223)
Loss before tax	(10,463)	(14,094)	(4,946)
Income tax credit	787	1060	809
Net loss for the period	(9,676)	(13,034)	(4,137)
Total other comprehensive income/(loss)	-	-	-
Total comprehensive loss for the period	£ (9,676)	(13,034)	£ (4,137)
Pro forma per share data (unaudited)(1)			
Basic and diluted loss per share (2)	£ (0.43)	$ (0.57)	
Weighted average shares outstanding(2)	22,689	22,689	

	Year Ended December 31,		
	2020	2020	2019
	(in thousands, except per share data)		
Consolidated Statement of Comprehensive Loss:			
Revenue	£ 1,979	$ 2,666	£ 3,427
Research and development expenses	(6,680)	(8,998)	(8,614)
Administrative expenses	(2,207)	(2,973)	(3,015)
Other income	569	766	1,561
Finance income – interest	1	1	22
Finance costs	(292)	(393)	(275)
Loss before tax	(6,630)	(8,931)	(6,894)
Income tax credit	1,172	1,579	826
Net loss for the year	(5,458)	(7,352)	(6,068)
Total other comprehensive income/(loss)	-	-	-
Total comprehensive loss for the year	£ (5,458)	$ (7,352)	£ (6,068)

	As at December 31,		
	2020	2020	2019
	(in thousands)		
Consolidated Statement of Financial Position items:			
Cash and cash equivalents	£ 748	$ 1,008	£ 956
Working capital (3)	(1,970)	(2,654)	336
Total assets	7,267	9,789	10,140
Total liabilities	(10,614)	(14,297)	(12,679)
Share capital and share premium account	16,542	22,282	12,877
Accumulated deficit	(19,889)	(26,790)	(15,416)
Total equity attributable to the equity shareholders of the parent	(3,347)	(4,508)	(2,539)

	As at September 30,	
	2021	2021
	(in thousands)	
Consolidated Statement of Financial Position items:		
Cash and cash equivalents	£ 1,551	$ 2,089
Working capital (3)	(12,403)	(16,707)
Total assets	7,139	9,616
Total liabilities	(19,798)	(26,668)
Share capital and share premium account	16,906	22,772
Accumulated deficit	(29,565)	(39,824)
Total equity attributable to the equity shareholders of the parent	(12,659)	(17,052)

(1) The unaudited pro forma loss per share data gives effect to the issue of 3,158,508 ordinary shares on conversion of Convertible Loan Notes pursuant to the terms of such notes.
(2) See Note 9 to our audited consolidated financial statements for the years ended December 31, 2020 and December 31, 2019 and Note 7 to our unaudited condensed consolidated financial statements appearing elsewhere in this prospectus for a description of the method used to compute basic and diluted net loss per share. All references to units of ordinary shares or per share amounts are reflective of the 10 for 1 forward share split for all periods presented.
(3) Working capital is defined as current assets less current liabilities.

RISK FACTOR SUMMARY

Our business is subject to a number of risks and uncertainties, including those risks discussed at length in the section below titled "Risk Factors." These risks include among others the following:

- We have generated operating losses since inception and expect to continue to generate losses. We may never achieve or maintain profitability. We will continue to require financing to continue to implement our business plan.

- We, as well as our independent registered public accounting firm, in relation to our financial position, have expressed substantial doubt about our ability to continue as a going concern.

- Our lack of any approved products and our limited operating history may make it difficult for an investor to evaluate the success of our business to date and to assess our future viability.

- GD-T cell therapies are a novel approach to treating cancers and viruses, which have development risks and will require us to obtain regulatory approvals for development, testing, commercialization, manufacturing and distribution. We may not achieve all the required regulatory approvals or approvals may not be obtained as timely as needed.

- Because of the novel approach, potential side effects, and long-term efficacy, regulatory approval will require considerable time for trials, data collection, regulatory submissions and funding for the process.

- Enrolling patients in clinical trials may be difficult for many reasons, including high screen failure, GD-T cell proliferation capacity, timing, proximity and availability of clinical sites, perceived risks, and publicity about the success or lack of success in the methods of treatment. COVID-19 requirements may also disrupt or delay the conduct of clinical trials.

- Because GD-T cell therapies are novel, our research and development and clinical trial results may not support our products intended purposes and regulatory approval. We are heavily dependent on the success of our lead product candidate (OmnImmune®), and intend to seek breakthrough therapy designation for some or all of our other therapeutic candidates, ImmuniStim®, TCB005, TCB006 and TCB009.

- Market opportunities for certain of our product candidates may be limited to those patients who are ineligible for or have failed prior treatments. This class of patient may be limited in number, difficult to locate and service, require special governmental approval, and unable to pay or obtain reimbursement.

- We rely on many third parties for aspects of our product development and commercialization, such as raw material supply, clinical trials, obtaining approvals, aspects of manufacturing, development of additional product candidates and distribution. We may not be able to control these parties and their business practices, such as compliance with good manufacturing requirements or their ability to supply or service us timely, which will likely disrupt our business.

- We face substantial competition: others may discover, develop or commercialize competing products before or more successfully than TCB.

- Even if we are able to commercialize any product candidates, such drugs may become subject to unfavorable pricing regulations or third-party coverage and reimbursement policies. Commercialized products may not be adopted by the medical profession.

- Because we operate internationally, we will be subject to a wide array of regulation of the United Kingdom, European Union and United States. In addition to regulation surrounding new drug development and their manufacture, distribution and use, we will be subject, for example to data protection rules relating to medical records, medical and general privacy laws, environmental laws regarding medical waste, and bribery and corrupt practices law, in addition to all the drug related approval, manufacturing and distribution rules.

- Product liability claims are frequent in drug development of novel therapies and insurance is mandatory and expensive. The inability to obtain insurance may prevent product development and claims may surpass our ability to pay and call into question the efficacy of a product with resulting reputational damage.

- Protecting our intellectual property is paramount in our ability to be able to commercialize our products and generate revenues and investment return for our stockholders. We may not be able to obtain the intellectual property protection we seek due to its cost, requirement to pursue it in many jurisdictions, challenges by others and patent office rejection.

- Obtaining and maintaining our patent protection depends on compliance with various procedural, document submission, fee payment and other requirements imposed by governmental patent agencies acting in multiple jurisdictions, and our patent protection could be reduced or eliminated for non-compliance with these requirements.

- As part of product development, we may need to license aspects of our research and products from third parties or if our IP is challenged, we may have to seek license accommodation, any of which may be expensive, limited in scope, or unavailable.

- We currently have a limited number of employees, and our future success depends on our ability to retain key executives and to attract, retain and motivate qualified personnel at all levels.

- We will need to grow the size and capabilities of our organization, and we may experience difficulties in managing this growth including but not limited to running a public company and taking a therapeutic through to market approval.

- We expect to expand our development and regulatory capabilities and potentially implement sales, marketing and distribution capabilities, and as a result, we may encounter difficulties in managing our growth, which could disrupt our operations. We expect to require further funding for these expansions of activity.

- We will incur increased costs as a result of operating as a public company in the United States, and our management is required to devote substantial time to new compliance initiatives and corporate governance practices.

- Certain of our existing stockholders, members of our board of directors and senior management maintain the ability to exercise significant control over us. Your interests may conflict with the interests of these existing stockholders.

- We are offering ADSs, which provide rights that are different from directly holding our ordinary shares.

- Future sales, or the possibility of future sales, of a substantial number of our ordinary shares, through the additional deposit of ordinary shares for ADSs, could adversely affect the price of our ADSs or Warrants in the market. After any lock up period, a substantial number of our issued and outstanding ordinary shares will be eligible for trading on the public securities market by their being deposited with the depositary for ADSs.

- As a foreign private issuer, we, and our stockholders, have certain exceptions to disclosure regulation under United States federal securities regulation, and we will take certain NASDAQ governance exceptions. Consequently, investors may not have the totality of disclosure about and governance controls in TCB as compared to United States domestic reporting companies.

- Shareholder rights and recourse will be governed by and ultimately determined by Scottish and United Kingdom law and judicial process, which in many ways are more limited than United States law and practice. Most of our directors and officers are not resident in the United States. Most of our assets are located in the United Kingdom.

RISK FACTORS

Investing in our company and its securities involves a high degree of risk. You should carefully consider the risks and uncertainties described below, together with all of the other information in this prospectus, including our consolidated financial statements and related notes, before investing in our company and our securities. If any of the following risks materialize, our business, financial condition, operating results and prospects could be materially and adversely affected. In that event, the price or value of our ADSs and/or Warrants in the public market could decline, and you could lose part or all of your investment.

Risks Related to Our Financial Position and Need for Additional Capital

We have incurred net losses every year since our inception and expect to continue to incur net losses in the future and may never achieve profitability.

We have generated losses since our inception in 2013. Since then, we have devoted substantially all of our resources to research and development efforts relating to our genetically unmodified and genetically engineered GD-T cell candidates, including engaging in activities to manufacture and supply our GD-T cell candidates for clinical trials, conducting initial clinical trials of our lead candidates, general and administrative support for these operations, and protecting our intellectual property. Based on our current plans, we do not expect to generate product or royalty revenues until we obtain marketing approval for, and commercialize, any of our GD-T cell-based candidates.

For the nine months ended September 30, 2020 and 2021, we incurred net losses of £4.1 million and £9.7 million ($13.0 million) respectively. As of September 30, 2021, we had an accumulated deficit of £29.6 million ($39.8 million). For the fiscal years ended December 31, 2019 and 2020, we incurred net losses of £6.1 million and £5.5 million ($7.4 million) respectively. As of December 31, 2020, we had an accumulated deficit of £19.9 million ($26.8 million). We expect to continue incurring significant losses as we continue with our research and development programs and to incur general and administrative costs associated with our operations. The extent of funding required to develop our product candidates is difficult to estimate given the novel nature of our GD-T cell-based cell therapy candidates and their un-proven route to market. Ultimately, our profitability is dependent upon the successful development, approval, and commercialization of our GD-T cell-based therapeutic candidates and achieving a level of revenues adequate to support our cost structure. We may never achieve profitability and until we do, we will continue to need to raise additional cash.

We have never generated any revenue from sales of our GD-T cell-based product candidates and our ability to generate revenue from sales of our therapeutic candidates and become profitable depends significantly on our success in a number of factors.

We continue to focus on development activities for our technologies and implementation of the early parts of our business plan. A large percentage of our expenses will continue to be fixed; accordingly, our losses may be greater than expected and our operating results will suffer. We may never achieve commercial success and continue to operate in the research and development stage, without commercially launching any products at this time. We have limited historical financial data upon which we may base our projected revenue and base our planned operating expenses. Our limited operating history makes it difficult for potential investors to evaluate our potential product candidates, drug therapies or prospective operations and business prospects. As a development stage company, we are subject to all the risks inherent in the initial organization, business development, financing, unexpected expenditures, and complications and delays that often occur in a new business. Investors should evaluate an investment in us in light of the uncertainties encountered by developing companies in a competitive environment. There can be no assurance that our efforts will be successful or that we will ultimately be able to attain profitability.

We have no GD-T cell-based therapeutic candidates approved for commercial sale and have not generated any revenue from sales of our GD-T cell-based therapeutic candidates, and do not anticipate generating any revenue from sales of our GD-T cell-based therapeutic candidates until sometime after we receive regulatory approval, if at all, for the commercial sale of a GD-T cell-based therapeutic candidate. We intend to fund future operations through our existing and future collaboration and licensing agreements for other therapeutic targets and through additional equity financings. Our ability to generate revenue and achieve profitability depends on our success in many factors, including:

- completing research regarding, and preclinical and clinical development of, our GD-T cell-based therapeutic candidates;

- obtaining regulatory approvals and marketing authorizations for our GD-T cell-based therapeutic candidates for which we complete clinical trials;

- developing sustainable and scalable manufacturing and supply processes for our GD-T cell-based therapeutic candidates, including establishing and maintaining commercially viable supply relationships with third parties and pursuing our own commercial manufacturing capabilities and infrastructure;

- launching and commercializing GD-T cell-based therapeutic candidates for which we obtain regulatory approvals and marketing authorizations, either directly or with a collaborator or distributor;

- obtaining market acceptance of our GD-T cell-based therapeutic candidates as viable treatment options;

- addressing any competing technological and market developments;

- identifying, assessing, acquiring and/or developing new GD-T cell-based therapeutic candidates;

- maintaining, protecting, and expanding our portfolio of intellectual property rights, including patents, trade secrets and know-how; and

- attracting, hiring and retaining qualified personnel.

Even if one or more of our GD-T cell-based therapeutic candidates is approved for commercial sale, we anticipate incurring significant costs associated with commercializing any approved GD-T cell-based therapeutic candidate. Our expenses will increase beyond our current expectations if the U.S. Food and Drug Administration, the FDA, or the United Kingdom Medicines and Healthcare products Regulatory Agency, the MHRA, or any other regulatory agency require changes to our manufacturing processes or assays, or for us to perform preclinical programs and clinical or other types of trials in addition to those that we currently anticipate. If we are successful in obtaining regulatory approvals to market one or more of our GD-T cell-based therapeutic candidates, our revenue will be dependent, in part, upon the size of the markets in the territories for which we gain regulatory approval, the accepted price for the GD-T cell-based therapeutic candidate, the ability to get reimbursement at any price, and whether we own the commercial rights for that territory. If the number of our addressable disease patients is not as significant as we estimate, the indication approved by regulatory authorities is narrower than we expect, or the reasonably accepted population for treatment is narrowed by competition, physician choice or treatment guidelines, we may not generate significant revenue from sales or supplies of such GD-T cell-based therapeutic candidates, even if approved. If we are not able to generate revenue from the sale of any approved GD-T cell-based therapeutic candidates, we may never become profitable.

If we fail to obtain additional financing as needed, we may be unable to complete the development and commercialization of our GD-T cell-based product candidates.

Our operations have required substantial amounts of cash since inception. We expect to continue to spend substantial amounts to continue the development of our GD-T cell-based therapeutic candidates, including for future clinical trials. We expect to use a large part of the net proceeds from this offering to advance and accelerate the clinical development of our therapeutic candidates, therefore, changing circumstances beyond our control may cause us to increase our spending significantly faster than we currently anticipate, we believe we will require additional capital, likely in significant amounts, for the further development and commercialization of our GD-T cell-based therapeutic candidates.

We cannot be certain that additional funding will be available on acceptable terms, or at all. We have no committed source of additional capital. If we are unable to raise additional capital in sufficient amounts or on terms acceptable to us, we may have to significantly delay, scale back or discontinue the development or commercialization of our GD-T cell-based therapeutic candidates or other research and development initiatives. Our license and supply agreements may also be terminated if we are unable to meet the milestone obligations under these agreements. We could be required to seek collaborators for our GD-T cell-based therapeutic candidates at an earlier stage than otherwise would be desirable or on terms that are less favorable than might otherwise be available or relinquish or license on unfavorable terms our rights to our GD-T cell-based therapeutic candidates in markets where we otherwise would seek to pursue development or commercialization ourselves. Any of the above events could significantly harm our business, prospects, financial condition and results of operations and cause the price of either of our ADSs or Warrants, or both, to decline.

We, as well as our independent registered public accounting firm, have expressed substantial doubt about our ability to continue as a going concern.

Our recurring losses from operations and negative cash flow raise substantial doubt about our ability to continue as a going concern. As a result, our independent registered public accounting firm included an explanatory paragraph in its report on our financial statements for the years ended December 31, 2019 and 2020 with respect to this uncertainty.

Our ability to continue as a going concern ultimately is dependent upon our generating cash flow from sales that are sufficient to fund operations or finding adequate financing to support our operations. To date, we have had no product revenues and relied on equity-based financing from the sale of securities subscribed by our founders and related parties and in various private placements; and receipts from collaboration partners. Our research and development plans may not be successful in creating a marketable product, and our business plan may not be successful in achieving a sustainable business and generating revenues. Although we are engaged in the offering described in this prospectus, we have no arrangements in place for all the anticipated, required financing to be able to fully implement our business plan. If we are unable to continue as planned currently, we may have to curtail some or all of our business plan and operations. In such case, investors will lose all or a portion of their investment. Management believes the proceeds from this offering and existing cash will be enough to fund operations for at least twelve months from the completion of this offering.

We anticipate needing additional financing over the longer term to execute our business plan and fund operations, which additional financing may not be available on reasonable terms or at all.

The proceeds from this offering are expected to provide capital to further develop our drug product candidates and fund our overall business plan for at least twelve months from the completion of this offering. We will require additional capital in the future to fully develop our technologies and potential products to the stage of a commercial launch. We cannot give now any indication of the amount of future funding that we will need or give any assurance that we will be able to obtain all the necessary funding that we may need. We may pursue additional funding through various financing sources, including the private and public sale of our equity and debt securities, licensing fees for our product candidates, joint ventures with capital partners and project type financing. We also may seek government-based financing, such as development and research grants. There can be no assurance that funds will be available on commercially reasonable terms, if at all. If financing is not available on satisfactory terms, we may be unable to further pursue our business plan and we may be unable to continue operations, in which case you may lose your entire investment. Alternatively, we may consider changes in our business plan that might enable us to achieve aspects of our business objectives and lead to some commercial success with a smaller amount of capital, but we cannot assure that changes in our business plan will result in revenues or maintain any value in your investment.

Risks Related to Development, Clinical Testing and Commercialization of Our Investigational Therapies and Any Future Therapeutic Candidates

Our GD-T cell therapies represent a novel approach to cancer and virus treatment that could result in heightened regulatory scrutiny, delays in clinical development, or delays in or our ability to achieve regulatory approval or commercialization of our therapeutic candidates.

Our products are novel cancer and virus treatment approaches that carry inherent development risks. We are therefore constantly evaluating and adapting our therapeutic candidates following the results obtained during development work and the ongoing clinical trials. Further development, characterization and evaluation may be required, depending on the results obtained, in particular where such results suggest any potential safety risk for patients. The need to develop further assays, or to modify in any way the protocols related to our therapeutic candidates to improve safety or effectiveness, may delay a clinical program, regulatory approval or commercialization, if approved at all, of any therapeutic candidate. Consequently, this may have a material impact on our ability to receive milestone payments and/or generate revenues from our therapeutic candidates. In addition, given the novelty of our GD-T cell therapeutic candidates, the end users and medical personnel require a substantial amount of education and training in their administration of our cell therapy. Regulatory authorities have very limited experience with commercial cell therapies for disease treatment. As a result, regulators may be more risk averse or require substantial dialogue and education as part of the normal regulatory approval process for each stage of development of our therapeutic candidates.

GD-T cell therapy creates significantly increased risk in terms of side-effect profile, ability to satisfy regulatory requirements associated with clinical trials, and the long-term efficacy of administered cells.

Development of a pharmaceutical or biologic therapy product has inherent risks based on differences in patient population and responses to therapy and treatment. The mechanism of action and impact on other systems and tissues within the human body following administration of GD-T cell therapy products is not completely understood, which means that we cannot predict the long-term effects of treatment with the GD-T cell therapy product. We are aware that certain patients may not respond to GD-T cell therapy and other patients may relapse. The percentage of the patient population in which these events may occur is unknown, but the inability of patients to respond and the possibility of relapse may impact our ability to conduct clinical trials, to obtain regulatory approvals, if at all, and to successfully commercialize our therapeutic products.

Our GD-T cell therapeutic candidates and their application are not fully scientifically understood and are still undergoing validation and investigation. The utility of our GD-T cell products may depend on persistence, potency, durability and infiltration capacity of the GD-T cells within a patient's body. The level of persistence and the factors affecting such persistence, potency and infiltration capacity in patients are not completely understood, which presents an additional risk to the ongoing development and use of our therapeutic candidates. Certain steps involved in validating and carrying out testing require access to samples (for example tissue samples or cell samples) from third parties. Such samples may be obtained from universities or research institutions and will often be provided subject to satisfaction of certain terms and conditions. There can be no guarantee that we will be able to obtain samples in sufficient quantities to enable development of and use of the full preclinical safety testing program for CAR-T therapeutic candidates undergoing development. In addition, the terms under which such samples are available may not be acceptable to us or may restrict our use of any generated results or require us to make payments to the third parties.

Our products, before they can be commercialized, will require regulatory approval.

We cannot commercialize a product candidate until the appropriate regulatory authorities have reviewed and approved the product candidate. Approval by the FDA, the MHRA and comparable other regulatory authorities is lengthy and unpredictable, and depends upon numerous factors. Approval policies, regulations, or the type and amount of clinical data necessary to gain approval may change during the course of a product candidate's clinical development and may vary among jurisdictions, which may cause delays in the approval or the decision not to approve an application. We have not obtained commercialization regulatory approval for any product candidate, and it is possible that any of our product candidates will never obtain regulatory approval.

Applications for product candidates we may develop could fail to receive regulatory approval for many reasons, including but not limited to:

- our inability to demonstrate to the satisfaction of the regulatory authorities that a product candidate we develop is safe and effective;
- the regulatory authorities may disagree with the design or implementation of our clinical trials;
- the population studied in the clinical program may not be sufficiently broad or representative to assure safety in the full population for which we seek approval;
- the regulatory authorities' requirement for additional preclinical studies or clinical trials;
- the regulatory authorities may disagree with our interpretation of data from nonclinical studies or clinical trials;
- the data collected from clinical trials may not be sufficient to support the submission of a new drug application, or NDA, or other submission for regulatory approval;
- we may be unable to demonstrate to the regulatory authorities that a product candidate's risk-benefit ratio for its proposed indication is acceptable;
- the regulatory authorities may fail to approve the manufacturing processes, test procedures and specifications, or facilities of third-party manufacturers with which we contract for clinical and commercial supplies; and
- the approval policies or regulations of the regulatory authorities may change in a manner that renders our clinical trial design or data insufficient for approval.

The lengthy approval process, as well as the unpredictability of the results of clinical trials, may result in our failing to obtain regulatory approval to market a product candidate in the United States, the UK, the EU or elsewhere, which would significantly harm our business, prospects, financial condition and results of operations.

We may encounter substantial delays in completing our clinical trials, which in turn will result in additional costs and may ultimately prevent successful or timely completion of the clinical development and commercialization of our product candidates.

We must conduct extensive clinical trials to demonstrate the safety and efficacy of the product candidates in humans before commercialization. Clinical testing is expensive, time-consuming and uncertain as to outcome. We cannot guarantee that any clinical trials will be conducted as planned or completed on schedule, if at all. A failure of one or more clinical trials can occur at any stage of testing. Events that may prevent successful or timely completion of clinical development include:

- delays in reaching, or any failure to reach, a consensus with regulatory agencies on study design;
- delays in obtaining FDA required Institutional Review Board, or IRB, approval at each clinical trial site;
- delays in recruiting a sufficient number of suitable patients to participate in our clinical trials;
- imposition of a clinical hold by regulatory agencies, after an inspection of our clinical trial operations or study sites;

- failure by third parties or us to adhere to clinical trial, regulatory or legal requirements;
- failure to perform in accordance with good clinical practices, GCP, or applicable regulatory guidelines in other countries;
- delays in the testing, validation, manufacturing and delivery of sufficient quantities of our product candidates to the clinical sites;
- delays in having patients' complete participation in a study or return for post-treatment follow-up;
- clinical trial sites or patients dropping out of a trial;
- delay or failure to address any patient safety concerns that arise during the course of a trial;
- unanticipated costs or increases in costs of clinical trials of our product candidates;
- occurrence of serious adverse events associated with the product candidate that are viewed to outweigh its potential benefits; or
- changes in regulatory requirements and guidance that require amending or submitting new clinical protocols.

We could also encounter delays if a clinical trial is suspended or terminated by us or by regulators and related reviewing authorities such as IRBs of the institutions in which such trials are being conducted, by an independent Safety Review Board. Suspension or termination of a clinical trial might be due to a number of factors, including failure to conduct the clinical trial in accordance with regulatory requirements or our clinical protocols, inspection of the clinical trial operations or trial site resulting in the imposition of a clinical hold, unforeseen safety issues or adverse side effects, or failure to demonstrate a benefit from using a therapy. In addition, if we make manufacturing or formulation changes to our product candidates, we may need to conduct additional studies to bridge our modified product candidates to earlier versions. In addition, any delays in completing our clinical trials will increase our costs, slow down our product candidate development and approval process and jeopardize our ability to obtain regulatory approvals, commence product sales and generate revenues. Any of these occurrences may significantly harm our business, prospects, financial condition and results of operations.

Manufacturing and administering our GD-T cell-based therapeutic candidates is complex, and we may encounter difficulties in production, particularly with respect to process development or scaling-up of our manufacturing capabilities. If we encounter such difficulties, our ability to supply of our GD-T cell therapeutic candidates for clinical trials or for commercial purposes could be delayed or stopped.

Manufacturing and administrating our GD-T cell-based therapeutics candidates is complex and highly regulated. The manufacture process of our GD-T cell-based therapeutics involves complex processes, including peripheral blood mononuclear cell isolation from leukapheresis material, stimulation of the GD-T cells, expansion of the cells to obtain a desired dose, and ultimately infusion of the cells to the patient's body. On occasions the GD-T cell therapeutic could be genetically modified, which could involve manufacturing of lentiviral vectors containing the gene of our interest (for example Chimeric Antigen Receptor) and transducing the cells or a method such as electroporation or nucleofection of a plasmid containing the gene of interest to the cells. As a result of the complexities, our manufacturing and supply costs are likely to be higher than those in more traditional manufacturing processes and the manufacturing process is less reliable and more difficult to reproduce. Our manufacturing process is, and will be, susceptible to product loss or failure due to logistical issues, including manufacturing issues associated with the differences in patients' white blood cells, interruptions in the manufacturing process, contamination, equipment or reagent failure, supplier error and variability in GD-T cell-based therapeutic candidate and patient characteristics. Even minor deviations from normal manufacturing processes could result in reduced production yields, product defects, and other supply disruptions. If microbial, viral or other contaminations are discovered in our GD-T cell-based therapeutic candidates or in the manufacturing facilities in which our GD-T cell based therapeutic candidates are made or administered, the manufacturing facilities may need to be closed for an extended period of time to investigate and remedy the contamination. As our GD-T cell-based therapeutic candidates progress through preclinical programs and clinical trials towards approval and commercialization, it is expected that various aspects of the manufacturing and administration process will be altered in an effort to optimize processes and results.

We have identified some improvements to our manufacturing and administration processes, but these changes may not achieve the intended objectives, and could cause our GD-T cell-based therapeutic candidates to perform differently and affect the results of planned clinical trials or other future clinical trials. The changes may require amendments to be made to regulatory applications which may further delay the timeframes under which modified manufacturing processes can be used for any GD-T cell-based therapeutic candidate. For example, we are planning to introduce automated enclosed systems to our production process. This will require development work to ensure that these modifications do not alter the characteristics of the product. If the GD-T cell-based therapeutic candidate manufactured under the new process has a worse safety or efficacy profile than the prior investigational product, we may need to re-evaluate the use of that manufacturing process, which could significantly delay the progress of our clinical trials.

Developing a commercially viable process is a difficult and uncertain task and there are risks associated with scaling to the level required for advanced clinical trials or commercialization, including, among others, increased costs, potential problems with process scale-out, process reproducibility, stability issues, lot consistency, and timely availability of reagents or raw materials. We may ultimately be unable to reduce the expenses associated with our GD-T cell-based therapeutic candidates to levels that will allow us to achieve a profitable return on investment. If we are unable to demonstrate that our commercial scale product is comparable to the product used in clinical trials, we may not receive regulatory approval for that product without additional clinical trials. Even if we are successful, our manufacturing capabilities could be affected by increased costs, unexpected delays, equipment failures, labor shortages, natural disasters, power failures and numerous other factors that could prevent us from realizing the intended benefits of our manufacturing strategy, which in turn could have a material adverse effect on our business.

We may seek expedited approval in the European Union and United States for our therapeutic candidates, but we may not be able to obtain or maintain such designation.

The FDA and the European Medicines Agency, the EMA, have established programs to expedite drug development and regulatory review. The FDA has four main expedited programs: fast track (introduced in 1987), accelerated approval (1992), priority review (1992), and breakthrough therapy (2012). A priority review designation in North America will direct overall attention and resources to the evaluation of applications for drugs that, if approved, would be significant improvements in the safety or effectiveness of the treatment, diagnosis, or prevention of serious conditions when compared to standard applications. Significant improvement may be demonstrated by the following examples:

- evidence of increased effectiveness in treatment, prevention, or diagnosis of condition;
- elimination or substantial reduction of a treatment-limiting drug reaction;
- documented enhancement of patient compliance that is expected to lead to an improvement in serious outcomes; or
- evidence of safety and effectiveness in a new subpopulation.

We intend to seek breakthrough therapy designation for some or all of our therapeutic candidates, but there can be no assurance that we will receive breakthrough therapy designation. Additionally, other treatments from competing companies may obtain the designations and impact our ability to develop and commercialize our therapeutic candidates, which may adversely impact our business, financial condition or results of operation. We may also seek fast track designation. If a drug or biologic candidate is intended for the treatment of a serious or life-threatening condition or disease and the drug demonstrates the potential to address unmet medical needs for the condition, the sponsor may apply for fast track designation. Under the fast track program, the sponsor of a new drug or biologic candidate may request that the FDA designate the candidate for a specific indication as a fast track drug or biologic concurrent with, or after, the submission of the IND for the candidate. The FDA must determine if the drug or biologic candidate qualifies for fast track designation within 60 days of receipt of the sponsor's request. Even if we do apply for and receive fast track designation, we may not experience a faster development, review or approval process compared to conventional FDA procedures. The FDA may withdraw fast track designation if it believes that the designation is no longer supported by data from our clinical development program. We may also seek accelerated approval for products that have obtained fast track designation. Under the FDA's fast track and accelerated approval programs, the FDA may approve a drug or biologic for a serious or life-threatening illness that provides meaningful therapeutic benefit to patients over existing treatments based upon a surrogate endpoint that is reasonably likely to predict clinical benefit, or on a clinical endpoint that can be measured earlier than irreversible morbidity or mortality, that is reasonably likely to predict an effect on irreversible morbidity or mortality or other clinical benefit, taking into account the severity, rarity, or prevalence of the condition and the availability or lack of alternative treatments. For drugs granted accelerated approval, post-marketing confirmatory trials have been required to describe the anticipated effect on irreversible morbidity or mortality or other clinical benefit. These confirmatory trials must be completed with due diligence.

The EMA has three programs, the accelerated assessment (2005), conditional marketing authorization (2006), and the Priority Medicines (PRIME) scheme (2016). These programs are intended to prioritize the most important medicines for faster access by patients. As part of its marketing authorization process, the EMA may grant conditional marketing authorizations for certain categories of medicinal products on the basis of less complete data than is normally required, when doing so may meet unmet medical needs of patients and may serve the interest of public health. In these cases, it is possible for the Committee for Medicinal Products for Human Use, the CHMP, to recommend the granting of a marketing authorization, subject to certain specific obligations to be reviewed annually, which is referred to as a conditional marketing authorization. This may apply to medicinal products for human use that fall under the jurisdiction of the EMA, including those that aim at the treatment, the prevention, or the medical diagnosis of seriously debilitating diseases or life-threatening diseases and those designated as orphan medicinal products. A conditional marketing authorization may be granted when the CHMP finds that, although comprehensive clinical data referring to the safety and efficacy of the medicinal product have not been supplied, the risk-benefit balance of the medicinal product is positive. The granting of a conditional marketing authorization is restricted to situations in which only the clinical part of the application is not yet fully complete. Incomplete preclinical or quality data may only be accepted if duly justified and only in the case of a product intended to be used in emergency situations in response to public-health threats. Conditional marketing authorizations are valid for one year, on a renewable basis. The holder will be required to complete ongoing trials or to conduct new trials with a view to confirming that the benefit-risk balance is positive. In addition, specific obligations may be imposed in relation to the collection of pharmacovigilance data. Granting a conditional marketing authorization allows medicines to reach patients with unmet medical needs earlier than might otherwise be the case and will ensure that additional data on a product are generated, submitted, assessed and acted upon. Although we may seek a conditional marketing authorization for our therapeutic candidates, the EMA or CHMP may ultimately not agree that the requirements for conditional marketing authorization have been satisfied and hence delay the commercialization of our therapeutic candidates.

In the European Union, accelerated assessment can reduce the timeframe for EMA's CHMP to review a marketing-authorization application. Applications may be eligible for accelerated assessment if the CHMP decides the product is of major interest for public health and therapeutic innovation. The evaluation of a marketing-authorization application can take up to 210 days. However, the CHMP can reduce the timeframe to 150 days if the applicant can provide sufficient justification for an accelerated assessment. The Priority Medicines (PRIME) scheme was introduced by the EMA in 2016 to support the development of medicines addressing unmet medical needs which offer a therapeutic advantage over existing treatments. To be accepted in the PRIME scheme, the treatments must meet the eligibility criteria for accelerated assessment including a strongly substantiated mechanism of action, supportive preclinical data, and first-in-human tolerance data. PRIME has been compared to the U.S. Breakthrough Therapy Designation.

Withdrawal of expedited approval will delay trials and likely increase cost.

The FDA or EMA may withdraw expedited approval of our therapeutic candidate or indication approved under the accelerated approval pathway if, for example:

- the trial or trials required to verify the predicted clinical benefit of our therapeutic candidate fail to verify such benefit or do not demonstrate sufficient clinical benefit to justify the risks associated with the drug;
- other evidence demonstrates that our therapeutic candidate is not shown to be safe or effective under the conditions of use;
- we fail to conduct any required post-approval trial of our therapeutic candidate with due diligence; or
- we disseminate false or misleading promotional materials relating to the relevant therapeutic candidate.

Obtaining and maintaining regulatory approval of our therapeutic candidates in one jurisdiction does not mean that we will be successful in obtaining regulatory approval of our therapeutic candidates in other jurisdictions.

We plan on submit marketing applications in multiple jurisdictions and countries, including the UK, the EU and the United States. Regulatory authorities in each jurisdiction have requirements for approval of therapeutic candidates with which we must comply prior to marketing in those jurisdictions. Obtaining regulatory approvals and compliance with regulatory requirements of multiple jurisdictions and countries could result in significant delays, difficulties and costs for us and could delay or prevent the introduction of our therapeutic candidates in certain countries. If we fail to comply with the regulatory requirements in international markets and/or receive applicable marketing approvals, our target market will be reduced and our ability to realize the full market potential of our therapeutic candidates will be harmed.

Obtaining and maintaining regulatory approval of our therapeutic candidates in one jurisdiction does not guarantee that we will be able to obtain or maintain regulatory approval in any other jurisdiction, while a failure or delay in obtaining regulatory approval in one jurisdiction may have a negative effect on the regulatory approval process in others. For example, even if the FDA grants marketing approval of our key products in the United States, comparable regulatory authorities in other jurisdictions must also approve the manufacturing, marketing and promotion of our products in those countries. Approval procedures vary among jurisdictions and may require additional preclinical programs or clinical trials. In many jurisdictions a therapeutic candidate must be approved for reimbursement before it can be approved for sale in that jurisdiction. In some cases, the price that we intend to charge for our therapeutic candidates is also subject to approval.

We may face difficulty in enrolling patients in our clinical trials.

We may find it difficult to enroll patients in our clinical trials. For example, in our TCB-001 clinical trial we experienced a high screen failure rate. Identifying and qualifying patients, including testing of patients for their GD-T cells' proliferation capacity, to participate in clinical trials of our therapeutic candidates, are critical to our success. The timing of our current and future clinical trials depends on the speed at which we can recruit patients to participate in testing our therapeutic candidates. If patients are unwilling to participate in our trial(s) because of negative publicity from adverse reactions or for other reasons, including competitive clinical trials for similar patient populations, the timeline for recruiting patients, conducting trials and obtaining regulatory approval of potential products may be delayed or prevented. These delays could result in increased costs, delays in advancing our product development, delays in testing the effectiveness of our technology or termination of the clinical trials altogether. We may not be able to identify, recruit and enroll a sufficient number of patients, or those with required or desired characteristics to achieve sufficient diversity in a given trial in order to complete our clinical trials in a timely manner. Patient enrolment is affected by factors including:

- eligibility criteria for the trial in question;
- severity of the disease under investigation;
- design of the trial protocol;
- trial duration and number and complexity of visits and procedures;
- size of the patient population;
- perceived risks and benefits of the therapeutic candidate under trial;
- novelty of the therapeutic candidate and acceptance by oncologists;
- proximity and availability of clinical trial sites for prospective patients;
- availability of competing therapies and clinical trials;

- efforts to facilitate timely enrolment in clinical trials;
- patient referral practices of physicians; and
- ability to monitor patients adequately during and after treatment.

If we have difficulty enrolling a sufficient number of patients to conduct our clinical trials as planned, we may need to delay, limit or terminate ongoing or planned clinical trials, any of which would have an adverse effect on our business.

The outcome of clinical trials is uncertain and our clinical trials may fail to demonstrate adequately the safety and efficacy of any of our T cell therapeutic candidates, which would prevent or delay regulatory approval and commercialization.

There is a risk in any clinical trial that side effects from our therapeutic candidates will require a hold on, or termination of, our clinical program(s) or further adjustments to our clinical program(s) in order to progress our therapeutic candidates. Our T cell therapeutic candidates will require evidence that they are safe before permitting clinical trials to commence and evidence that the therapeutic candidates are safe and effective before granting any regulatory approval. In particular, because our therapeutic candidates are subject to regulation as biological products, we will need to demonstrate that they are safe, pure and potent for use in each target indication. The therapeutic candidate must demonstrate an acceptable risk versus benefit profile in its intended patient population and for its intended use. The risk/benefit profile required for product licensure will vary depending on these factors and may include not only the ability to show tumor shrinkage, but also adequate duration of response, a delay in the progression of the disease and/or an improvement in survival. For example, response rates from the use of our therapeutic candidates will not be sufficient to obtain regulatory approval unless we can also show an adequate duration of response.

We may not be able to submit INDs, or the foreign equivalent outside of the United States, to continue our CAR-T clinical trials.

We are currently conducting preclinical development of our CAR-T therapeutic candidates. Progression of our CAR-T therapeutic candidates from pre- to clinical development (first-in-human, phase 1) is inherently risky and dependent on the results obtained in preclinical programs, the results of other clinical programs and results of third-party programs that utilize common components used for production and administration of our therapeutic candidates. If results are not available when expected or problems are identified during therapy development, we may experience significant delays in development of pipeline products and of existing clinical programs, which may impact our ability to receive regulatory approval. This may also impact our ability to achieve certain financial milestones and the expected timeframes to market any of our therapeutic candidates. Failure to submit further INDs or the foreign equivalent and commence additional clinical programs will significantly limit our opportunity to generate revenue.

Our research and development efforts may not result in the progression of our product candidates into clinical trials.

Our research and development efforts and our selection of the product candidates to pursue remain subject to all of the risks associated with the development of new treatment modalities. Development of the underlying technology may be affected by unanticipated technical or other problems, among other development and research issues, and the possible insufficiency of funds needed in order to complete development of these products. Safety, regulatory and efficacy issues, clinical hurdles or challenges also may result in delays and cause us to incur additional expenses that will increase our need for capital and result in additional losses. If we cannot complete, or if we experience significant delays in developing our medical products for use in potential commercial applications, particularly after incurring significant expenditures, our business may fail and investors may lose the entirety of their investment.

We will need to obtain regulatory approval for our product candidates, which is time consuming, costly and complicated. We may not obtain regulatory approval.

We cannot commercialize a product candidate until the appropriate regulatory authorities have reviewed and approved the product candidate. Approval by the FDA and comparable foreign regulatory authorities is lengthy and unpredictable, and depends upon numerous factors. Approval policies, regulations, or the type and amount of clinical data necessary to gain approval may change during the course of a product candidate's clinical development and may vary among jurisdictions, which may cause delays in the approval or the decision not to approve an application. We have not obtained regulatory approval for any product candidate, and it is possible that any of our product candidates will never obtain regulatory approval.

Applications for product candidates we may develop could fail to receive regulatory approval for many reasons. For example, under FDA regulation, approval may not be obtained for many reasons such as:

- our inability to demonstrate to the satisfaction of the FDA or comparable foreign regulatory authorities that a product candidate we may develop is safe and effective;
- the FDA or comparable foreign regulatory authorities may disagree with the design or implementation of our clinical trials;
- the population studied in the clinical program may not be sufficiently broad or representative to assure safety in the full population for which we seek approval;
- the FDA's or comparable foreign regulatory authorities' requirement for additional preclinical studies or clinical trials;
- the FDA or comparable foreign regulatory authorities may disagree with our interpretation of data from nonclinical studies or clinical trials;

- the data collected from clinical trials of our product candidates may not be sufficient to support the submission of a new drug application, or NDA, or other submission for regulatory approval in the United States or elsewhere;
- we may be unable to demonstrate to the FDA or comparable foreign regulatory authorities that a product candidate's risk-benefit ratio for its proposed indication is acceptable;
- the FDA or comparable foreign regulatory authorities may fail to approve the manufacturing processes, test procedures and specifications, or facilities of third-party manufacturers with which we contract for clinical and commercial supplies; and
- the approval policies or regulations of the FDA or comparable foreign regulatory authorities may change in a manner that renders our clinical trial design or data insufficient for approval.

The lengthy approval process, as well as the unpredictability of the results of clinical trials, may result in our failing to obtain regulatory approval to market a product candidate in the United States or elsewhere, which would significantly harm our business, prospects, financial condition and results of operations

We are heavily dependent on the success of our lead product candidates, OmnImmune®, ImmuniStim®, TCB005. TCB006 and TCB009. If we are unable to successfully complete clinical development, obtain regulatory approval for, or commercialize these products, or experience delays in doing so, our business will be materially harmed.

Our future success is dependent on our ability to successfully develop, obtain regulatory approval for, and commercialize the aforementioned products which are in various early stages of development. Before we can generate any revenues from sales of the products, we may be required to conduct additional clinical development, including, among other things, additional toxicology studies before we can conduct longer-term clinical trials and a larger pivotal clinical trial if our clinical trial of these products is successful, seek and obtain regulatory approval, secure adequate manufacturing supply to support larger clinical trials and commercial sales and build a commercial organization. Further, the success of these products will depend on patent and trade secret protection, acceptance of these products by patients, the medical community and third-party payers, its ability to compete with other therapies, healthcare coverage and reimbursement, and maintenance of an acceptable safety profile following approval, among other factors. If we do not achieve any of these factors in a timely manner or at all, we could experience significant delays or an inability to successfully commercialize these products which may materially harm our business.

Laboratory conditions differ from clinical conditions and commercial conditions, which could affect the effectiveness of our potential products. Failures to effectively move from laboratory to the field would harm our business.

Observations and developments that may be achievable under laboratory circumstances may not be replicated in commercial settings or in the use of any of the proposed products in the field. The failure of our product candidates under development or other future product candidates to be able to be tested, approved and manufactured in available manufacturing facilities or to be able to meet the demands of users in the field would harm our business.

Results of earlier studies may not be predictive of future clinical trial results, and initial studies may not establish an adequate safety or efficacy profile for our drugs and other product candidates that we may pursue to justify proceeding to advanced clinical trials or an application for regulatory approval.

The results of preclinical studies and clinical trials of our product candidates may not be predictive of the results of later-stage clinical trials, and interim results of a clinical trial do not necessarily predict final results. Additionally, any positive results generated in our Phase 1b/2a clinical trials in adults would not ensure that we will achieve similar results in larger, pivotal clinical trials or in clinical trials in general populations. In addition, preclinical and clinical data are often susceptible to various interpretations and analyses, and many companies that have believed their product candidates performed satisfactorily in preclinical studies and clinical trials have nonetheless failed to obtain marketing approval. Product candidates in later stages of clinical trials may fail to show the desired safety and efficacy despite having progressed through nonclinical studies and initial clinical trials. A number of companies in the biopharmaceutical industry have suffered significant setbacks in advanced clinical trials due to lack of efficacy or adverse safety profiles, notwithstanding promising results in earlier studies, and we cannot be certain that we will not face similar setbacks. Even if early-stage clinical trials are successful, we may need to conduct additional clinical trials for product candidates in additional patient populations or under different treatment conditions before we are able to seek approvals from the FDA and regulatory authorities outside the United States to market and sell these product candidates. Our failure to demonstrate the required characteristics to support marketing approval for our product candidates in any ongoing or future clinical trials would substantially harm our business, prospects, financial condition and results of operations.

We manufacture and test all our therapeutic candidates in-house, and may experience logistic issues.

The manufacture, testing and release of TCB's cell therapies for clinical trials may not meet with the regulatory requirements and result in the delay of clinical trials. Logistical issues which may prevent timely completion of manufacture and testing include:

- failure in integrity of facility infrastructure;
- failure of High Efficiency Particulate Absorbing (HEPA) filters to prevent airborne cross-contamination;
- delays in the procuring test materials/reagents due to supplier, shipping issues or discontinued supply;
- failure by third parties to notify a change in material product specifications that are not GMP compliant;
- redundant equipment (or parts) used within the manufacturing process;
- equipment failure within production, quality control and stores;
- failure of quality control equipment;
- delays in cleanroom supplies from third parties such as PPE or cleaning reagents;
- failure in the cleanroom resulting in insufficient quantities of our product candidates being available to the clinical sites;
- increase in our costs of materials;
- delays in final product release testing being conducted within product shelf-life of 36 hours;
- released in 'real time' which means that safety testing is incomplete when administered to the patient resulting in contaminated product being released to the clinic;
- failure due to resource issues associated with personnel illness; and
- failure in recruitment of cleanroom operators and quality staff as we progress through clinical trials.

We conduct and manage clinical studies using internal staff trained to perform such studies and loss of these staff may delay our clinical program.

We are highly dependent upon the principal members of our management team and the members of our scientific team. These persons have significant experience and knowledge within our operational sector, and the loss of any team member could impair our ability to design, identify, and develop clinical trials, new intellectual property and new scientific or product ideas.

We expect to operate in a highly competitive, ever evolving, market.

The broader market for our products is becoming more focused and potentially more competitive. Over time, we believe this field will become subject to more rapid change and new drugs, therapies and other products will emerge. We may not be able to compete effectively against these companies or their products. We may find ourselves in competition with companies that have competitive advantages over us, such as:

- significantly greater name recognition;

- established relations with healthcare professionals, customers and third-party payors;
- established distribution networks;
- additional lines of products, and the ability to offer rebates, higher discounts or incentives to gain a competitive advantage;
- greater experience in conducting research and development, manufacturing, clinical trials, obtaining regulatory approval for products, and marketing approved products; and
- greater financial and human resources for product development, sales and marketing, and patent litigation.

Many of our competitors, either alone or with their strategic collaborators, have substantially greater financial, technical and human resources than we do. Accordingly, our competitors may be more successful than we are in obtaining approval for treatments and achieving widespread market acceptance and may render our treatments obsolete or non-competitive. Mergers and acquisitions in the biotechnology and pharmaceutical industries may result in even more resources being concentrated among a smaller number of our competitors. These competitors also compete with us in recruiting and retaining qualified scientific and management personnel and establishing clinical study sites and patient registration for clinical studies, as well as in acquiring technologies complementary to, or necessary for, our programs. Smaller or early-stage companies may also prove to be significant competitors, particularly through collaborative arrangements with large and established companies.

Rapidly changing medical technology within the life sciences could make the product candidates that we are developing obsolete.

The medical industry is characterized by rapid and significant medical technological and therapy changes, frequent new product candidates and product introductions and enhancements and evolving industry standards. Our future success will depend on our ability to continually develop and then improve the product candidates that we design and to develop and introduce new product candidates that address the evolving needs of the physicians and patients on a timely and cost-effective basis. Any new product candidates and products developed by us may not be accepted in the intended markets. Our inability to gain market acceptance of new products could harm our future operating results.

The market opportunities for certain of our product candidates may be small, due to the fact that the products may be limited to those patients who are ineligible for or have failed prior treatments, and our projections regarding the size of the addressable market may be incorrect.

Cancer therapies are sometimes characterized as first line, second line or third line, and the FDA often approves new therapies initially only for third line use. When blood cancers are detected, they are treated with first line of therapy with the intention of curing the cancer. This generally consists of chemotherapy, radiation, antibody drugs, tumor targeted small molecules, or a combination of these. In addition, sometimes a bone marrow transplantation can be added to the first line therapy after the combination chemotherapy is given. If the patient's cancer relapses, then they are given a second line or third line therapy, which can consist of more chemotherapy, radiation, antibody drugs, tumor targeted small molecules, or a combination of these, or bone marrow transplant. Generally, the higher the line of therapy, the lower the chance of a cure. With third or higher line, the goal of the therapy in the treatment of lymphoma and myeloma is to control the growth of the tumor and extend the life of the patient, as a cure is unlikely to happen. Patients are generally referred to clinical trials in these situations.

Our projections of both the number of people who have the cancers we are targeting, as well as the size of the patient population subset of people with these cancers in a position to receive first, second, third and fourth line therapy and who have the potential to benefit from treatment with our product candidates, are based on our beliefs and estimates. These estimates have been derived from a variety of sources, including scientific literature, surveys of clinics, patient foundations, or market research and may prove to be incorrect. Further, new studies may change the estimated incidence or prevalence of these cancers. The number of patients may turn out to be fewer than expected. Additionally, the potentially addressable patient population for our product candidates may be limited or may not be amenable to treatment with our product candidates. Even if we obtain significant market share for our product candidates, because the potential target populations are small, we may never achieve significant revenues without obtaining regulatory approval for additional indications or as part of earlier lines of therapy.

We rely on third parties to support our clinical trials. If these third parties do not successfully carry out their contractual duties or meet expected deadlines, we may not be able to obtain regulatory approval of or commercialize our product candidates.

We depend and will continue to depend upon independent investigators and collaborators, such as universities, medical institutions, CROs and strategic partners to support our and clinical trials under agreements with the Company.

We negotiate budgets and contracts with CROs and study sites, which may result in delays to our development timelines and increased costs. We will rely heavily on these third parties over the course of our clinical trials, and we control only certain aspects of their activities. Nevertheless, we are responsible for ensuring that each of our studies is conducted in accordance with applicable protocol, legal, regulatory and scientific standards, and its reliance on third parties does not relieve us of our regulatory responsibilities. TCB and these third parties are required to comply with GCPs, which are regulations and guidelines enforced by regulatory authorities for product candidates in clinical development. Regulatory authorities enforce these GCPs through periodic inspections of trial sponsors, principal investigators and trial sites. If we or any of these third parties fail to comply with applicable GCP regulations, the clinical data generated in our clinical trials may be deemed unreliable and the FDA or comparable foreign regulatory authorities may require us to perform additional clinical trials before approving our marketing applications. We cannot assure that, upon inspection, such regulatory authorities will determine that any of our clinical trials comply with the GCP regulations. In addition, our clinical trials must be conducted with biologic product produced under cGMPs and will require a large number of test patients. Our failure or any failure by these third parties to comply with these regulations or to recruit a sufficient number of patients may require us to repeat clinical trials, which would delay the regulatory approval process. Moreover, our business may be implicated if any of these third parties violates federal or state fraud and abuse or false claims laws and regulations or healthcare privacy and security laws.

Any third parties supporting our clinical trials are and will not be our employees and, except for remedies available to us under our agreements with such third parties, we cannot control whether or not they devote sufficient time and resources to our ongoing preclinical, clinical and nonclinical programs. These third parties may also have relationships with other commercial entities, including our competitors, for whom they may also be conducting clinical studies or other drug development activities, which could affect their performance on our behalf. If these third parties do not successfully carry out their contractual duties or obligations or meet expected deadlines, if they need to be replaced or if the quality or accuracy of the clinical data they obtain is compromised due to the failure to adhere to our clinical protocols or regulatory requirements or for other reasons, our clinical trials may be extended, delayed or terminated and we may not be able to complete development of, obtain regulatory approval of or successfully commercialize our product candidates. As a result, our financial results and the commercial prospects for our product candidates would be harmed, our costs could increase and our ability to generate revenue could be delayed.

If any of our relationships with trial sites, or any CRO that we may use in the future, terminates, we may not be able to enter into arrangements with alternative trial sites or CROs or do so on commercially reasonable terms. Switching or adding third parties to conduct our clinical trials will involve substantial cost and require extensive management time and focus. In addition, there is a natural transition period when a new third party commences work. As a result, delays occur, which can materially impact our ability to meet its desired clinical development timelines.

We do not have any current sales, marketing, commercial manufacturing and distribution capabilities or arrangements, and will need to create these as we move towards commercialization of our products.

We do not yet have commercial sales, marketing, manufacturing and distribution capabilities or arrangements. We will need to develop all of the foregoing or partner with organizations who have expertise in all the foregoing. We do not have any corporate experience in establishing these commercial sized capabilities. We believe that setting up the commercialization aspects of a company such as ours, in our field, will take a substantial amount of capital and time. Therefore, we may seek development and marketing partners and license our drug technologies or product candidates to others in order to avoid our having to provide the marketing, manufacturing and distribution capabilities within our organization. There can be no assurance that we will find any development and marketing partners or companies that are interested in licensing our drug technology or any of our product candidates or products. If we are unable to establish and maintain adequate sales, marketing, manufacturing and distribution capabilities, independently or with others, we will not be able to generate product revenue, and may not become profitable.

We may rely on third parties to manufacture our clinical product supplies, and we may have to rely on third parties to produce and process our product candidates, if approved.

Although to date, we have used our internal capabilities to manufacture clinical trial supplies, we do not yet have sufficient information to reliably estimate the cost of commercially manufacturing and processing of our product candidates. The actual cost to manufacture and process our product candidates could materially and adversely affect the commercial viability of our product candidates. As a result, we may never be able to develop a commercially viable product.

We anticipate that we will rely on a limited number of third-party manufacturers for commercial production, but this will expose us to the following risks.

- We may be unable to identify manufacturers on acceptable terms or at all because the number of potential manufacturers is limited and the regulatory authorities may have questions regarding any replacement contractor. This may require new testing and regulatory interactions. In addition, a new manufacturer would have to be educated in, or develop substantially equivalent processes for, production of our products.

- Third-party manufacturers might be unable to timely formulate and manufacture our product or produce the quantity and quality required to meet our clinical and commercial needs, if any.

- Future contract manufacturers may not perform as agreed or may not remain in the contract manufacturing business for the time required to supply our clinical trials or to successfully produce, store and distribute our products.

- Manufacturers are subject to strict compliance with cGMP and other government regulations and corresponding foreign standards. We do not have control over third-party manufacturers' compliance with these regulations and standards.

- We may not own, or may have to share, the intellectual property rights to any improvements made by our third-party manufacturers in the manufacturing process for our products.

- Third-party manufacturers could breach or terminate their agreement(s) with us.

Contract manufacturers would also be subject to the same risks we face in developing our own manufacturing capabilities, as described above. Each of these risks could delay our clinical trials, the regulatory approval, if any, of our product candidates or the commercialization of our product candidates or result in higher costs or deprive us of potential product revenue. In addition, we will rely on third parties to perform release tests on our product candidates prior to delivery to patients. If these tests are not appropriately done and test data are not reliable, patients could be put at risk of serious harm.

Cell-based therapies rely on the availability of specialty raw materials, which may not be available to us on acceptable terms or at all.

Our product candidates require specialized raw materials, including viral vectors that deliver the targeting moiety (CAR) and other genes to the product candidate. We currently manufacture some of our requirements through contract manufacturers, some of which are manufactured by companies with limited resources and experience to support a commercial product, and the suppliers may not be able to deliver raw materials to our specifications. In addition, those suppliers normally support blood-based hospital businesses and generally do not have the capacity to support commercial products manufactured under cGMP by biopharmaceutical firms. The suppliers may be ill-equipped to support our needs, especially in non-routine circumstances like an FDA inspection or medical crisis, such as widespread contamination. We also do not have contracts with many of these suppliers, and we may not be able to contract with them on acceptable terms or at all. Accordingly, we may experience delays in receiving key raw materials to support clinical or commercial manufacturing.

In addition, some raw materials utilized in the manufacture of our candidates are currently available from a single supplier, or a small number of suppliers. For example, principal suppliers for the purchase of equipment and reagents critical for the manufacture of our product candidates include Cytiva (Global Life Sciences Solutions Operations UK Ltd), Wilson Wolf Manufacturing Corporation, Phoenix Labs, Nova Biologics, Inc., Sexton Biotechnologies and other suppliers. We cannot be sure that these suppliers will remain in business or that they will not be purchased by one of our competitors or another company that is not interested in continuing to produce these materials for our intended purpose. In addition, the lead time needed to establish a relationship with a new supplier can be lengthy, and we may experience delays in meeting demand in the event that we must switch to a new supplier. The time and effort to qualify a new supplier could result in additional costs, diversion of resources or reduced manufacturing yields, any of which would negatively impact our operating results. Further, we may be unable to enter into agreements with a new supplier on commercially reasonable terms, which could have a material adverse impact on our business.

Product liability lawsuits against us could cause us to incur substantial liabilities and to limit commercialization of any products that we may develop.

We face an inherent risk of product liability exposure related to the testing of our product candidates in human clinical trials and will face an even greater risk if we commercially sell any products that we may develop. If we cannot successfully defend ourselves against claims that our product candidates or products caused injuries, we will incur substantial liabilities. Regardless of merit or eventual outcome, liability claims may result in:

- reduced resources of our management to pursue our business strategy;

- decreased demand for any product candidates or products that we may develop;

- injury to our reputation and significant negative media attention;

- withdrawal of clinical trial participants;

- initiation of investigations by regulators;
- product recalls, withdrawals or labelling, marketing or promotional restrictions;
- significant costs to defend the resulting litigation;
- substantial monetary awards paid to clinical trial participants or patients;
- loss of revenue; and
- the inability to commercialize any products that we may develop.

We currently hold £5.0 million in clinical study liability annual insurance cover for each clinical study, with a per patient limit of £5.0 million, which may not be adequate to cover all liabilities that we may incur. We may need to increase our insurance coverage as we expand our clinical trials or if we commence commercialization of our product candidates. Insurance coverage is increasingly expensive. We may not be able to maintain insurance coverage at a reasonable cost or in an amount adequate to satisfy any liability that may arise.

Risks Related to Governmental Regulations

Changes and uncertainties in the tax system in the countries in which we have operations could materially adversely affect our financial condition and results of operations, and reduce net returns to our shareholders.

We conduct business and file income tax returns in multiple jurisdictions. Our consolidated effective income tax rate could be materially adversely affected by several factors, including: changing tax laws, regulations and treaties, or the interpretation thereof; tax policy initiatives and reforms under consideration (such as those related to the Organisation for Economic Co-Operation and Development's, or OECD, Base Erosion and Profit Shifting, or BEPS, Project, the European Commission's state aid investigations and other initiatives); the practices of tax authorities in jurisdictions in which we operate; the resolution of issues arising from tax audits or examinations and any related interest or penalties. Such changes may include (but are not limited to) the taxation of operating income, investment income, dividends received or (in the specific context of withholding tax) dividends paid.

We are unable to predict what tax reform may be proposed or enacted in the future or what effect such changes would have on our business, but such changes, to the extent they are brought into tax legislation, regulations, policies or practices in jurisdictions in which we operate, could increase the estimated tax liability that we have expensed to date and paid or accrued on our balance sheets, and otherwise affect our financial position, future results of operations, cash flows in a particular period and overall or effective tax rates in the future in countries where we have operations, reduce post-tax returns to our shareholders and increase the complexity, burden and cost of tax compliance.

Changes in our business strategy or operations may result in grant income being repaid to government grant awarding bodies

We have been awarded and received grant income from government agencies with respect to a number of research and development programs totaling £5.6 million since incorporation through September 30, 2021. In some cases, the grant award contains commitments for the business that extend beyond the specific program period. If the Company changes strategy or the nature of its operations, some grant awarding bodies may view this as a breach of the original terms of the grant and all or part of the original grant award may become subject to repayment. In the event of our having to return funds under prior grant awards, the Company may be required to repay up to an aggregate of £5.6 million.

Tax authorities may disagree with our positions and conclusions regarding certain tax positions, or may apply existing rules in an unforeseen manner, resulting in unanticipated costs, taxes or non-realization of expected benefits.

A tax authority may disagree with tax positions that we have taken, which could result in increased tax liabilities. For example, Her Majesty's Revenue & Customs, or HMRC, the United States Internal Revenue Service, the IRS, or another tax authority could challenge our allocation of income by tax jurisdiction and the amounts paid between our affiliated companies pursuant to our intercompany arrangements and transfer pricing policies, including amounts paid with respect to our intellectual property development. Similarly, a tax authority could assert that we are subject to tax in a jurisdiction where we believe we have not established a taxable connection, often referred to as a "permanent establishment" under international tax treaties, and such an assertion, if successful, could increase our expected tax liability in one or more jurisdictions.

A tax authority may take the position that material income tax liabilities, interest and penalties are payable by us, for example where there has been a technical violation of contradictory laws and regulations that are relatively new and have not been subject to extensive review or interpretation, in which case we expect that we might contest such assessment. High-profile companies can be particularly vulnerable to aggressive application of unclear requirements. Many companies must negotiate their tax bills with tax inspectors who may demand higher taxes than applicable law appears to provide. Contesting such an assessment may be lengthy and costly and if we were unsuccessful in disputing the assessment, the implications could increase our anticipated effective tax rate, where applicable.

We may be unable to use net operating loss and tax credit carryforwards and certain built-in losses to reduce future tax payments or benefit from favorable UK tax legislation.

As a UK incorporated and tax resident entity, we are subject to UK corporate taxation. Due to the nature of our business, we have generated losses since inception and therefore have not paid any UK corporation tax. As of December 31, 2020, we had cumulative carryforward tax trading losses of £12.8 million. Subject to any relevant utilization criteria and restrictions (including those that limit the percentage of profits that can be reduced by carried forward losses and those that can restrict the use of carried forward losses where there is a change of ownership of more than half of our ordinary shares (including those represented by the ADSs) and a major change in the nature, conduct or scale of the trade), we expect these to be eligible for carry forward and utilization against future operating profits. The use of loss carryforwards in relation to UK profits incurred on or after April 1, 2017 will be limited each year to £5.0 million per group plus, broadly, an incremental 50% of UK taxable profits.

As a company that carries out extensive research and development activities, we seek to benefit from the UK research and development tax relief programs, being the Small and Medium-sized Enterprises R&D tax relief program, or SME Program, and, to the extent that our projects are grant funded or relate to work subcontracted to us by third parties, the Research and Development Expenditure Credit program, or RDEC Program. Under the SME Program, we may be able to surrender the trading losses that arise from our qualifying research and development activities for a cash rebate of up to 33.35% of such qualifying research and development expenditures. The majority of our research, clinical trials management and manufacturing development activities are eligible for inclusion within these tax credit cash rebate claims. We may not be able to continue to claim payable research and development tax credits in the future if we cease to qualify as a SME, based on size criteria concerning employee headcount, turnover and gross assets.

We may benefit in the future from the UK's "patent box" regime, which allows certain profits attributable to revenue from patented products (and other qualifying income) to be taxed at an effective rate of 10% by giving an additional tax deduction. We own several patents which cover our investigational therapies, and accordingly, future upfront fees, milestone fees, product revenue and royalties could be eligible for this deduction. When taken in combination with the enhanced relief available on our research and development expenditures, we expect a long-term rate of corporation tax lower than the statutory to apply to us. If, however, there are unexpected adverse changes to the

UK research and development tax credit regime or the "patent box" regime, or for any reason we are unable to qualify for such advantageous tax legislation, or we are unable to use net operating loss and tax credit carryforwards and certain built-in losses to reduce future tax payments then our business, results of operations and financial condition may be adversely affected. This may impact our ongoing requirement for investment and the timeframes within which additional investment is required.

Failure to comply with United States health and data protection laws and regulations could lead to enforcement actions, including civil or criminal penalties, private litigation, and adverse publicity and could negatively affect our operating results and business.

We and any potential collaborators are subject to data protection laws and regulations, such as laws and regulations that address privacy and data security. In the United States, numerous federal and state laws and regulations, including state data breach notification laws, state health information privacy laws, and federal and state consumer protection laws, govern the collection, use, disclosure, and protection of health-related and other personal information. In addition, we may obtain health information from third parties, including research institutions from which we obtain clinical trial data, which are subject to privacy and security requirements under HIPAA, as amended by HITECH. To the extent that we act as a business associate to a healthcare provider engaging in electronic transactions, we may also be subject to the privacy and security provisions of HIPAA, as amended by HITECH, which restricts the use and disclosure of patient-identifiable health information, mandates the adoption of standards relating to the privacy and security of patient-identifiable health information, and requires the reporting of certain security breaches to healthcare provider customers with respect to such information. Additionally, many states have enacted similar laws that may impose more stringent requirements on entities like ours. Depending on the facts and circumstances, we could be subject to significant civil, criminal, and administrative penalties if we obtain, use, or disclose individually identifiable health information maintained by a HIPAA-covered entity in a manner that is not authorized or permitted by HIPAA.

Additionally, in June 2018, the State of California enacted the California Consumer Privacy Act of 2018, or CCPA, which came into effect on January 1, 2020 and provides new data privacy rights for consumers (as that term is broadly defined) and new operational requirements for companies, which may increase our compliance costs and potential liability. The CCPA gives California residents expanded rights to access and delete their personal information, opt out of certain personal information sharing, and receive detailed information about how their personal information is used. The CCPA provides for civil penalties for violations, as well as a private right of action for data breaches that is expected to increase data breach litigation. While there is currently an exception for protected health information that is subject to HIPAA and clinical trial regulations, as currently written, the CCPA may impact certain of our business activities. The CCPA could mark the beginning of a trend toward more stringent state privacy legislation in the United States, which could increase our potential liability and adversely affect our business.

Compliance with U.S. and foreign privacy and data protection laws and regulations could require us to take on more onerous obligations in our contracts, restrict our ability to collect, use and disclose data, or in some cases, impact our ability to operate in certain jurisdictions. Failure to comply with these laws and regulations could result in government enforcement actions (which could include civil, criminal and administrative penalties), private litigation, and/or adverse publicity and could negatively affect our operating results and business. Moreover, clinical trial subjects, employees and other individuals about whom we or our potential collaborators obtain personal information, as well as the providers who share this information with us, may limit our ability to collect, use and disclose the information. Claims that we have violated individuals' privacy rights, failed to comply with data protection laws, or breached our contractual obligations, even if we are not found liable, could be expensive and time-consuming to defend and could result in adverse publicity that could harm our business.

European data collection is governed by restrictive privacy and security regulations governing the use, processing and cross-border transfer of personal information.

The collection, use, storage, disclosure, transfer, or other processing of personal data (including health data processed in the context of clinical trials) (i) regarding individuals in the EU, and/or (ii) carried out in the context of the activities of our establishment in any EU member state, is subject to the EU General Data Protection Regulation, or GDPR, which became effective on May 25, 2018, as well as other national data protection legislation in force in relevant member states (including the Data Protection Act 2018 in the UK).

The GDPR is wide-ranging in scope and imposes numerous additional requirements on companies that process personal data, including imposing special requirements in respect of the processing of health and other sensitive data, requiring that consent of individuals to whom the personal data relates is obtained in certain circumstances, requiring additional disclosures to individuals regarding data processing activities, requiring that safeguards are implemented to protect the security and confidentiality of personal data, creating mandatory data breach notification requirements in certain circumstances, and requiring that certain measures (including contractual requirements) are put in place when engaging third-party processors. The GDPR also imposes strict rules on the transfer of personal data to countries outside the EEA, including the United States, and permits data protection authorities to impose large penalties for violations of the GDPR, including potential fines of up to €20 million or 4% of annual global revenue, whichever is greater. The GDPR provides individuals with various rights in respect of their personal data, including rights of access, erasure, portability, rectification, restriction and objection. The GDPR also confers a private right of action on data subjects and consumer associations to lodge complaints with supervisory authorities, seek judicial remedies, and obtain compensation for damages resulting from violations of the GDPR.

The GDPR may increase our responsibility and liability in relation to personal data that we process where such processing is subject to the GDPR. While we have taken steps to comply with the GDPR, and implementing legislation in applicable EU member states, including by seeking to establish appropriate lawful bases for the various processing activities we carry out as a controller or joint controller, reviewing our security procedures and those of our vendors and collaborators, and entering into data processing agreements with relevant vendors and collaborators, we cannot be certain that our efforts to achieve and remain in compliance have been, and/or will continue to be, fully successful.

Following the UK's withdrawal from the EU on January 31, 2020 and following the end the of the transitional arrangements on December 31, 2020, it is likely that the data protection obligations of the GDPR will continue to apply to UK-based organizations' processing of personal data in substantially unvaried form, for at least the short term thereafter.

Risks Related to Our Business Operations, Managing Growth and Employee Matters

We may have difficulty managing growth in our business.

Because of our small size, growth in accordance with our business plan, if achieved, will place a significant strain on our financial, technical, operational and management resources. As we expand our activities, there will be additional demands on these resources. The failure to continue to upgrade our technical, administrative, operating and financial control systems or the occurrence of unexpected expansion difficulties, including issues relating to our research and development activities and retention of experienced scientists, managers and engineers, could have a material adverse effect on our business, financial condition and results of operations and our ability to timely execute our business plan. If we are unable to implement these actions in a timely manner, our results may be adversely affected.

We depend upon our key personnel and our ability to attract and retain employees

We are heavily dependent on the ongoing employment and involvement of certain key employees. These include (i) Dr Michael Leek, our current Chief Executive Officer and Chairman (who is expected to become the Executive Chairman of the Board after the completion of this offering), (ii) Angela Scott, our Chief Operating Officer, (iii) Bryan Kobel, our recently appointed Chief Executive Officer, and (iv) Sebastian Wanless, our Director of Clinical operations in the United Kingdom, Europe and North America. In response to this dependence, we are arranging to have appropriate key man insurance in place on these individuals immediately prior to the completion of this offering.

Dr Michael Leek and Angela Scott are married. They are our co-founders, our two most senior and experienced executive officers and are a vital part of our business. If the marriage ended or they could otherwise not amicably work with each other, one of them may decide to leave us which would materially harm our business.

We anticipate a requirement to expand our current personnel, who will be based in the UK, the EU and the USA, very rapidly in order to achieve our planned business activities and aims to further engage in clinical trials. Such expansion is dependent on our ability to recruit experienced and suitably trained employees or consultants, and to retain such employees on a long-term basis. Our ability to take our existing pipeline of GD-T cell therapeutics and to meet the demands of our clinical programs may be compromised or delayed if we are unable to recruit sufficient personnel on a timely basis.

The loss of key managers and senior scientists could delay our research and development activities. In addition, our ability to compete in the highly competitive pharmaceutical industry depends upon our ability to attract and retain highly qualified management, scientific and medical personnel. Many other companies and academic institutions that we compete against for qualified personnel have greater financial and other resources, different risk profiles and a longer history in the industry than we do. Therefore, we might not be able to attract or retain these key persons on conditions that are economically acceptable. Moreover, some qualified prospective employees may choose not to work for us due to negative perceptions regarding the therapeutic use of psilocybin or other objections to the therapeutic use of a controlled substance. Furthermore, we will need to recruit new managers and qualified scientific personnel to develop our business if we expand into fields that will require additional skills. Our inability to attract and retain these key persons could prevent us from achieving our objectives and implementing our business strategy, which could have a material adverse effect on our business and prospects.

In addition, certain key academic and scientific personnel play a pivotal role in our collaborative partners' research and development activities. If any of those key academic and scientific personnel who work on development of our research programs, our investigational GD-T cell therapy and any future therapeutic candidates leave our collaborative partners, the development of our research programs, our investigational GD-T cell therapy and any future therapeutic candidates may be delayed or otherwise adversely affected.

We will need to grow the size and capabilities of our organization, and we may experience difficulties in managing this growth.

As of the date of this prospectus, we had approximately 72 full-time equivalent employees. As our development and commercialization plans and strategies develop, and as we transition into operating as a public company, we will have to add a significant number of additional managerial, operational, financial, and other personnel. Future growth will impose significant added responsibilities on members of management, including:

- identifying, recruiting, integrating, maintaining, and motivating additional employees;
- managing our internal development efforts effectively, including the clinical and regulatory review process for our GD-T therapeutic candidates, while complying with our contractual obligations to contractors and other third parties; and
- improving our operational, financial and management controls, reporting systems, and procedures.

Our future financial performance and our ability to commercialize our GD-T therapeutic candidates will depend, in part, on our ability to effectively manage any future growth, and our management may also have to divert a disproportionate amount of its attention away from day-to-day activities in order to devote a substantial amount of time to managing these growth activities.

If we fail to maintain proper and effective internal controls, our ability to produce accurate financial statements on a timely basis could be impaired, which would adversely affect our business and our stock price.

Ensuring that we have adequate internal financial and accounting controls and procedures in place to produce accurate financial statements on a timely basis is a costly and time-consuming effort that needs to be re-evaluated frequently. We may discover material weaknesses in our internal financial and accounting controls and procedures that need improvement from time to time.

Management is responsible for establishing and maintaining adequate internal control over financial reporting to provide reasonable assurance regarding the reliability of our financial reporting and the preparation of financial statements for external purposes. Management does not expect that our internal control over financial reporting will prevent or detect all errors and all fraud. A control system, no matter how well designed and operated, can provide only reasonable, not absolute, assurance that the control system's objectives will be met. Because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that misstatements due to error or fraud will not occur or that all control issues and instances of fraud, if any, within our company will have been detected.

We will be required to comply with Section 404 of the Sarbanes-Oxley Act in connection with our SEC reports. We expect to expend significant resources in developing the necessary documentation and testing procedures required by Section 404. We cannot be certain that the actions we will be taking to improve our internal controls over financial reporting will be sufficient, or that we will be able to implement our planned processes and procedures in a timely manner. In addition, if we are unable to produce accurate financial statements on a timely basis, investors could lose confidence in the reliability of our financial statements, which could cause the market price of either of our ADSs or Warrants, or both, to decline and make it more difficult for us to finance our operations and growth.

A pandemic, epidemic, or outbreak of an infectious disease, such as the COVID-19 pandemic, may materially and adversely affect our business, including our preclinical studies, clinical trials, third parties on whom we rely, our supply chain, our ability to raise capital, our ability to conduct regular business and our financial results.

We are subject to risks related to public health crises such as the COVID-19 pandemic. The COVID-19 pandemic continues throughout the world. The pandemic and policies and regulations implemented by governments in response to the pandemic, often directing businesses and governmental agencies to cease non-essential operations at physical locations, prohibiting certain nonessential gatherings and ceasing non-essential travel have also had a significant impact, both direct and indirect, on businesses and commerce, as worker shortages have occurred, supply chains have been disrupted, facilities and production have been suspended, and demand for certain goods and services, such as medical service and supplies, has spiked, while demand for other goods and services, such as travel, has fallen. The full extent to which COVID-19 will ultimately impact our business, preclinical trials and financial results will depend on future developments, which are highly uncertain and cannot be accurately predicted, including new information which may emerge concerning the severity of COVID-19 and the actions to contain COVID-19 or treat its impact, among others. Global health concerns, such as the COVID-19 pandemic, could also result in social, economic, and labor instability in the countries in which we or the third parties with whom we engage operate.

In response to the COVID-19 pandemic, we have taken temporary precautionary measures intended to help minimize the risk of the virus to our employees, including flexibility for employees to work remotely where appropriate, suspending all non-essential travel worldwide for our employees and discouraging employee attendance at industry events and in-person work-related meetings, all of which could negatively affect our business. The extent of the impact of the COVID-19 pandemic on our preclinical studies or clinical trial operations, our supply chain and manufacturing and our office-based business operations, will depend on future developments, which are highly uncertain and cannot be predicted with confidence, such as the duration of the pandemic, the severity of the COVID-19 pandemic, or the effectiveness of actions to contain and treat coronavirus.

While we are working closely with our third-party manufacturers, distributors and other partners to manage our supply chain activities and mitigate potential disruptions to current and any future therapeutic candidates as a result of the COVID-19 pandemic, if the COVID-19 pandemic continues and persists for an extended period of time, we expect there will be significant and material disruptions to our supply chain and operations, and associated delays in the manufacturing and supply of current and any future therapeutic candidates. Any such supply disruptions would adversely impact our ability to generate sales of and revenue from our approved products and our business, financial condition, results of operations and growth prospects could be materially adversely affected.

The COVID-19 pandemic may also affect employees of third-party CROs located in affected geographies that we rely upon to carry out our clinical trials. As COVID-19 continues to be present and spread around the globe, we may experience additional disruptions that could severely impact our business and clinical trials, including:

- delays or difficulties in enrolling patients in our clinical trials;
- delays or difficulties in clinical site initiation, including difficulties in recruiting clinical site investigators and clinical site staff;
- diversion of healthcare resources away from the conduct of clinical trials, including the diversion of sites or facilities serving as our clinical trial sites and staff supporting the conduct of our clinical trials, including our trained therapists, or absenteeism due to the COVID-19 pandemic that reduces site resources;
- interruption of key clinical trial activities, such as clinical trial site monitoring, due to limitations on travel imposed or recommended by federal, state or national governments, employers and others or interruption of clinical trial subject visits and study procedures, the occurrence of which could affect the integrity of clinical trial data;
- risk that participants enrolled in our clinical trials will acquire COVID-19 while the clinical trial is ongoing, which could impact the results of the clinical trial, including by increasing the number of observed adverse events or patient withdrawals from our trials;
- limitations in employee resources that would otherwise be focused on conducting our clinical trials, including because of sickness of employees or their families or the desire of employees to avoid contact with large groups of people;
- delays in receiving authorizations from regulatory authorities to initiate our planned clinical trials;
- delays in clinical sites receiving the supplies and materials needed to conduct our clinical trials;
- interruption in global shipping that may affect the transport of clinical trial materials, such as the cell therapy used in our clinical trials;
- changes in local regulations as part of a response to the COVID-19 pandemic which may require us to change the ways in which our clinical trials are conducted, which may result in unexpected costs, or the discontinuation of the clinical trials altogether;
- interruptions or delays in preclinical studies due to restricted or limited operations at research and development laboratory facilities;
- delays in necessary interactions with local regulators, ethics committees and other important agencies and contractors due to limitations in employee resources or forced furlough of government employees; and
- refusal of the FDA, the EMA, the MHRA or the other regulatory bodies to accept data from clinical trials in affected geographies outside the United States or the EU or other relevant local geography.

Any negative impact the COVID-19 pandemic has on patient enrolment or treatment or the development of our investigational cell therapies and any future therapeutic candidates could cause costly delays to clinical trial activities, which could adversely affect our ability to obtain regulatory approval for and to commercialize our investigational cell therapies and any future therapeutic candidates, if approved, increase our operating expenses, and have a material adverse effect on our financial results.

The COVID-19 pandemic has also caused significant volatility in public equity markets and disruptions to the United States and global economies. This increased volatility and economic dislocation may make it more difficult for us to raise capital on favorable terms, or at all. We cannot currently predict the scope and severity of any potential business shutdowns or disruptions. If we or any of the third parties with whom we engage, however, were to experience shutdowns or other business disruptions, our ability to conduct our business in the manner and on the timelines presently planned could be materially and negatively affected, which could have a material adverse impact on our business and our results of operations and financial conditions. To the extent the COVID-19 pandemic adversely affects our business and financial results, it may also heighten many of the other risks described in this "Risk Factors" section, such as those relating to the timing and completion of our clinical trials and our ability to obtain future financing.

Our current operations are headquartered in one location, and we or the third parties upon whom we depend may be adversely affected by unplanned natural disasters, as well as occurrences of civil unrest, and our business continuity and disaster recovery plans may not adequately protect us from a serious disaster, including earthquakes, outbreak of disease or other natural disasters.

Our current business operations are headquartered in our offices in Glasgow, UK, with an additional office in Leiden in the Netherlands. Any unplanned event, such as flood, fire, explosion, earthquake, extreme weather condition, medical epidemics, power shortage, telecommunication failure or other natural or man-made accidents or incidents, including events of civil unrest that result in us being unable to fully utilize our facilities, or the manufacturing facilities of our third-party contract manufacturers, may have a material and adverse effect on our ability to operate our business, particularly on a daily basis, and have significant negative consequences on our financial and operating conditions. Loss of access to these facilities may result in increased costs, delays in the development of our investigational GD-T cell therapy or any future therapeutic candidates or interruption of our business operations.

The disaster recovery and business continuity plans we have in place may prove inadequate in the event of a serious disaster or similar event. We may incur substantial expenses as a result of the limited nature of our disaster recovery and business continuity plans, which, could have a material adverse effect on our business. As part of our risk management policy, we maintain insurance coverage at levels that we believe are appropriate for our business, but in the final result may not be sufficient to satisfy any damages and losses.

The increasing use of social media platforms presents new risks and challenges.

Social media is increasingly being used to communicate about our clinical development programs and the diseases our investigational GD-T cell therapy or any future therapeutic candidates are being developed to treat, and we may use appropriate social media in connection with our commercialization efforts of our investigational GD-T cell therapy following approval of our GD-T cell therapy or any future therapeutic candidates, if any. Social media practices in the biopharmaceutical industry continue to evolve, and regulations and regulatory guidance relating to such use are evolving and not always clear. This evolution creates uncertainty and risk of noncompliance with regulations applicable to our business, resulting in potential regulatory actions against us, along with the potential for litigation related to certain prohibited activities. For example, patients may use social media channels to comment on their experience in an ongoing clinical trial or to report an alleged adverse event. When such disclosures occur, there is a risk that trial enrolment may be adversely impacted, we fail to monitor and comply with applicable adverse event reporting obligations, or that we may not be able to defend our business or the public's legitimate interests in the face of the political and market pressures generated by social media due to restrictions on what we may say about our investigational GD-T cell therapy or any future therapeutic candidates. There is also a risk of inappropriate disclosure of sensitive information or negative or inaccurate posts or comments about us on any social networking website. If any of these events were to occur or we otherwise fail to comply with applicable regulations, we could incur liability, face regulatory actions or incur other harm to our business.

Risks Related to Intellectual Property

If we or our licensors are unable to protect our/their intellectual property, then our financial condition, results of operations and the value of our drug technology and product candidates could be adversely affected.

Patents and other proprietary rights are essential to our business, and our ability to compete effectively with other companies is dependent upon the proprietary nature of our drug technologies and product candidates. We also rely upon trade secrets, know-how, continuing innovations and licensing opportunities to develop, maintain and strengthen our competitive position. We seek to protect these, in part, through confidentiality agreements with employees, consultants and other parties. Our success will depend in part on the ability of TCB and our licensors to obtain, to maintain (including making periodic filings and payments) and to enforce patent protection for the licensed intellectual property, in particular, those patents to which we have secured rights. We, and our licensors, may not successfully prosecute or continue to prosecute the patent applications which we have licensed. Even if patents are issued in respect of these patent applications, TCB or our licensors may fail to maintain these patents, may determine not to pursue litigation against entities that are infringing upon these patents, or may pursue such enforcement less aggressively than we ordinarily would for our own patents. Without adequate protection for the intellectual property that we own or license, other companies might be able to offer substantially identical products for sale, which could unfavorably affect our competitive business position and harm our business prospects. Even if issued, patents may be challenged, invalidated, or circumvented, which could limit our ability to stop competitors from marketing similar products or limit the length of term of patent protection that we may have for our products.

Litigation or third-party claims of intellectual property infringement or challenges to the validity of our patents would require us to use resources to protect our rights and may prevent or delay our development, regulatory approval or commercialization of our product candidates.

If we are the target of claims by third parties asserting that our product candidates and products or intellectual property infringe upon the rights of others we may be forced to incur substantial expenses or divert substantial employee resources from our current business endeavors. If successful, those claims could result in our having to pay substantial damages or could prevent us from developing one or more product candidates or commercializing a product. Further, if a patent infringement suit were brought against us or our collaborators, we or they could be forced to stop or delay research, development, manufacturing or sales of the product candidate or product that is the subject of the suit.

If we or our collaborators experience patent infringement claims, or if we elect to avoid potential claims others may be able to assert, we or our collaborators may choose to seek, or be required to seek, a license from the third-party and would most likely be required to pay license fees or royalties or both. These licenses may not be available on acceptable terms, or at all. Even if we or our collaborators were able to obtain a license, the rights may be nonexclusive, which would give our competitors access to the same intellectual property. Ultimately, we could be prevented from commercializing a product, or be forced to cease some aspect of our business operations if, as a result of actual or threatened patent infringement claims, we or our collaborators are unable to enter into licenses on acceptable terms. This could harm our business significantly. The cost to us of any litigation or other proceeding, regardless of its merit, even if resolved in our favor, could be substantial. Some of our competitors may be able to bear the costs of such litigation or proceedings more effectively than we can because of their having greater financial resources. Uncertainties resulting from the initiation and continuation of patent litigation or other proceedings could have a material adverse effect on our ability to compete in the marketplace. Intellectual property litigation and other proceedings may, regardless of their merit, also absorb significant management time and employee resources.

If we are unable to obtain and maintain patent protection for our GD-T cell technologies and product candidates, or if the scope of the patent protection obtained is not sufficiently broad, our competitors could develop and commercialize technology and biologics similar or identical to ours, and our ability to successfully commercialize our technology and product candidates may be impaired.

Our success depends on our ability to obtain and maintain patent protection in the United States, the European Union, Japan and other countries with respect to our product candidates. We seek to protect our proprietary position by filing patent applications related to our technology and product candidates in the major pharmaceutical markets, including the United States, major countries in Europe and Japan. If we do not adequately protect our intellectual property, competitors may be able to use our technologies and erode or negate any competitive advantage that we may have, which could harm our business and ability to achieve profitability.

To protect our proprietary positions, we file patent applications related to our novel technologies and product candidates that are important to our business. The patent application and prosecution process is expensive and time-consuming. We may not be able to file and prosecute all necessary or desirable patent applications at a reasonable cost or in a timely manner. We may also fail to identify patentable aspects of our research and development before it is too late to obtain patent protection. It is possible that defects of form in the preparation or filing of our patents or patent applications may exist, or may arise in the future, such as with respect to proper priority claims, inventorship, claim scope or patent term adjustments. If any current or future licensors or licensees are not fully cooperative or disagree with us as to the prosecution, maintenance or enforcement of any patent rights, such patent rights could be compromised and we might not be able to prevent third parties from making, using and selling competing products. If there are material defects in the form or preparation of our patents or patent applications, such patents or applications may be invalid and unenforceable. Moreover, our competitors may independently develop equivalent knowledge, methods and know-how. Any of these outcomes could impair our ability to prevent competition from third parties.

Patent applications are generally in the form of composition of matter or method patents. A composition of matter (COM) patent protects an actual drug molecule or engineered cell or other therapeutic agent and will be infringed by a third party making any use of the protected composition. COM patents provide de-facto protection for any and all uses of the protected composition and are generally held to be the strongest and most valuable form of patent protection. Method patents protect, for example, a method of manufacturing a product or a method of using it. They can be valuable but typically are more limited in scope than COM patents, particularly method of use patents which only protect a particular application of a product. Where our patent applications are limited in their scope, such as a patent protecting the method of use, such patent rights could be compromised and we might not be able to prevent third parties from making, using and selling competing products.

Prosecution of our owned and in-licensed patent portfolio is at a very early stage. We have one granted US patent, one granted Australian patent and one granted Israeli patent to date and no granted European patents. Most of our current patent portfolio consists of applications pending at a number of national or regional patent offices (Australia, Canada, Brazil, China, Eurasia, Europe, Hong Kong, Israel, Japan, South Korea, New Zealand, Singapore, US, South Africa). Neither priority applications nor PCT applications can themselves give rise to issued patents. Rather, protection for the inventions disclosed in these applications must be further pursued by applicable deadlines via applications that are subject to examination. As applicable deadlines for the priority and PCT applications become due, we will need to decide whether to and in which countries or jurisdictions to pursue patent protection for the various inventions claimed in these applications, and we will only have the opportunity to pursue and obtain patents in those jurisdictions where we pursue protection.

It is also possible that we will fail to identify patentable aspects of our research and development output before it is too late to obtain patent protection. The patent applications that we own or in-license may fail to result in issued patents with claims that cover our current and future product candidates in the countries in which we pursue patent protection. Our patent applications cannot be enforced against third parties practicing the technology claimed in such applications unless, and until, a patent issues from such applications, and then only to the extent the issued claims cover the technology.

If the patent applications we hold or have in-licensed with respect to our development programs and product candidates fail to issue, if their breadth or strength of protection is threatened, or if they fail to provide meaningful exclusivity for our current and future product candidates, it could threaten our ability to commercialize our product candidates. Any such outcome could have a negative effect on our business.

Patent and other intellectual property rights may not be upheld, in which case we will suffer a loss of our intellectual property position and the value of our assets.

The patent position of biotechnology and pharmaceutical companies generally is highly uncertain. Changes in either the patent laws or interpretation of the patent laws of the various jurisdictions in which we pursue patents may diminish the value of our patents or narrow the scope of our patent protection. In addition, the protections offered by laws of different countries vary. No consistent policy regarding the breadth of claims allowed in biotechnology and pharmaceutical patents has emerged to date in many jurisdictions. In addition, the determination of patent rights with respect to pharmaceutical technologies, such as our cell technologies, commonly involves complex legal and factual questions, which has in recent years been the subject of much litigation. As a result, the issuance, scope, validity, enforceability and commercial value of our patent rights, whether owned or in-licensed, are highly uncertain. Furthermore, the scope, strength and enforceability of our patent rights or the nature of proceedings that may be brought by or against us related to our patent rights may change as the related patent and intellectual property laws change over time. Additionally, in the United States, one of the jurisdictions in which we purse patent protection, the U.S. Supreme Court has ruled on several patent cases in recent years either narrowing the scope of patent protection available in certain circumstances or weakening the rights of patent owners in certain situations. In addition to increasing uncertainty with regard to our ability to obtain patents in the future, this combination of events has created uncertainty with respect to the value of patents, once obtained. Depending on decisions by the U.S. Congress, the U.S. federal courts, and the USPTO, the laws and regulations governing patents could change in unpredictable ways that could weaken our ability to obtain patents or to enforce any patents that we might obtain in the future.

We may be unaware of the rights of others which may ultimately be used to limit our intellectual property rights.

We may not be aware of all third-party intellectual property rights potentially relating to our current and future our product candidates. Publications of discoveries in the scientific literature often lag behind the actual discoveries, and patent applications in many jurisdictions typically are not published until 18 months or more after filing, or in some cases not at all. Therefore, we cannot be certain that we or our licensors were the first to make the inventions claimed in our patents or pending patent applications, or that we or our licensors were the first to file for patent protection of such inventions. Similarly, should we own or in-license any patents or patent applications in the future, we may not be certain that we or the applicable licensor were the first to file for patent protection for the inventions claimed in such patents or patent applications. As a result, the issuance, scope, validity and commercial value of our patent rights cannot be predicted with any certainty. Moreover, in the United States, we may be subject to a third-party pre-issuance submission of prior art to the U.S. Patent and Trademark Office, or USPTO, or become involved in opposition, derivation, re-examination, *inter partes* review or interference proceedings, in the United States or elsewhere, challenging our patent rights or the patent rights of others. An adverse determination in any such submission, proceeding or litigation could reduce the scope of, or invalidate, our patent rights, allow third parties to commercialize our technology or product candidates and compete directly with us, without payment to us, or result in our inability to manufacture or commercialize products without infringing third-party patent rights, which could significantly harm our business and results of operations.

We may be subject to claims by third parties asserting that we or our employees have misappropriated their intellectual property, or claiming ownership of what we regard as our own intellectual property.

Many of our employees were previously employed at universities or other biotechnology or pharmaceutical companies. Although we try to ensure that our employees do not use the proprietary information or know-how of third parties in their work for us, we may be subject to claims that these employees or we have inadvertently or otherwise used intellectual property, including trade secrets or other proprietary information, of any such employee's former employer. We may also in the future be subject to claims that we have caused an employee to breach the terms of his or her non-competition or non-solicitation agreement. Litigation may be necessary to defend against these potential claims.

In addition, while it is our policy to require our employees and contractors who may be involved in the development of intellectual property to execute agreements assigning such intellectual property to us, such employees and contractors may breach the agreement and claim the developed intellectual property as their own.

If we fail in defending any the claims we have made, in addition to paying monetary damages, we may lose valuable intellectual property rights or personnel. A court could prohibit us from using technologies or features that are essential to our products if such technologies or features are found to incorporate or be derived from the trade secrets or other proprietary information of the former employers. Even if we are successful in prosecuting or defending against such claims, litigation could result in substantial costs and could be a distraction to management. In addition, any litigation or threat thereof may adversely affect our ability to hire employees or contract with independent service providers. Moreover, a loss of key personnel or their work product could hamper or prevent our ability to commercialize our products.

Technologies and other proprietary rights for which we seek patent protection may not be obtained, which would potentially limit the value of our intellectual property.

Our pending and future patent applications, whether owned or in-licensed, may not result in patents being issued that protect our technology or product candidates, in whole or in part, or which effectively prevent others from commercializing competitive technologies and products. Even if our patent applications issue as patents, they may not issue in a form that will provide us with any meaningful protection against competing products or processes sufficient to achieve our business objectives, prevent competitors from competing with us or otherwise provide us with any competitive advantage. Our competitors may be able to circumvent our owned or licensed patents, should they issue, by developing similar or alternative technologies or products in a non-infringing manner. Our competitors may seek approval to market their own products similar to or otherwise competitive with our products. In these circumstances, we may need to defend and/or assert our patents, including by filing lawsuits alleging patent infringement. In any of these types of proceedings, a court or other agency with jurisdiction may find our patents invalid and/or unenforceable.

The issuance of a patent is not conclusive as to its inventorship, scope, validity or enforceability, and our owned and licensed patents may be challenged in the courts or patent offices in the jurisdictions in which we have filed for patent protection. Such challenges may result in loss of exclusivity or freedom to operate or in patent claims being narrowed, invalidated or held unenforceable, in whole or in part, which could limit our ability to stop others from using or commercializing similar or identical technology and products, or limit the duration of the patent protection of our technology and products. In addition, given the amount of time required for the development, testing and regulatory review of new product candidates, patents protecting such candidates might expire before or shortly after such candidates are commercialized.

We may be subject to claims challenging the inventorship or ownership of our owned or in-licensed patent rights and other intellectual property.

We generally enter into confidentiality and intellectual property assignment agreements with our employees, consultants, outside scientific collaborators, sponsored researchers and other advisors. However, these agreements may not be honored and may not effectively assign intellectual property rights to us. For example, disputes may arise from conflicting obligations of consultants or others who are involved in developing our technology and product candidates. Litigation may be necessary to defend against these and other claims challenging inventorship or ownership. The owners of intellectual property in-licensed to us could also face such claims. If we or our licensors fail in defending any such claims, in addition to paying monetary damages, we may lose valuable intellectual property rights, such as exclusive ownership of, or right to use, valuable intellectual property. Such an outcome could have a material adverse effect on our business. Even if we or our licensors are successful in defending against such claims, litigation could result in substantial costs and be a distraction to management and other employees.

Third parties may initiate legal proceedings alleging that we are infringing their intellectual property rights, the outcome of which would be uncertain and could significantly harm our business.

We believe that we have proprietary and modular T cell programming technology that does not infringe the intellectual property and other proprietary rights of third parties. Numerous third-party U.S. and non-U.S. issued patents exist in the area of biotechnology, including in the area of programmed T cell therapies. Some are patents held by our competitors. If any third-party patents cover our product candidates or technologies, we may not be free to manufacture or commercialize our product candidates as planned.

There is a substantial amount of intellectual property litigation in the biotechnology and pharmaceutical industries, and we may become party to, or threatened with, litigation or other adversarial proceedings regarding intellectual property rights with respect to our technology or product candidates, including interference proceedings before the relevant patent office. Intellectual property disputes arise in a number of areas including with respect to patents, use of other proprietary rights and the contractual terms of license arrangements. Third parties may assert claims against us based on existing or future intellectual property rights and claims may also come from competitors against whom our own patent portfolio may have no deterrent effect. The outcome of intellectual property litigation is subject to uncertainties that cannot be adequately quantified in advance. Other parties may allege that our product candidates or the use of our technologies infringes patent claims or other intellectual property rights held by them or that we are employing their proprietary technology without authorization. As we continue to develop and, if approved, commercialize our current and future product candidates, competitors may claim that our technology infringes their intellectual property rights as part of business strategies designed to impede our successful commercialization. There are and may in the future be additional third-party patents or patent applications with claims to, for example, materials, compositions, formulations, methods of manufacture or methods for treatment related to the use or manufacture of any one or more of our product candidates.

If we are found to infringe a third party's intellectual property rights, we could be forced, including by court order, to cease developing, manufacturing or commercializing the infringing product candidate or product. Alternatively, we may be required or may choose to obtain a license from such third party in order to use the infringing technology and continue developing, manufacturing or marketing the infringing product candidate. However, we may not be able to obtain any required license on commercially reasonable terms or at all. Even if we were able to obtain a license, it could be non-exclusive, thereby giving our competitors access to the same technologies licensed to us. In addition, we could be found liable for monetary damages, including treble damages and attorneys' fees if we are found to have willfully infringed a patent. A finding of infringement could prevent us from commercializing our product candidates or force us to cease some of our business operations. Claims that we have misappropriated the confidential information or trade secrets of third parties could have a similar negative effect on our business. Even if successful, the defense of any claim of infringement or misappropriation is time-consuming, expensive and diverts the attention of our management from our ongoing business operations.

We may need to license intellectual property from third parties, and such licenses may not be available or may not be available on commercially reasonable terms.

A third party may hold intellectual property rights, including patent rights, which are important or necessary to the development or manufacture of our product candidates. It may be necessary for us to use the patented or proprietary technology of third parties to commercialize our product candidates, in which case we would be required to obtain a license from these third parties. Such a license may not be available on commercially reasonable terms, or at all, and we could be forced to accept unfavorable contractual terms. If we are unable to obtain such licenses on commercially reasonable terms, our business could be harmed.

We may become involved in lawsuits to protect or enforce our intellectual property, which could be expensive, time-consuming and unsuccessful.

Competitors may infringe our patents, if issued, trademarks, copyrights or other intellectual property. To counter infringement or unauthorized use, we may be required to file infringement claims, which can be expensive and time-consuming and divert the time and attention of our management and scientific personnel. Any claims we assert against perceived infringers could provoke these parties to assert counterclaims against us alleging that we infringe their patents, trademarks, copyrights or other intellectual property. In addition, in a patent infringement proceeding, there is a risk that a court will decide that a patent of ours is invalid or unenforceable, in whole or in part, and that we do not have the right to stop the other party from using the invention at issue. There is also a risk that, even if the validity of such patents is upheld, the court will construe the patent's claims narrowly or decide that we do not have the right to stop the other party from using the invention at issue on the grounds that our patents do not cover the invention. An adverse outcome in a litigation or proceeding involving our patents could limit our ability to assert our patents against those parties or other competitors, and may curtail or preclude our ability to exclude third parties from making and selling similar or competitive products. Similarly, if we assert trademark infringement claims, a court may determine that the marks we have asserted are invalid or unenforceable, or that the party against whom we have asserted trademark infringement has superior rights to the marks in question. In this case, we could ultimately be forced to cease use of such trademarks.

In any infringement litigation, any award of monetary damages we receive may not be commercially valuable. Furthermore, because of the substantial amount of discovery required in connection with intellectual property litigation, there is a risk that some of our confidential information could be compromised by disclosure during litigation. Moreover, there can be no assurance that we will have sufficient financial or other resources to file and pursue such infringement claims, which typically last for years before they are concluded. Some of our competitors may be able to sustain the costs of such litigation or proceedings more effectively than we can because of their greater financial resources and more mature and developed intellectual property portfolios. Even if we ultimately prevail in such claims, the monetary cost of such litigation and the diversion of the attention of our management and scientific personnel could outweigh any benefit we receive as a result of the proceedings. Accordingly, despite our efforts, we may not be able to prevent third parties from infringing, misappropriating or successfully challenging our intellectual property rights. Uncertainties resulting from the initiation and continuation of patent litigation or other proceedings could have a negative impact on our ability to compete in the marketplace.

Any trademarks we may obtain may be infringed or successfully challenged, resulting in harm to our business.

We expect to rely on trademarks as one means to distinguish any of our product candidates that are approved for marketing from the products of our competitors. While we have a corporate trademark, we have not yet selected trademarks for our product candidates and have not yet begun the process of applying to register trademarks for our product candidates. Once we select trademarks and apply to register them, our trademark applications may not be approved. Third parties may oppose our trademark applications, or otherwise challenge our use of the trademarks. In the event that our trademarks are successfully challenged, we could be forced to rebrand our products, which could result in loss of brand recognition and could require us to devote resources to advertising and marketing new brands. Our competitors may infringe our trademarks and we may not have adequate resources to enforce our trademarks.

In addition, any proprietary name we propose to use with our clinical-stage product candidates or any other product candidate in the United States must be approved by the FDA, regardless of whether we have registered it, or applied to register it, as a trademark. The FDA typically conducts a review of proposed product names, including an evaluation of the potential for confusion with other product names. If the FDA objects to any of our proposed proprietary product names, we may be required to expend significant additional resources in an effort to identify a suitable proprietary product name that would qualify under applicable trademark laws, not infringe the existing rights of third parties and be acceptable to the FDA.

If we are unable to protect the confidentiality of our trade secrets, our business and competitive position would be harmed.

In addition to seeking patent and trademark protection for our product candidates, we also rely on trade secrets, including unpatented know-how, technology and other proprietary information, to maintain our competitive position. We seek to protect our trade secrets, in part, by entering into non-disclosure and confidentiality agreements with parties who have access to them, such as our employees, consultants, advisors and other third parties. We also enter into confidentiality and invention or patent assignment agreements with our employees and consultants. Despite these efforts, any of these parties may breach the agreements and disclose our proprietary information, including our trade secrets. Monitoring unauthorized uses and disclosures of our intellectual property is difficult, and we do not know whether the steps we have taken to protect our intellectual property will be effective. In addition, we may not be able to obtain adequate remedies for any such breaches. Enforcing a claim that a party illegally disclosed or misappropriated a trade secret is difficult, expensive and time-consuming, and the outcome is unpredictable. In addition, some courts in the jurisdiction in which we operate or intend to operate are less willing or unwilling to protect trade secrets.

Moreover, our competitors may independently develop knowledge, methods and know-how equivalent to our trade secrets. Competitors could purchase our products and replicate some or all of the competitive advantages we derive from our development efforts for technologies on which we do not have patent protection. If any of our trade secrets were to be lawfully obtained or independently developed by a competitor, we would have no right to prevent them, or those to whom they communicate it, from using that technology or information to compete with us. If any of our trade secrets were to be disclosed to or independently developed by a competitor, our competitive position would be harmed.

Obtaining and maintaining our patent protection depends on compliance with various procedural, document submission, fee payment and other requirements imposed by governmental patent agencies, and our patent protection could be reduced or eliminated for non-compliance with these requirements.

Periodic maintenance and annuity fees on any issued patent are due to be paid to the patent offices and patent agencies over the lifetime of the patent to maintain the patents that have been issued. Additionally, these offices and agencies require compliance with a number of procedural, documentary, fee payment and other similar provisions during the patent application process. While an inadvertent lapse can in many cases be cured by payment of a late fee or by other means in accordance with the applicable rules, there are situations in which noncompliance can result in abandonment or lapse of the patent or patent application, resulting in partial or complete loss of patent rights in the relevant jurisdiction. Non-compliance events that could result in abandonment or lapse of a patent or patent application include failure to respond to official actions within prescribed time limits, non-payment of fees and failure to properly legalize and submit formal documents. If we or our licensors fail to maintain the patents and patent applications covering our products or product candidates, our competitors might be able to enter the market, which would harm our business. In addition, to the extent that we have responsibility for taking any action related to the prosecution or maintenance of patents or patent application in-licensed from a third party, any failure on our part to maintain the in-licensed rights could jeopardize our rights under the relevant license and may expose us to liability.

If we fail to comply with our obligations in the agreements under which we license our development or commercialization rights to products or drug technologies from third parties, we could lose license rights that are important to our business.

We hold a license from UCL Business plc ("UCLB") for its technology related to co-stimulatory CAR-T in GD-T cells. This is in addition to the intellectual property that we own. Our license with UCLB is for a single CAR-T binder, where we pay an annual license fee, certain performance-based milestone payments and a single-digit royalty on sales arising from use of that binder together with certain cumulative sales-based milestone payments. Through September 30, 2021 we have paid UCLB approximately $0.5 million (taking into consideration fluctuation in exchange rates) in license fee payments. Furthermore, the Company has a duty not to breach terms of the license agreement. If we fail to meet specific obligations, the licensor will have the right to terminate the applicable license or modify certain terms of the license agreement. Royalty provisions cease upon termination or upon expiry of the license which occurs, on a country-by-country basis, upon the later of the tenth (10^{th}) anniversary of the first commercial sale of a licensed product or the lapse, expiry, or revocation of all patents.

Risks Related to the Offering and Ownership of Our ADSs and Warrants

Control by a limited number of shareholders may limit your ability to influence the outcome of director elections and other transactions requiring shareholder approval

Upon completion of this offering, the directors, management persons and 5% and greater shareholders as a group will own 68% of our issued and outstanding ordinary shares (including those represented by the ADSs), including options and other convertible securities that may be converted within sixty days of the date of this prospectus. Dr. Michael Leek and Angela Scott, who are married, our founders, and are part of our management team, upon completion of this offering, will own approximately 17% of our outstanding ordinary shares on a beneficial basis. Such persons together, along with several other long term significant shareholders, will have influence over corporate actions requiring shareholder approval, including the following actions:

- to elect our directors;
- to amend or prevent amendment of our articles of association;
- to effect or prevent a merger, sale of assets or other corporate transaction; and
- to influence the outcome of any other matter submitted to our shareholders for vote.

These persons' share ownership may discourage a potential acquirer from making a tender offer or otherwise attempting to obtain control of our company, which in turn could reduce the market price of our ADSs and Warrants or prevent our shareholders from realizing a premium over the market price of our ADSs and Warrants.

Prior to the completion of our initial public offering, there was no public trading market for our ADSs or Warrants, and the market price of an ADS or a Warrant may decline after this offering.

The offering under this prospectus is an initial public offering of ADSs, representing our ordinary shares and Warrants to purchase ADSs. We plan to apply for listing of the ADSs and Warrants on the Nasdaq Global Market under the symbols "TCBP" and "TCBPW," respectively. No assurance can be given that our application will be approved. If the application is not approved, we will not complete this offering and there will be no public market for our securities. There can be no assurance that we will be able to successfully develop a liquid market for the ADSs or the Warrants after this offering. The stock market in general, and early stage public companies in particular, has experienced extreme price and volume fluctuations that have often been unrelated or disproportionate to the operating performance of such companies. If we are unable to develop a market for the ADSs and the Warrants after this offering, you may not be able to sell your ADSs or Warrants at prices you consider to be fair or at times that are convenient for you, or at all.

The initial public offering price and overall value of the Company will be arrived at by negotiation.

We and the underwriters will negotiate to determine the initial public offering price of the ADS and Warrant, and the overall value of the Company. The initial public offering price of the securities as sold together may be higher than the combined or separate trading prices of the ADSs and Warrants following this offering. As a result, you could incur losses in respect of your investment.

We will have significant flexibility in using the net proceeds of this offering, and may use the proceeds in ways that you may not agree, and if we do not use those proceeds effectively your investment could be harmed.

We intend to use the proceeds of this offering to primarily to fund the cost of our proposed trials (OmnImmune® and ImmuniStim®) clinical and pre-clinical research and development with respect to applications of GD-T cell therapy, and general corporate purposes. We will have significant flexibility over the specific use of the net proceeds that we receive in this offering and may find it necessary or advisable to use portions of the proceeds from this offering for other purposes. You may not have an opportunity to evaluate the economic, financial or other information on which we base our decisions on how to use our proceeds and will need to rely upon our judgment with respect to the use of proceeds. As a result, you and other shareholders may not agree with our decisions. If we do not use the net proceeds that we receive in this offering effectively, our business, results of operations and financial condition could be harmed.

We will be a foreign private issuer and, as a result, we will not be subject to U.S. proxy rules and will be subject to Exchange Act reporting obligations that, to some extent, are more lenient and less frequent than those of a U.S. domestic public company.

Upon consummation of this offering, we will report under the Exchange Act as a non-U.S. company with foreign private issuer status. Because we will qualify as a foreign private issuer under the Exchange Act, we are exempt from certain provisions of the Exchange Act that are applicable to U.S. domestic public companies. These include: (1) the sections of the Exchange Act regulating the solicitation of proxies, consents or authorizations with respect to a security registered under the Exchange Act; (2) the sections of the Exchange Act requiring insiders to file public reports of their stock ownership and trading activities and liability for insiders who profit from trades made in a short period of time; and (3) the rules under the Exchange Act requiring the filing with the SEC of quarterly reports on Form 10-Q containing unaudited financial and other specified information, or current reports on Form 8-K upon the occurrence of specified significant events. In addition, foreign private issuers are not required to file their annual report on Form 20-F until four months after the end of each fiscal year, while U.S. domestic issuers are required to file their annual report on Form 10-K within 90 days after the end of each fiscal year. Foreign private issuers are also exempt from the Regulation Fair Disclosure, aimed at preventing issuers from making selective disclosures of material information. As a result of the above, you may not have the same protections afforded to shareholders of companies that are not foreign private issuers.

As a foreign private issuer and as permitted by the listing requirements of Nasdaq, we will rely on certain home country governance practices rather than the corporate governance requirements of Nasdaq.

We will be a foreign private issuer as of the effective date of this registration statement. As a result, in accordance with Nasdaq Listing Rule 5615(a)(3), we will comply with home country governance requirements and certain exemptions thereunder rather than complying with certain of the corporate governance requirements of Nasdaq.

Scottish law does not require that a majority of our board of directors consist of independent directors or that our board committees consist of entirely independent directors. Our board of directors and board committees, therefore, may include fewer independent directors than would be required if we were subject to Nasdaq Listing Rule 5605(b)(1). In addition, we will not be subject to Nasdaq Listing Rule 5605(b)(2), which requires that independent directors must regularly have scheduled meetings at which only independent directors are present. Also, Scottish law does not require the board of directors to have a nominations committee, and we do not plan on having such a committee.

We also will seek exemption from the Nasdaq listing rules so as to follow the quorum rules for shareholder meetings under Scottish law. We also will seek exemption from the Nasdaq listing rules so as to not be required to obtain shareholder approval for certain issuance of securities and shareholder approval of share option plans under the Nasdaq Listing Rule 5635.

We may lose our foreign private issuer status, which would then require us to comply with the Exchange Act's domestic reporting regime and cause us to incur significant legal, accounting and other expenses.

We will be a foreign private issuer immediately after this offering. In order to maintain our current status as a foreign private issuer, a majority of our outstanding ordinary shares (including those represented by ADSs) must continue to be either directly or indirectly owned of record by non-residents of the United States. If a majority of our outstanding ordinary shares (including those represented by the ADSs) are instead held by U.S. residents, then in order to continue to maintain our foreign private issuer status, (i) a majority of our executive officers or directors must not be U.S. citizens or residents, (ii) more than 50% of our assets must not be located in the United States, and (iii) our business must be administered principally outside the United States. At the completion of this offering, the majority of our executive officers and directors will be resident in the United Kingdom and not United States citizens or green card holders, less than 50% of our assets will be located in the United States, and our business will be administered principally in the United Kingdom.

Losing our status as a foreign private issuer would require us to comply with all of the periodic disclosure and current reporting requirements of the Exchange Act applicable to U.S. domestic issuers. We may also be required to make changes in our corporate governance practices in accordance with various SEC and Nasdaq rules. The regulatory and compliance costs to us under U.S. securities laws, if we are required to comply with the reporting requirements applicable to a U.S. domestic issuer, may be significantly higher than the cost we would incur as a foreign private issuer. As a result, we would expect that a loss of foreign private issuer status will increase our legal and financial compliance costs and will make some activities highly time consuming and costly. We also expect that if we will be required to comply with the rules and regulations applicable to U.S. domestic issuers, it will make it more difficult and expensive for us to obtain director and officer liability insurance; we may therefore be required to accept reduced coverage or incur substantially higher costs to obtain coverage. These rules and regulations could also make it more difficult for us to attract and retain qualified members of our board of directors.

We do not intend to list any of our securities on any public securities exchange in the United Kingdom. This may limit the information available to our security holders.

Our ordinary shares and Warrants are not listed now, and we do not currently intend to list any of our securities in the future on any public securities exchange in the United Kingdom. As a result, we are not, and will not be, subject to the reporting and other requirements of companies listed on a securities exchange in the United Kingdom. Accordingly, there will be less publicly available information concerning our company than there would be if we were a public company listed in the United Kingdom.

There has been no prior active trading market for either the ADSs or Warrants and an active and liquid market for the ADSs and/or Warrants may fail to develop, which could harm the market price of the ADSs and/or Warrants, and you may not be able to resell your ADSs and/ or Warrants at or above the initial public offering price.

There is a risk that an active trading market for the ADSs and Warrants may not develop or be sustained after this offering is completed. The initial public offering price of the ADSs and Warrants, and the value of our company, was determined by negotiations among the lead underwriters and us. Among the factors considered in determining the initial offering price will be the following:

- our financial information;
- the history of, and the future prospects for, our company and the industry in which we compete;
- an assessment of our management, its past and present operations, and the prospects for, and timing of, our future revenue;
- the present state of our development; and

- the above factors in relation to market values and various valuation measures of other companies engaged in activities similar to ours.

Following the offering, the ADSs and/or Warrants may not trade at prices that equal or are greater than the initial offering prices of securities sold hereby. The initial offering prices may not be indicative of the market price of the ADSs and Warrants after the offering. In the absence of an active trading market for the ADSs and/or Warrants, investors may not be able to sell their ADSs and Warrants at or above the initial offering price or at the time that they would like to sell.

The market price of the ADSs and Warrants may be volatile and you could lose all or part of your investment.

The price of the securities of publicly traded emerging pharmaceutical and drug discovery and development companies has been highly volatile and is likely to remain highly volatile in the future. As a result of this volatility, you may not be able to sell your ADSs and Warrants at or above the initial public offering price. The market price of the ADSs and Warrants may fluctuate significantly due to a variety of factors, including the following:

- positive or negative results of testing and clinical trials by us, strategic partners or competitors;
- delays in entering into strategic relationships with respect to development or commercialization of our investigational GD-T cell therapy or any future therapeutic candidates;
- entry into strategic relationships on terms that are not deemed to be favorable to us;
- technological innovations or commercial therapeutic introductions by competitors;
- changes in government regulations and healthcare payment systems;
- developments concerning proprietary rights, including patent and litigation matters;
- public concern relating to the commercial value or safety of any of our investigational GD-T cell therapy or any future therapeutic candidates;

- negative publicity or public perception of the use of GD-T cells as a treatment therapy;
- financing or other corporate transactions;
- publication of research reports or comments by securities or industry analysts;
- the trading volume of the ADSs and Warrants on Nasdaq;
- sales of our ordinary shares, including through deposit of additional ordinary shares with the depositary for the ADSs, by us, members of our senior management and directors or our shareholders or the anticipation that such sales may occur in the future;
- general market conditions in the pharmaceutical industry or in the economy as a whole;
- general economic, political, and market conditions and overall market volatility in the United States or the UK as a result of the COVID-19 pandemic or other pandemics or similar events; and
- other events and factors, many of which are beyond our control.

These and other market and industry factors may cause the market price and demand for our securities to fluctuate substantially, regardless of our actual operating performance, which may limit or prevent investors from readily selling their ADSs and Warrants and may otherwise negatively affect the liquidity of the ADSs and Warrants. In addition, the stock market in general, and pharmaceutical companies in particular, have experienced extreme price and volume fluctuations that have often been unrelated or disproportionate to the operating performance of these companies.

The Warrants are speculative in nature.

The Warrants offered hereby merely represent the right to acquire our ordinary shares at a fixed cash price, for a limited period of time. The warrants may not be exercised on a cashless basis. We are required to maintain a registration statement to be effective at the time a warrant may be exercised, and if we do not do so, then the Warrants cannot be exercised under the US securities laws. In such a case, the Warrants would have no value, and your sole recourse would be a claim for damages against the company. If the Warrants are not exercised before they expire, in five years, the Warrants will never provide any value to the holder thereof. It is usual that the price of a warrant in the public market is more volatile than that of the corresponding shares for which it is exercisable. Therefore, investors should expect the price of a Warrant to be fluctuate to a greater degree than our ADSs, and correspondingly be more speculative. Following this offering, the market value of the Warrants is uncertain, and there can be no assurance that the market value of the Warrants will equal or exceed their public offering price.

Purchasers of our Warrants will not have any rights of the holders of ordinary shares until such Warrants are exercised.

The Warrants being offered do not confer any of the rights afforded to the holders of our ordinary shares, even those ordinary shares held through ADSs, such as voting rights or the right to receive dividends, but rather merely represent the right to acquire ordinary shares at a fixed price.

Following the completion of the offering, we may be at an increased risk of securities class action litigation.

Historically, securities class action litigation has often been brought against a company following a decline in the market price of its securities. This risk is especially relevant for us because pharmaceutical and biopharmaceutical companies have experienced significant share (and ADS) price volatility in recent years. If we were to be sued, it could result in substantial costs and a diversion of management's attention and resources, which could harm our business.

Assuming a market for the ADSs and Warrants develops, the ordinary shares that will become eligible for future sale may adversely affect the market for the ADSs and/or Warrants.

Subject to various lock up agreements to which our shareholders and holders of the Convertible Loan Notes have agreed, which have various leak out provisions, early termination provisions and exceptions, many of our shareholders will be eligible to sell all or some of their ordinary shares by means of depositing them with the depositary in exchange for ADSs and then trading the ADSs through ordinary brokerage transactions, in the open market pursuant to Rule 144, promulgated under the Securities Act. Additionally, we have registered for resale up to 10,429,596 ADS (assuming exercise of 5,794,220 Warrants) and/or up to 5,794,220 Warrants (if not exercised for ADSs) held by shareholders who convert outstanding Convertible Loan Notes into equity in connection with this offering or thereafter upon interest payment dates, which are subject to lock up agreements with leak out and early termination provisions.

In general, pursuant to Rule 144, non-affiliated and affiliated (directors, officers and holders of 10% of the ordinary shares, including in ADS form) shareholders may sell freely after a six-month holding period, which includes the holding period prior to our going public, subject to the current public information and broker requirements. Of the 29,117,222 ordinary shares, including those represented by ADSs, expected to be outstanding following completion of the offering, (i) the 5,176,468 ordinary shares represented by ADSs and the 6,470,585 ordinary shares issuable on exercise of the Warrants will be freely tradable as registered shares in this offering, and (ii) subject to the lock up agreements and the selling requirements of Rule 144, there will be [21,423,767] shares that will be freely tradable without restriction 90 days after the date of this offering pursuant to Rule 144.

Any substantial sale of our ordinary shares, when represented by ADSs, pursuant to Rule 144 or pursuant to any resale prospectus (including sales by investors of securities acquired in connection with this offering) may have a material adverse effect on the market price of the ADSs and Warrants. Further details can be found in the "Ordinary Shares and ADSs Eligible for Future Sale" section.

If you purchase the ADSs and Warrants in this offering, youwill incur immediate and substantial dilution in the book value of your shares.

We expect the initial public offering price of the ADSs and Warrants in this offering to be substantially higher than the net tangible book value per ordinary share represented by an ADS prior to this offering. Investors purchasing ADSs and Warrants in this offering will pay a price that substantially exceeds the book value of our tangible assets after subtracting our liabilities. To the extent outstanding options and warrants are exercised for ordinary shares, investors may experience further dilution. Based on the assumed aggregate combined initial public offering price of $4.24 per one ADS, investors purchasing ADSs in this offering will incur immediate dilution of $3.71 per ordinary share, as represented by an ADS. Further, investors purchasing ADSs in this offering will contribute 38% of the total amount invested by shareholders since our inception, but will own only 18% of the total number of our total ordinary shares immediately outstanding after this offering.

You may not receive distributions on our ordinary shares represented by the ADSs or any value for them if it is illegal or impractical to make them available to holders of ADSs.

The depositary for the ADSs has agreed to pay to you the cash dividends or other distributions it or the custodian receives on our ordinary shares or other deposited securities after deducting its fees and expenses. You would receive these distributions in proportion to the number of our ordinary shares your ADSs represent. However, in accordance with the limitations set forth in the deposit agreement, it may be unlawful or impractical to make a distribution available to holders of ADSs. We have no obligation to take any other action to permit distribution on the ADSs, ordinary shares, rights or anything else to holders of the ADSs. This means that you may not receive the distributions we make on our ordinary shares or any value from them if it is unlawful or impractical to make them available to you. These restrictions may have an adverse effect on the value of your ADSs.

We will incur increased costs as a result of operating as a Scottish public company listed in the U.S., and our board of directors will be required to devote substantial time to new compliance initiatives and corporate governance practices.

As a Scottish public company listed in the U.S., we will incur significant legal, accounting and other expenses that we did not incur as a private company. In addition, the Sarbanes-Oxley Act, the Dodd-Frank Wall Street Reform and Consumer Protection Act, the listing requirements of Nasdaq, and other applicable securities rules and regulations impose various requirements on foreign reporting public companies, including the establishment and maintenance of effective disclosure and financial controls and corporate governance practices. Our board of directors, management and other personnel will need to devote a substantial amount of time to these compliance initiatives. Moreover, these rules and regulations will increase our legal and financial compliance costs and will make some activities more time-consuming and costly. For example, we expect that these rules and regulations may make it more difficult and more expensive for us to obtain director and officer liability insurance, which in turn could make it more difficult for us to attract and retain qualified members of our board of directors.

However, these rules and regulations are often subject to varying interpretations, in many cases due to their lack of specificity, and, as a result, their application in practice may evolve over time as new guidance is provided by regulatory and governing bodies. This could result in continuing uncertainty regarding compliance matters and higher costs necessitated by ongoing revisions to disclosure and governance practices.

Pursuant to Section 404 of the Sarbanes-Oxley Act, or Section 404, we will be required to furnish a report by our board of directors on our internal control over financial reporting. However, while we remain an emerging growth company, we will not be required to include an attestation report on internal control over financial reporting issued by our independent registered public accounting firm. To achieve compliance with Section 404 within the prescribed period, we will be engaged in a process to document and evaluate our internal controls over financial reporting, which is both costly and challenging. In this regard, we will need to continue to dedicate internal resources, potentially engage outside consultants and adopt a detailed work plan to assess and document the adequacy of internal control over financial reporting, continue steps to improve control processes as appropriate, validate through testing that controls are functioning as documented and implement a continuous reporting and improvement process for internal control over financial reporting. Despite our efforts, there is a risk that we will not be able to conclude, within the prescribed timeframe, that our internal controls over financial reporting are effective as required by Section 404. If we identify one or more material weaknesses, it could result in an adverse reaction in the financial markets due to a loss of confidence in the reliability of our financial statements.

Prior to the completion of this offering, we have been a private company with limited operating scale and with the appropriate accounting personnel to adequately execute our accounting processes and other supervisory resources with which to address our internal control over financial reporting. We are progressing with the activities necessary to implement, in due course, appropriate accounting policies, processes and controls to comply with our expected expansion in scale of operations and with Section 404. These activities include identifying and recruiting additional individuals with requisite expertise to assist in implementation activities designed to strengthen our internal control over financial reporting to avoid control deficiencies and initiating the design and implementation of improvements to our financial control environment to address our future needs. However, we cannot assure you that the measures we have taken to date, and actions we plan to take in the future, will be sufficient to prevent or avoid potential future material weaknesses in our controls.

Our independent registered public accounting firm will not be required to formally attest to the effectiveness of our internal control over financial reporting pursuant to Section 404 until we are no longer an "emerging growth company" which will be for up to five years after this offering.

If we are unsuccessful in building an appropriate accounting infrastructure, we may not be able to prepare and disclose, in a timely manner, our financial statements and other required disclosures, or comply with existing or new reporting requirements. Any failure to report our financial results on an accurate and timely basis could result in sanctions, lawsuits, delisting of our shares from Nasdaq or other adverse consequences that would materially harm our business. If we cannot provide reliable financial reports or prevent fraud, our business and results of operations could be harmed and investors could lose confidence in our reported financial information. Any of the foregoing occurrences, should they come to pass, could negatively impact the public perception of our company, which could have a negative impact on the price of either the ADSs or Warrants, or both.

Your rights as a shareholder will be governed by Scottish law and will differ from the rights of shareholders under U.S. law.

Upon completion of the corporate reorganization, we will be public limited company under the laws of Scotland and United Kingdom. Therefore, the rights of holders of our ordinary shares, including those represented by ADSs, are governed by the corporate law of Scotland and the United Kingdom and by our memorandum of association and articles. The statutory framework that governs the Company is the Companies Act 2006 which is a UK-wide act and references to the "UK Law" are to UK-wide legislation. These rights differ from the typical rights of shareholders in U.S. corporations. In certain cases, facts that, under U.S. law, would entitle a shareholder in a U.S. corporation to claim damages may not give rise to a cause of action or claim for damages under Scottish law. For example, the rights of shareholders to bring proceedings against the

Company or against our directors or officers in relation to public statements are more limited under Scottish law and UK Law than under the civil liability provisions of the U.S. securities laws. Further details are provided in the section "Description of Share Capital and Articles of Association" showing the differences between Delaware corporate law and the Companies Act 2006.

You may face difficulties in protecting your interests, and your ability to protect your rights through the U.S. federal courts may be limited, because we are incorporated outside the United States, conduct most of our operations outside the United States and most of our directors and senior management reside outside the United States.

We are incorporated and have our registered office in, and are currently existing under the laws of, Scotland. In addition, most of our tangible assets are located, and most of our senior management and certain of our directors reside, outside of the United States. As a result, it may not be possible to serve process within the United States on certain directors or us or to enforce judgments obtained in U.S. courts against such directors or us based on civil liability provisions of the securities laws of the United States.

The United States and the UK do not currently have a treaty providing for recognition and enforcement of judgments (other than arbitration awards) in civil and commercial matters. Consequently, a final judgment for payment of money given by a court in the United States, whether or not predicated solely upon U.S. securities laws, would not automatically be recognized or enforceable in the UK. In addition, uncertainty exists as to whether courts of Scotland would entertain original actions brought in Scotland against us or our directors or senior management predicated upon the securities laws of the U.S. or any state in the U.S. Any final and conclusive monetary judgment for a definite sum obtained against us in U.S. courts would be treated by the courts of Scotland as a cause of action in itself and sued upon as a debt at common law so that no retrial of the issues would be necessary, provided that certain requirements are met.

Whether these requirements are met in respect of a judgment based upon the civil liability provisions of the U.S. securities laws, including whether the award of monetary damages under such laws would constitute a penalty, is subject to determination by the court making such decision. If the courts of Scotland give a judgment for the sum payable under a U.S. judgment, the Scottish judgment will be enforceable by methods generally available for this purpose. These methods generally permit the courts of Scotland discretion to prescribe the manner of enforcement.

As a result, U.S. investors may not be able to enforce against us or certain of our directors any judgments obtained in U.S. courts in civil and commercial matters, including judgments under the U.S. federal securities laws.

As a Scottish public limited company, certain capital structure decisions will require shareholder approval, which may limit our flexibility to manage our capital structure.

Scottish law provides that a board of directors may only allot shares (or grant rights to subscribe for or to convert any security into shares) with the prior authorization of shareholders, such authorization stating the aggregate nominal amount of shares that it covers and being valid for a maximum period of five years, each as specified in the articles of association or relevant ordinary resolution passed by shareholders at a general meeting. Once allotted, the board of directors are free to issue the shares without further shareholder approval. The authority from our shareholders to allot additional shares for a period of five years from [January], 2022 was included in the ordinary resolution passed by our shareholders on [January], 2022, which authorization will need to be renewed upon expiration (i.e., at least every five years) but may be sought more frequently for additional five-year terms (or any shorter period).

Scottish law also generally provides shareholders with pre-emptive rights when new shares are issued for cash. However, it is possible for the articles of association, or for shareholders to pass a special resolution at a general meeting, being a resolution passed by the members (or of a class of members) of a company by a majority of not less than 75%, to disapply pre-emptive rights. Such a disapplication of pre-emptive rights may be for a maximum period of up to five years from the date of adoption of the articles of association, if the disapplication is contained in the articles of association, but not longer than the duration of the authority to allot shares to which this disapplication relates or from the date of the shareholder special resolution, if the disapplication is by shareholder special resolution. In either case, this disapplication would need to be renewed by our shareholders upon its expiration (i.e., at least every five years). Such authority from our shareholders to disapply pre-emptive rights for a period of five years was included in the special resolution passed by our shareholders on, [January], 2022, which disapplication will need to be renewed upon expiration (i.e., at least every five years) to remain effective, but may be sought more frequently for additional five-year terms (or any shorter period).

Scottish law also generally prohibits a public company from repurchasing its own shares without the prior approval of shareholders by ordinary resolution, being a resolution passed by a simple majority of votes cast, and other formalities. Such approval may be for a maximum period of up to five years.

Our business and results of operations may be negatively impacted by the UK's withdrawal from the EU.

The UK withdrew from the EU effective on January 31, 2020, and the transition period ended on December 31, 2020, which we refer to as Brexit. The future regulations that will apply in the UK following the transition period (including financial laws and regulations, tax and free trade agreements, intellectual property rights, data protection laws, supply chain logistics, environmental, health and safety laws and regulations medicine licensing and regulations, immigration laws and employment laws), have yet to be fully addressed and continue to be in transition, subject to change. The overall lack of clarity on future UK laws and regulations and their interaction with the EU laws and regulations may negatively impact foreign direct investment in the UK, increase costs, depress economic activity and restrict access to capital. As we are headquartered in the UK and have operations and clinical trials in the United Kingdom and EU, it is possible that Brexit may impact some or all of our current operations and otherwise how we conduct business. For example, Brexit may impact our ability to freely move employees from our headquarters in the UK to other locations in Europe, and it may impact the ability of European therapists to move freely to the UK in order to complete part of their training or work on our clinical trials there.

The long-term effects of Brexit will depend in part on the agreements the UK made during the Brexit transition period and thereafter to retain access to markets in the EU. The Brexit withdrawal from the EU is unprecedented, and it is unclear how the UK's access to the European single market for goods, capital, services and labor within the EU, or single market, and the wider commercial, legal and regulatory environment, will impact our current and future operations (including business activities conducted by third parties and contract manufacturers on our behalf) and clinical activities in the UK In addition to the foregoing, our UK operations support our current and future operations and clinical activities in the EU and European Economic Area, or EEA, and these operations and clinical activities could be disrupted by Brexit.

We may also face new regulatory costs and challenges that could have an adverse effect on our operations as a result of Brexit. The UK could lose the benefits of global trade agreements negotiated by the EU on behalf of its member states, which may result in increased trade barriers that could make our doing business in the EU and the EEA more difficult. Since the regulatory framework in the UK covering quality, safety and efficacy of therapeutic substances, clinical trials, marketing authorization, commercial sales and distribution of therapeutic substances is derived from EU directives and regulations, Brexit could materially impact the future regulatory regime with respect to the approval of our GD-T cell therapy or any future therapeutic candidates in the UK. For instance, in November 2017, EU member states voted to move the EMA, the EU's regulatory body, from London to Amsterdam. Operations in Amsterdam commenced in March 2019, and the move itself may cause significant disruption to the regulatory approval process in Europe. It remains to be seen how, if at all, Brexit will impact regulatory requirements for therapeutic candidates and therapies in the UK. Any delay in obtaining, or an inability to obtain, any regulatory approvals, as a result of Brexit or otherwise, would delay or prevent us from commercializing our investigational GD-T cell therapy or future therapeutic candidates in the UK and/or the EU and restrict our ability to generate revenue and achieve and sustain profitability. We may be forced to restrict or delay efforts to seek regulatory approval in the UK and/or EU for GD-T cell therapy or any future therapeutic candidates, which could significantly and materially harm our business.

We expect that Brexit, in the near and middle term will lead to certain legal uncertainties and potentially divergent national laws and regulations as the UK determines which EU laws to replicate or replace, including those related to data privacy and the regulation of medicinal products, as described above. Any of these effects of Brexit, and others we cannot anticipate, could negatively impact our business and results of operations.

Our business may be subject to risks related to possible Scottish independence from the UK

The possibility of Scottish independence from the UK creates a range of uncertainties for Scotland based business in general, which would require careful assessment by the board of directors and management as political events develop. There could be changes in currency, taxation, general legislation, regulations and trading arrangements and agreements, together with economic prospects more generally. It is not possible to predict the effect of Scottish independence if it were to occur and the changes introduced could have only limited effect on the business, be beneficial to the business or could have a material adverse effect on the business' revenue, financial condition, profitability, prospects and results of operations.

A transfer of ordinary shares, other than one effected by means of the transfer of book-entry interests, such as through the ADS program that we have established for this offering, may be subject to United Kingdom stamp duty.

The transfer of our ordinary shares effected by means of the transfer of book entry interests through the ADS program we established for this offering will generally not be subject to United Kingdom stamp duty. However, if you hold your ordinary shares directly rather than beneficially through the ADS program, any transfer of your ordinary shares (including into the ADS program with a view to trading) would be likely to be subject to United Kingdom stamp duty currently at the rate of 1.5% of the higher of the price paid or the market value of the shares acquired.

General Risk Factors

Exchange rate fluctuations may materially affect our results of operations and financial condition.

Due to the international scope of our operations, our assets, earnings and cash flows are influenced by movements in exchange rates of several currencies, particularly the U.S. dollar, the pound sterling and the euro. Our reporting currency and our functional currency is the pound sterling and the majority of our operating expenses are paid in pound sterling. We regularly acquire services, consumables and materials in U.S. dollars, pound sterling and the euro. Further potential future revenue may be derived from abroad, particularly from the United States. As a result, our business and the value of our ordinary shares, including those represented by the ADSs and underlying the Warrants, may be affected by fluctuations in foreign exchange rates between the pound sterling and these other currencies, which may also have a significant impact on our results of operations and cash flows from period to period. Currently, we do not have any exchange rate hedging arrangements in place.

Collaborations, whether through joint ventures, licensing, development arrangements, and other forms of agreements, will be important to our overall business development.

In common with many development stage biotechnology companies an element of our business plan is consider entering into collaborative arrangements with larger pharmaceutical and biotechnology companies. We expect that future collaborations will provide us with important expertise, aid in product development, conducting drug trials, facilitate market entry and may provide some level of funding or future revenue. Notwithstanding our belief that collaborations will be beneficial to us, any collaboration arrangement may by their nature pose a number of risks, including the following:

- collaborators have significant discretion in determining the efforts and resources that they will apply to a project;
- collaborators may not perform their obligations as expected;
- collaborators may dispute the amounts of payments owed;
- collaborators may not pursue development and commercialization of any product candidates that achieve regulatory approval or may elect not to continue or renew development or commercialization programs or license arrangements

In the past, we have entered into collaborative arrangements with two partners, bluebird bio, Inc. (USA) and Nipro Corporation (Japan), which involved funded or partly funded preclinical collaboration. Neither collaboration involve us in any current clinical or development activity or are generating any current cash receipts for us. It is uncertain if these collaborations will generate any future cash receipts or obligations for TCB.

As a company based outside of the United States, our business is subject to economic, political, regulatory and other risks associated with international operations.

Our business is based in the United Kingdom and is subject to risks associated with conducting business outside of the United States. Many of our suppliers and clinical trial relationships are located outside the United States, primarily in the United Kingdom and in the EU. Accordingly, our future results could be harmed by a variety of factors, including:

- economic weakness, including inflation, or political change;
- differing and changing regulatory requirements for product approvals;
- differing jurisdictions could present different issues for securing, maintaining or obtaining freedom to operate in such jurisdictions;
- potentially reduced protection for intellectual property rights;
- difficulties in compliance with different, complex and changing laws, regulations and court systems of multiple jurisdictions and compliance with a wide variety of foreign laws, treaties and regulations;
- changes in non-U.S. currency exchange rates of the pound sterling, U.S. dollar, euro and currency controls;
- changes in a specific country's or region's political or economic environment, including the implications of the recent action of the United Kingdom withdrawing from the European Union and efforts related to Scottish independence;
- customs, tariffs and trade barriers, trade protection measures, import or export licensing requirements or other restrictive actions by governments;
- differing medical product reimbursement regimes and price controls;
- compliance with tax, employment, immigration and labor laws for employees living or traveling abroad, including, for example, the variable tax treatment in different jurisdictions of options granted under our share option schemes or equity incentive plans;
- workforce uncertainty in countries where labor unrest is more common than in the United Kingdom and the United States;

- difficulties associated with staffing and managing international operations, including differing labor relations; and
- business interruptions resulting from geo-political actions, including war and terrorism, or natural disasters including earthquakes, typhoons, floods and fires.

If we are not able to maintain and enhance our reputation and brand recognition, our business, financial condition and results of operations will be harmed.

We believe that maintaining and enhancing our reputation and brand recognition is critical to our relationships with existing and future third-party therapy locations, therapists, patients and collaborators, and to our ability to attract clinics to become our third-party therapy locations offering our therapies. The promotion of our brand may require us to make substantial investments, and we anticipate that, as our market becomes increasingly competitive, these marketing initiatives may become increasingly difficult and expensive. Brand promotion and marketing activities may not be successful or yield increased revenue, and to the extent that these activities yield increased revenue, the increased revenue may not offset the expenses we incur and our business, financial condition and results of operations could be harmed. In addition, any factor that diminishes our reputation or that of our management, including failing to meet the expectations of our network of third-party therapy locations, therapists and patients, could harm our reputation and brand and make it substantially more difficult for us to attract new third-party therapy locations, therapists and patients. If we do not successfully maintain and enhance our reputation and brand recognition, our business may not grow and we could lose our relationships with third-party therapy sites, therapists and patients, which would harm our business, financial condition and results of operations.

We are subject to anti-corruption laws, export control laws, customs laws, sanctions laws and other laws governing our operations. If we fail to comply with these laws, we could be subject to civil or criminal penalties, other remedial measures and legal expenses, be precluded from manufacturing our products and developing and selling our investigational therapies or any future therapeutic candidates or be required to develop and implement costly compliance programs, which could adversely affect our business, results of operations and financial condition.

Our operations are subject to anti-corruption laws, including the UK Bribery Act 2010, or Bribery Act, the U.S. Foreign Corrupt Practices Act of 1977, as amended, or FCPA, and other anti-corruption laws that apply in countries where we do business and may do business in the future. The Bribery Act, FCPA and these other laws generally prohibit us, our officers, and our employees and intermediaries from bribing, being bribed or making other prohibited payments to government officials or other persons to obtain or retain business or gain some other business advantage.

The Bribery Act, the FCPA and these other laws generally prohibit us and our employees and intermediaries from authorizing, promising, offering, or providing, directly or indirectly, a financial or other advantage to government officials or other persons to induce them to improperly perform a relevant function or activity (or reward them for such behavior).

Under the Bribery Act, we may also be liable for failing to prevent a person associated with us from committing a bribery offense. We, along with those acting on our behalf and our commercial partners, operate in a number of jurisdictions that pose a high risk of potential Bribery Act or FCPA violations, and we participate in collaborations and relationships with third parties whose corrupt or illegal activities could potentially subject us to liability under the Bribery Act, FCPA or local anti-corruption laws, even if we do not explicitly authorize or have actual knowledge of such activities. In addition, we cannot predict the nature, scope or effect of future regulatory requirements to which our international operations might be subject or the manner in which existing laws might be administered or interpreted.

Compliance with the FCPA, in particular, is expensive and difficult, particularly in countries in which corruption is a recognized problem. In addition, the FCPA presents particular challenges in the pharmaceutical industry, because, in many countries, hospitals are operated by the government, and doctors and other hospital employees are considered foreign officials. Certain payments to hospitals in connection with clinical trials and other work have been deemed to be improper payments to government officials and have led to FCPA enforcement actions. Need to dedicate additional resources to comply with numerous laws and regulations in each jurisdiction in which we plan to operate.

We may in the future operate in jurisdictions that pose a high risk of potential Bribery Act or FCPA violations, and we may participate in collaborations and relationships with third parties whose actions could potentially subject us to liability under the Bribery Act, FCPA or local anti-corruption laws. In addition, we cannot predict the nature, scope or effect of future regulatory requirements to which our international operations might be subject or the manner in which existing laws might be administered or interpreted. If we expand our operations, we will need to dedicate additional resources to comply with numerous laws and regulations in each jurisdiction in which we plan to operate.

We are also subject to other laws and regulations governing our international operations, including regulations administered by the governments of the UK and the U.S., and authorities in the EU, including applicable export control regulations, economic sanctions on countries and persons, customs requirements and currency exchange regulations, collectively referred to as the Trade Control laws. In addition, various laws, regulations and executive orders also restrict the use and dissemination outside of the United States, or the sharing with certain non-U.S. nationals, of information classified for national security purposes, as well as certain products and technical data relating to those products. If we expand our presence outside of the U.S., it will require us to dedicate additional resources to comply with these laws, and these laws may preclude us from manufacturing our products and developing and selling our investigational therapies or any future therapeutic candidates outside of the United States, which could limit our growth potential and increase our development costs.

There is no assurance that we will be completely effective in ensuring our compliance with all applicable anti-corruption laws, including the Bribery Act, the FCPA or other legal requirements, including Trade Control laws. If we are not in compliance with the Bribery Act, the FCPA and other anti-corruption laws or Trade Control laws, we may be subject to criminal and civil penalties, disgorgement and other sanctions and remedial measures, and legal expenses, which could have an adverse impact on our business, financial condition, results of operations and liquidity. Any investigation of any potential violations of the Bribery Act, the FCPA, other anti-corruption laws or Trade Control laws by UK, U.S. or other authorities could also have an adverse impact on our reputation, our business, results of operations and financial condition.

Because we are subject to environmental, health and safety laws and regulations, we may become exposed to liability and substantial expenses in connection with environmental compliance or remediation activities which may adversely affect our business and financial condition.

Our operations, including our research, development, testing and manufacturing activities, are subject to numerous environmental, health and safety laws and regulations. These laws and regulations govern, among other things, the controlled use, manufacture, handling, release and disposal of and the maintenance of a registry for, hazardous materials, such as chemical solvents, human cells, carcinogenic compounds, mutagenic compounds and compounds that have a toxic effect on reproduction, laboratory procedures and exposure to blood-borne pathogens.

We may incur significant costs to comply with these current or future environmental and health and safety laws and regulations. Furthermore, if we fail to comply with such laws and regulations, we could be subject to fines or other sanctions.

As with other companies engaged in activities similar to ours, we face a risk of environmental liability inherent in our current and historical activities, including liability relating to releases of or exposure to hazardous materials and, as a result, may incur material liability as a result of such release or exposure. Environmental, health and safety laws and regulations are becoming more stringent. We may incur substantial expenses in connection with any current or future environmental compliance or remediation activities, in which case, our production and development efforts may be interrupted or delayed and our financial condition and results of operations may be materially adversely affected. In the event of an accident involving such hazardous materials, an injured party may seek to hold us liable for damages that result.

The requirements of being a public company may strain our resources, divert management's attention and affect our ability to attract and retain qualified board members.

Once we are a public company, we will incur additional accounting, legal and other expenses that we did not incur as a private company. We will incur costs associated with our public company reporting requirements. We also anticipate that we will incur costs associated with corporate governance requirements, including requirements under the Sarbanes-Oxley Act of 2002, as well as rules and regulations implemented by the SEC and The Nasdaq Stock Market. We expect these rules and regulations to increase our legal and financial compliance costs and to make some activities more time-consuming and costly. Furthermore, these rules and regulations could make it more difficult or costlier for us to obtain certain types of insurance, including director and officer liability insurance, and we may be forced to accept reduced policy limits and coverage or incur substantially higher costs to obtain the same or similar coverage. The impact of these requirements could also make it more difficult for us to attract and retain qualified persons to serve on our board of directors, our board committees or as executive officers. We are currently evaluating and monitoring developments with respect to these rules and regulations, and we cannot predict or estimate the amount of additional costs we may incur or the timing of such costs.

New laws and regulations as well as changes to existing laws and regulations affecting public companies, including the provisions of the Sarbanes-Oxley Act of 2002, the Dodd-Frank Wall Street Reform and Protection Act, and rules adopted by the SEC and The Nasdaq Stock Market, will likely result in increased costs to us as we respond to their requirements.

Our internal computer systems, or those of our future collaborators or other contractors or consultants, may fail or suffer security breaches, which could result in a significant disruption of our product development programs and our ability to operate our business effectively.

Our internal computer systems and those of our current and any future collaborators and other contractors or consultants are vulnerable to damage from computer viruses, unauthorized access, natural disasters, terrorism, war and telecommunication and electrical failures. While we have not experienced any significant system failure, accident or security breach to date, if such an event were to occur and cause interruptions in our operations, it could result in a disruption of our development programs and our business operations, whether due to a loss of our trade secrets or other proprietary information or other similar disruptions. For example, the loss of clinical trial data from completed or future clinical trials could result in delays in our regulatory approval efforts and significantly increase our costs to recover or reproduce the data. To the extent that any disruption or security breach were to result in a loss of, or damage to, our data or applications, or inappropriate disclosure of confidential or proprietary information, we could incur liability, our competitive position could be harmed and the further development and commercialization of our product candidates could be delayed.

We are an "emerging growth company" under the federal securities laws and we cannot be certain if the reduced disclosure requirements applicable to emerging growth companies will make the ADSs and Warrants less attractive to investors.

We are an "emerging growth company," as defined in Section 2(a) of the Securities Act, and we may take advantage of certain exemptions from various reporting requirements that are applicable to public companies that are not "emerging growth companies" including, but not limited to, not being required to comply with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act, reduced disclosure obligations regarding executive compensation, and exemptions from the requirements of holding a nonbinding advisory vote on executive compensation and shareholder approval of any golden parachute payments not previously approved. We cannot predict if investors will find the ADSs and Warrants less attractive because we may rely on these exemptions. Investors may be unable to compare our business with other companies in our industry if they believe that our reporting is not as transparent as other companies in our industry. If some investors, including persons considering an investment in the company, find the ADSs or Warrants less attractive as a result, there may be a less active trading market for the ADSs and Warrants, and the prices of these securities may be more volatile.

We will remain an "emerging growth company" for up to five years, although we will lose that status sooner if our revenues exceed $1 billion (or equivalent), if we issue more than $1 billion (or equivalent) in non-convertible debt in a three-year period, or if the market value of our ordinary shares that is held by non-affiliates exceeds $700 million (or equivalent) as of any June 30.

We do not intend to pay dividends on our ordinary shares, including those represented by ADSs, so any returns will be limited to the market value of the ADSs.

We currently anticipate that we will retain future earnings for the development, operation, and expansion of our business and do not anticipate declaring or paying any cash dividends for the foreseeable future. In addition, we may enter into agreements that prohibit us from paying cash dividends without prior written consent from our contracting parties, or which include other terms prohibiting or limiting the amount of dividends that may be declared or paid on our ordinary shares, including those represented by the ADSs. Furthermore, under UK corporate law, a company's accumulated realized profits, so far as not previously utilized by distribution or capitalization, must exceed its accumulated realized losses so far as not previously written off in a reduction or reorganization of capital duly made (on a non-consolidated basis), before dividends can be paid. In the future, were our dividend policy to change, a dividend or distribution may still be restricted from being declared and paid. For these reasons, any return to shareholders may therefore be limited to the appreciation of their shares, which may never occur.

You may not receive distributions on our ordinary shares represented by the ADSs or any value for them if it is illegal or impractical to make them available to holders of ADSs.

The depositary for the ADSs has agreed to pay to you the cash dividends or other distributions it or the custodian receives on our ordinary shares or other deposited securities after deducting its fees and expenses. You will receive these distributions in proportion to the number of our ordinary shares your ADSs represent. In accordance with the limitations set forth in the deposit agreement, however, it may be unlawful or impractical to make a distribution available to holders of ADSs. We have no obligation to take any other action to permit distribution on the ADSs, ordinary shares, rights or anything else to holders of the ADSs. This means that you may not receive the distributions we make on our ordinary shares or any value from them if it is unlawful or impractical to make them available to you. These restrictions may have an adverse effect on the value of your ADSs.

Holders of the ADSs will not have the same voting rights as the holders of our ordinary shares, and may not receive voting materials or any other documents that would need to be provided to our shareholders pursuant in time to be able to exercise their right to vote.

Except as described elsewhere in this prospectus and the deposit agreement, holders of the ADSs will not be able to exercise voting rights attaching to the ordinary shares represented by the ADSs. The deposit agreement provides that, upon receipt of notice of any meeting of holders of our ordinary shares, the depositary will fix a record date for the determination of ADS holders who shall be entitled to give instructions for the exercise of voting rights. Upon our request, the depositary shall distribute to the holders as of the record date: (i) the notice of the meeting or solicitation of consent or proxy sent by us; and (ii) a statement as to the manner in which instructions may be given by the holders. We cannot guarantee that ADS holders will receive the voting materials in time to ensure that they can instruct the depositary to vote the ordinary shares underlying their ADSs.

ADS holders will not be able to exercise their right to vote directly as a holder of ordinary shares, unless they surrender the ADSs they hold to the depositary and withdraw the ordinary shares underlying such ADSs. Holders of ADSs may not know about the meeting far enough in advance to cancel the ADSs and withdraw those ordinary shares. In addition, the depositary and its agents are not responsible for failing to carry out voting instructions or for the manner of carrying out voting instructions. As a result, holders of ADSs may not be able to exercise their right to vote, and there may be nothing they can do if the ordinary shares underlying their ADSs are not voted as they requested or if their shares cannot be voted.

Holders of ADSs may not be able to participate in equity offerings we may conduct from time to time.

Certain shareholders and holders of ADSs, including those in the United States, may, even in the case where preferential subscription rights have not been cancelled or limited, not be entitled to exercise such rights, unless the offering is registered or the ordinary shares are qualified for sale under the relevant regulatory framework. As a result, there is the risk that investors in ADSs may suffer dilution of their holdings should they not be permitted to participate in preference right equity or other offerings that we may conduct in the future.

Holders of ADSs may be subject to limitations on the transfer of their ADSs and the withdrawal of the underlying ordinary shares.

ADSs are transferable on the books of the depositary. However, the depositary may close its books at any time or from time to time when it deems expedient in connection with the performance of its duties. The depositary may refuse to deliver, transfer or register transfers of ADSs generally when our books or the books of the depositary are closed, or at any time if we or the depositary think it is advisable to do so because of any requirement of law, government or governmental body, or under any provision of the deposit agreement, or for any other reason, subject to the right of ADS holders to cancel their ADSs and withdraw the underlying ordinary shares. Temporary delays in the cancellation of your ADSs and withdrawal of the underlying ordinary shares may arise because the depositary has closed its transfer books or we have closed our transfer books, the transfer of ordinary shares is blocked to permit voting at a shareholders meeting or we are paying a dividend on our ordinary shares. In addition, ADS holders may not be able to cancel their ADSs and withdraw the underlying ordinary shares when they owe money for fees, taxes and similar charges and when it is necessary to prohibit withdrawals in order to comply with any laws or governmental regulations that apply to ADSs or to the withdrawal of ordinary shares or other deposited securities.

ADS holders may not be entitled to a jury trial with respect to claims arising under the deposit agreement, which could result in less favorable outcomes to the plaintiff(s) in any such action.

The deposit agreement governing the ADSs representing our ordinary shares provides that, to the fullest extent permitted by law, owners and holders of ADSs irrevocably waive the right to a jury trial of any claim they may have against us or the depositary arising out of or relating to the ADSs or the deposit agreement.

If this jury trial waiver provision is not permitted by applicable law, an action could proceed under the terms of the deposit agreement with a jury trial. If we or the depositary oppose a jury trial demand based on the waiver, the court would determine whether the waiver was enforceable based on the facts and circumstances of that case in accordance with the applicable state and federal law. To our knowledge, the enforceability of a contractual pre-dispute jury trial waiver in connection with claims arising under the federal securities laws has not been finally adjudicated by the United States Supreme Court. However, we believe that a contractual pre-dispute jury trial waiver provision is generally enforceable, including under the law of the State of New York, which governs the deposit agreement, by a federal or state court in the City and County of New York, which has non-exclusive jurisdiction over matters arising under the deposit agreement. In determining whether to enforce a contractual pre-dispute jury trial waiver provision, courts will generally consider whether a party knowingly, intelligently and voluntarily waived the right to a jury trial. We believe that this is the case with respect to the deposit agreement and the ADSs. It is advisable that you consult legal counsel regarding the jury waiver provision before entering into the deposit agreement.

If you or any other holders or beneficial owners of ADSs bring a claim against us or the depositary in connection with matters arising under the deposit agreement or the ADSs, including claims under federal securities laws, you or such other holder or beneficial owner may not be entitled to a jury trial with respect to such claims, which may have the effect of limiting and discouraging lawsuits against us and/or the depositary. If a lawsuit is brought against us and/or the depositary under the deposit agreement, it may be heard only by a judge or justice of the applicable trial court, which would be conducted according to different civil procedures and may result in different outcomes than a trial by jury would have had, including results that could be less favorable to the plaintiff(s) in any such action, depending on, among other things, the nature of the claims, the judge or justice hearing such claims, and the venue of the hearing.

No condition, stipulation or provision of the deposit agreement or ADSs serves as a waiver by any holder or beneficial owner of ADSs or by us or the depositary of compliance with U.S. federal securities laws and the rules and regulations promulgated thereunder.

ADS holders have limited choice of forum, which could limit your ability to obtain a favorable judicial forum for complaints against us, the depositary or our respective directors, officers or employees.

The deposit agreement governing the ADSs provides that: (i) the deposit agreement and the ADSs will be interpreted in accordance with the law of the State of New York; and (ii) as an owner of ADSs, you irrevocably agree that any legal action arising out of the deposit agreement and the ADSs involving us or the depositary may only be instituted in a state or federal court sitting in the City and County of New York. Any person or entity purchasing or otherwise acquiring any the ADSs, whether by transfer, sale, operation of law or otherwise, shall be deemed to have notice of and have irrevocably agreed and consented to these provisions. This choice of forum provision may increase your cost and limit your ability to bring a claim in a judicial forum that you find favorable for disputes with us, the depositary or our and the depositary's respective directors, officers or employees, which may discourage such lawsuits against us, the depositary and our and the depositary's respective directors, officers or employees. However, it is possible that a court could find such choice of forum provisions to be inapplicable or unenforceable. The enforceability of similar choice of forum provisions has been challenged in legal proceedings. It is possible that a court could find this type of provisions to be inapplicable or unenforceable.

To the extent that any such claims may be based upon federal law claims, Section 27 of the Exchange Act creates exclusive federal jurisdiction over all suits brought to enforce any duty or liability created by the Exchange Act or the rules and regulations thereunder. Furthermore, Section 22 of the Securities Act creates concurrent jurisdiction for federal and state courts over all suits brought to enforce any duty or liability created by the Securities Act or the rules and regulations thereunder. Accordingly, actions by our ADS holders to enforce any duty or liability created by the Exchange Act, the Securities Act or the respective rules and regulations thereunder must be brought in a federal court. Our ADS holders will not be deemed to have waived our compliance with the federal securities laws and the regulations promulgated thereunder.

If we are a "passive foreign investment company," or a PFIC, in the year of the offering or in any future year, a U.S. shareholder may be subject to adverse U.S. federal income tax consequences.

Under the Internal Revenue Code of 1986, as amended, or the Code, we will be a PFIC for any taxable year in which, after the application of certain look-through rules with respect to our subsidiaries, either (i) 75% or more of our gross income consists of passive income or (ii) 50% or more of the average quarterly value of our assets consists of assets that produce, or are held for the production of, passive income (including cash). Passive income includes, among other things, dividends, interest, certain non-active rents and royalties, and capital gains. Based on our operations, income, assets and certain estimates and projections, including as to the relative values of our assets and the treatment of amounts in respect of refundable tax credits from governmental entities we received, or are or may become entitled to receive, as gross income that is not passive income, we do not believe that we were a PFIC in 2020 and do not expect to be a PFIC for our 2021 taxable year. However, the determination whether we are a PFIC is a fact-intensive determination that must be made on an annual basis applying principles and methodologies that are in some circumstances unclear, and whether we will be a PFIC in 2021 or any future taxable year is uncertain because, among other things, (i) we currently own, and will own after the closing of this offering, a substantial amount of passive assets, including cash, (ii) the valuation of our assets that generate non-passive income for PFIC purposes, including our intangible assets, is uncertain and may depend in part of the market price of the ADSs or, if applicable, our ordinary shares from time to time, which may fluctuate substantially, (iii) the treatment of amounts in respect of refundable tax credits from governmental entities we received, or are or may become entitled to receive, as gross income that is not passive income is uncertain, and (iv) the composition of our income may vary substantially over time. Accordingly, there can be no assurance that we will not be a PFIC for any taxable year, and our U.S. counsel expresses no opinion with respect to our PFIC status, or with respect to our expectations regarding our PFIC status in 2021 or any future taxable year.

If we are a PFIC for any taxable year during which a U.S. investor holds ADSs or ordinary shares, we would continue to be treated as a PFIC with respect to that U.S. investor for all succeeding years during which the U.S. investor holds the ADSs or ordinary shares, even if we ceased to meet the threshold requirements for PFIC status, unless certain exceptions apply. Such a U.S. investor may be subject to adverse U.S. federal income tax consequences, including (i) the treatment of all or a portion of any gain on the disposition of the ADSs or ordinary shares as ordinary income (and therefore ineligible for the preferential rates that apply to capital gains with respect to some U.S. investors), (ii) the application of a deferred interest charge on such gain and the receipt of certain dividends on the ADSs or the ordinary shares and (iii) compliance with certain reporting requirements. We do not intend to provide the information that would enable investors to make a qualified electing fund election, or a QEF Election, with respect to their holding of ADSs or ordinary shares that could mitigate the adverse U.S. federal income tax consequences to a U.S. investor should we be classified as a PFIC.

If we are a controlled foreign corporation for U.S. federal income tax purposes, there could be adverse U.S. federal income tax consequences to certain U.S. holders who own, directly, indirectly or by attribution, ten percent or more of our ordinary shares.

Each "Ten Percent Shareholder" (as defined below) in a non-U.S. corporation that is classified as a "controlled foreign corporation," or a CFC, for U.S. federal income tax purposes generally is required to include in income for U.S. federal tax purposes such Ten Percent Shareholder's pro rata share of the CFC's "Subpart F income", investment of earnings in U.S. property, and "global intangible low-taxed income", even if the CFC has made no distributions to its shareholders. In addition, a Ten Percent Shareholder that realizes gain from the sale or exchange of shares in a CFC may be required to classify a portion of such gain as dividend income rather than capital gain. A non-U.S. corporation generally will be classified as a CFC for U.S. federal income tax purposes if Ten Percent Shareholders own, directly, indirectly or constructively (through attribution), more than 50% of either the total combined voting power of all classes of stock of such corporation entitled to vote or of the total value of the stock of such corporation.

A "Ten Percent Shareholder" is a United States person (as defined by the Code) who owns or is considered to own 10% or more of the total combined voting power of all classes of stock entitled to vote of such corporation or 10% or more of the total value of the stock of such corporation. The determination of CFC status is complex and includes attribution rules, the application of which is not entirely certain. A failure by a United States shareholder of a CFC to comply with its reporting obligations may subject the United States shareholder to significant monetary penalties and other adverse tax consequences, and may extend the statute of limitations. We cannot provide any assurances that we will assist U.S. holders in determining whether we or any of our non- U.S. subsidiaries are CFCs or whether any holder is a Ten Percent Shareholder. We also cannot guarantee that we will furnish information that may be necessary to comply with the aforementioned obligations. U.S. holders should consult their own advisors regarding the potential application of these rules.

DIVIDEND POLICY

Since inception, we have not declared or paid any dividends on our ordinary shares. We do not have any current plans to pay any dividends on our ordinary shares, including those represented by ADSs, in the foreseeable future. We intend to retain all our available funds and any future earnings to operate and expand our business. Because we do not anticipate paying any cash dividends in the foreseeable future. Capital appreciation, if any, will be your sole source of gains, and you may never receive a return on your investment.

The determination to pay dividends, if any, will be made at the discretion of our board of directors and may be based on a number of factors, including our future operations and earnings, capital requirements and surplus, general financial condition, contractual and legal restrictions and other factors that the board of directors may deem relevant.

Under current Scottish law, among other things, a company's accumulated realized profits must exceed its accumulated realized losses (on a non-consolidated basis) before dividends can be paid. Accordingly, we may only pay dividends if we have sufficient distributable reserves (on a non-consolidated basis), which are our accumulated realized profits that have not been previously distributed or capitalized less our accumulated realized losses, so far as such losses have not been previously written off in a reduction or reorganization of capital.

USE OF PROCEEDS

We estimate that the net proceeds from the sale of the ADSs and Warrants in this offering will be $18.8 million (or $21.8 million if the underwriters exercise their over-allotment option to purchase additional ADSs and Warrants in full), based on an assumed initial public offering price of $4.25 per ADS and 1.25 Warrants, and after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us. Each $1.00 increase or decrease in the assumed initial public offering price for an ADS would increase or decrease our net proceeds, after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us, by approximately $4.76 million, assuming that the number of ADSs and Warrants offered by us remains the same. An increase or decrease of 1,000,000 of the ADSs sold in this offering from the aforementioned expected number of ADSs to be sold in this offering, assuming no change in the assumed initial public offering price, would increase or decrease our net proceeds from this offering by $3.91 million, after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us.

We currently expect to use the net proceeds from this offering primarily as follows:

- to finance the cost of treating patients under our proposed OmnImmune® (TCB 008-001) clinical trial (a phase 2/3 trial for the treatment of acute myeloid leukemia), including initiating and progressing the patient doses planned as part of the phase 2/3 trial – $6.5 million;

- to finance the cost of treating patients under our proposed ImmuniStim® (TCB 008-002) clinical trial (for the treatment of COVID-19 infections), including completing the patient doses planned as part of the phase 1 trial - $2.0million;

- to continue the research and development of our proposed GD-T CAR therapies to treat solid cancers including initiating of planned proof of concept studies and selected other research and development - $3.8 million;

- financing our operating overhead costs and working capital - $6.5 million.

This analysis assumes that the Convertible Loan Note balance is converted into ordinary shares in accordance with the terms of the note; however, if all of the holders opt to require repayment of the balance of the note in full, the additional maximum cash outgoings would amount to $4.7 million, which would be payable in approximately equal tranches at 90 and 180 days after the effective date of the IPO. In that event we have plans to either reduce expenditure across the line items referred to above, or to raise additional capital, which may be available through the exercise of the underwriter's oversubscription option, the exercise of Warrants, or through other initiatives to secure additional capital or partnership receipts. In any of these scenarios we expect that the net proceeds from this offering, combined with our current cash, will be sufficient to fund operations for at least twelve months from the completion of this offering. However, we will need to raise additional capital in order to continue product development; complete the clinical trials referred to in the above analysis and additional, new clinical trials; pursue regulatory approvals; protect our intellectual property, and generally commercialize our product candidates and scale up our operating and overhead infrastructure. Our expected use of net proceeds from this offering, as described above, represents our current intentions based upon our present plans and business condition. As of the date of this prospectus, we cannot predict with certainty all of the particular uses for the net proceeds to be received upon the completion of this offering or the actual amounts that we will spend on the uses set forth above. We believe opportunities may exist from time to time to expand our current business through the acquisition or in-license of complementary product candidates or programming technologies. While we have no current plans or agreements for any specific acquisitions or in-licenses at this time, we may use a portion of the net proceeds for these purposes.

The amounts and timing of our actual expenditures will depend on numerous factors, including the progress of our clinical trials, the potential for achieving accelerated regulatory approval and the amount of cash used in our operations. We therefore cannot estimate with certainty the amount of net proceeds to be used for the purposes described above. We may find it necessary or advisable to use the net proceeds for other purposes, and we will have broad discretion in the application of the net proceeds.

Pending these uses, we plan to invest these net proceeds in short-term, interest-bearing obligations, investment-grade instruments, certificates of deposit or direct or guaranteed obligations of the United States and the United Kingdom. The goal with respect to the investment of these net proceeds is capital preservation and liquidity so that such funds are readily available to fund our operations. Our investment positions will also take into consideration the law and rules under the U.S. Investment Company Act of 1940, so as to avoid being characterized as an investment company thereunder.

CORPORATE REORGANIZATION

We are a public company with limited liability incorporated in October 2021 pursuant to the laws of Scotland, under the name TC BioPharm (Holdings) plc. We were incorporated with nominal share capital for the purpose of becoming the ultimate holding company of TC BioPharm Limited, the company in which our principal operations are undertaken, and for the purpose of consummating the corporate reorganization described herein. In advance of the completion of the offering, TC BioPharm (Holdings) Limited re-registered as a public limited company with the name TC BioPharm (Holdings) plc. TC BioPharm (Holdings) plc will not conduct any operations except those as the listed entity, as explained below.

TC BioPharm Limited was incorporated on July 1, 2013 as a private company with limited liability pursuant to the laws of Scotland and has conducted all our principal operations to date. TC BioPharm Limited has two wholly owned subsidiaries:

- TC BioPharm BV, The Netherlands – incorporated March 2019
- TC BioPharm (North America) Inc. – incorporated June 2021

These two subsidiaries have had limited trading activity since their incorporation. Following the offering it is anticipated that TC BioPharm (North America) Inc. will develop operations and a management presence in the United States with a view to expanding our product offerings into that jurisdiction in the future.

The corporate reorganization will take place in several steps, all of which will be completed prior to the completion of this offering as follows:

● On December 17, 2021, all shareholders in TC BioPharm Limited and holders of convertible loan notes in TC BioPharm Limited exchanged their shares and convertible loan notes for the same number and classes of newly issued shares and/or convertible loan notes in TC BioPharm (Holdings) Limited and, as a result, TC BioPharm Limited became a wholly owned subsidiary of TC BioPharm (Holdings) Limited.

● On December 17, 2021, TC BioPharm (Holdings) Limited carried out a 10 for 1 forward split of all classes of its share capital.

● On December 30, 2021, holders of various options to subscribe for shares in TC BioPharm Limited exchanged their options for equivalent options in TC BioPharm (Holdings) Limited.

● On January 10, 2022, TC BioPharm (Holdings) Limited re-registered under the laws of Scotland as a public limited company, with a change of name to TC BioPharm (Holdings) plc.

● Conditional on and effective prior to completion of this offering, the different classes and nominal values of issued share capital of TC BioPharm (Holdings) plc will be reorganized into a single class of ordinary shares with the same nominal value. The ADSs will be representative of a portion of these ordinary shares.

Investors in this offering will only acquire, and this prospectus describes only, ADSs and the Warrants to purchase ADSs of TC BioPharm (Holdings) plc.

The steps outlined above are described in further detail below:

Exchange of TC BioPharm Limited securities for TC BioPharm (Holdings) Limited securities

Prior to our corporate reorganization, the share capital of TC BioPharm Limited was divided into two classes: “A ordinary shares” (nominal value £0.001 each) and “ordinary shares” (nominal value £1.00 each), TC BioPharm Limited also had issued options to purchase shares. On December 17, 2021, the shareholders and option holders of TC BioPharm Limited exchanged their shares or options for the same number (and classes) of shares and options in TC BioPharm (Holdings) Limited. The nominal value of each class of share in TC BioPharm (Holdings) limited was £0.10. As a result, TC BioPharm (Holdings) Limited became the sole shareholder of TC BioPharm Limited. TC BioPharm Limited and its two subsidiaries in the Netherlands and the United States will continue as the operating companies. Following the exchange, on December 17, 2021, TC BioPharm (Holdings) Limited undertook a stock split, whereby each ordinary and A ordinary (with nominal value of £0.10) was subdivided into 10 ordinary shares with nominal value of £0.01.

Re-registration of TC BioPharm (Holdings) Limited as a Public Limited Company and Change of Name to TC BioPharm (Holdings) plc

On January 10, 2022, TC BioPharm (Holdings) Limited re-registered as a public limited company and changed its name to TC BioPharm (Holdings) plc. An extraordinary meeting of the shareholders was held on January 14, 2022 to approve further resolutions which will be required to be passed by the shareholders of TC BioPharm (Holdings) plc prior to the completion of this offering, details of which are set out in the section titled “Description of Share Capital and Articles of Association” and include adoption of new articles of association that will become effective upon the completion of this offering (see the section entitled Post-IPO Articles of Association) and authorization of our directors to allot shares in the Company and grant rights to subscribe for or convert any securities into shares in the Company up to a maximum aggregate nominal amount of £2,000,000 for a period of five years.

Reorganization of separate classes of Shares of TC BioPharm (Holdings) plc into a single class of Ordinary Shares

Pursuant to the terms of the articles of association of TC BioPharm (Holdings) plc, immediately prior to the IPO, certain shareholders who, prior to the IPO, owned certain ordinary share which carried the right, will subscribe at nominal value for a certain number of additional shares, calculated by reference to the pre-money valuation of the IPO. Pursuant to the terms of the articles of association of TC BioPharm (Holdings) plc as will be in effect as a result of the reorganization and conditional on and effective prior to completion of this offering, each class of shares of TC BioPharm (Holdings) plc will be reorganized into one class of ordinary shares of TC BioPharm (Holdings) plc. The ADSs will be representative of a portion of these ordinary shares.

CAPITALIZATION

The following table sets forth our cash and cash equivalents, indebtedness and capitalization as of September 30, 2021, on:

(1) an actual basis, after giving retrospective effect to the 10 for 1 forward share split;

(2) a pro forma basis to give effect to (i) the accrued interest on the Convertible Loan Notes in issue at September 30, 2021 and (ii) the issue of, subsequent to September 30, 2021 and in the period to January 28, 2022, Convertible Loan Notes with a cash subscription value of $3.3 million plus accrued interest on all outstanding Convertible Loan Notes, to the expected date of the offering, of $8.0 million and issue of up to a further 1,234,646 ordinary shares issuable, immediately prior to the IPO, under the terms of our Articles of Association to certain shareholders who, prior to the IPO, owned certain ordinary share which carried the right, to subscribe at nominal value for a certain number of additional shares, calculated by reference to the pre-money valuation of the IPO; and

(3) a pro forma basis as adjusted to give effect to (i) the sale of 5,176,468 ADSs and the 6,470,585 Warrants pursuant to this prospectus, at the aggregate combined public offering price of $4.25 per one ADS and 1.25 Warrants in this offering, (ii) the issue of 3,158,508 ordinary shares on conversion of Convertible Loan Notes (including the interest accrued to date) pursuant to the provisions of such notes and (iii) the fair value adjustment in relation to the Convertible Loan Note derivates based on the offering price.

The pro forma as adjusted calculations assume an aggregate combined public offering price of $4.25 per one ADS and 1.25 Warrants after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us.

You should read this information together with our audited consolidated financial statements and related notes of TC BioPharm Limited appearing elsewhere in this prospectus and the information set forth under the sections titled “Use of Proceeds” and “Management’s Discussion and Analysis of Financial Condition and Results of Operations”.

	As of September 30, 2021			
	Actual (1)		Pro Forma (2)	Pro Forma As Adjusted (3)
	(in thousands, except share and per share data)			
	£	$	$	$
Cash and cash equivalents	1,551	2,089	5,389	24,245
Convertible Loan Notes	4,931	6,654	14,649	1,225
Convertible Loan Notes - derivative	4,256	5,733	8,999	-
Total equity attributable to equity holders:				
Class A Ordinary shares, £0.0001 par value; 1,645,020 shares authorized, issued and outstanding, actual; Nil shares authorized, issued and outstanding, pro forma; Nil shares authorized, issued and outstanding, pro forma as adjusted	-	-	-	-
Ordinary shares, £0.10 par value; 17,813,010 shares authorized, issued and outstanding, actual; £0.01 par value 20,782,246 shares authorized, issued and outstanding, pro forma; £0.01 par value 29,117,222 shares authorized, issued and outstanding, pro forma as adjusted	1,781	2,399	2,399	2,511
Share premium	15,125	20,373	20,373	52,457
Accumulated deficit	(29,565)	(39,824)	(47,785)	(38,786)
Total shareholders’ equity	(12,659)	(17,052)	(25,013)	16,182
Total capitalization	(12,659)	(17,052)	(25,013)	16,182

A $1.00 increase (decrease) in the assumed aggregate combined initial public offering price of $4.25 per one ADS and 1.25 Warrants would increase (decrease) pro forma as adjusted amount of each of cash and cash equivalents, total shareholders’ equity and total capitalization by approximately $4.76 million, assuming that the number of ADSs and Warrants offered by us, as set forth on the cover page of this prospectus, remains the same and after deducting estimated underwriting discounts, commissions and offering expenses.

From October 2021 to January 28, 2022, the Company issued Convertible Loan Notes with a face value amount of $6.7 million. The loan note was issued with a 50% discount. Upon listing, 50% of the face value of the outstanding Convertible Loan Notes (including interest accrued to date), and any further balance as elected by the noteholders, will convert into ADSs and Warrants at a conversion price for a unit comprised of one ADS and 1.25 Warrants, which is the lower of (a) the price per share calculated on a fully diluted basis (based on the number of shares in issue and vested share options immediately prior to the IPO being approved by the shareholders) on an assumed entity valuation of $120,000,000 and (b) the listing price. The remaining balance of the loan notes are repayable or convertible (at the same value) at the loan note holders’ option in two equal tranches at 90 days and 180 days after the listing date.

The number of our ordinary shares (including shares represented by ADSs) to be outstanding after this offering is based on 19,547,600 ordinary shares outstanding as of September 30, 2021, which gives effect to our corporate reorganization (including the exchange of all issued shares into ordinary shares on a 10-for-1 basis), and the issue of up to a further 1,234,646 ordinary shares issuable, immediately prior to the IPO, under the terms of our Articles of Association to certain shareholders who, prior to the IPO, owned certain ordinary share which carried the right, to subscribe at nominal value for a certain number of additional shares, calculated by reference to the pre-money valuation of the IPO and excludes:

- Any exercise by the underwriters of the over-allotment option to purchase up to 776,470 ADSs and 970,588 Warrants or exercise of the Representative’s Warrants for 258,824 ADSs (or 297,647 ADSs, if the over-allotment option is exercised);
- 5,329,230 ordinary shares issuable upon the exercise of options outstanding under our 2014 Share Option Scheme (as amended) as of September 30, 2021, with a weighted-average exercise price of £0.46 per share.
- Effective at the date of this offering, 4,166,411 ordinary shares issuable upon the exercise of options outstanding under our 2021 Share Option Scheme, as more fully described in the section titled “Management—Equity Incentive Plans”;
- 794,540 ordinary shares issuable upon the exercise of options outstanding, at a future date based on the achievement of certain clinical and commercial milestones with an exercise price of £4.30 per share.
- Any ordinary share issuable upon exercise of a Warrant; and
- With respect to the Convertible Loan Notes, the potential further issuances of up to 1,117,034 ADSs and 1,396,293 Warrants, at the option of the holders of Convertible Loan Notes.

To the extent these outstanding options or any newly issued options are exercised, or we issue additional ordinary shares in the future, there will be further dilution to the new investors purchasing ordinary shares in this offering. In addition, we may choose to raise additional capital because of market conditions or strategic considerations, even if we believe that we have sufficient funds for our current or future operating plans. If we raise additional capital through the sale of equity or convertible debt securities, the issuance of these securities could result in further dilution to our shareholders.

DILUTION

If you invest in our ADSs in this offering, your ownership interest of our ordinary shares will be immediately diluted to the extent of the difference between the initial public offering price per ADS in this offering and the pro forma as adjusted net tangible book value per ADS after this offering. For the purposes of calculating the potential impact of dilution, the full value of the offering price of $4.24 for one ADS has been ascribed to the ADS. Dilution results from the fact that the initial public offering price per ADS is substantially in excess of the net tangible book value per ADS.

As of September 30, 2021, we had a historical net tangible book value of (£13.1) million, or (£0.63) per ADS (equivalent to ($0.85) per ADS). Our net tangible book value per ADS represents total tangible assets less total liabilities, divided by the number of ordinary shares and the A class ordinary shares outstanding on September 30, 2021.

After giving further effect to the sale of 5,176,468 ADSs in this offering at an assumed initial public offering price of $4.24 per one ADS and the issuance of 3,158,508 ordinary shares in respect of the convertible debt at an assumed price of $4.24 per ordinary share which is the calculated ordinary share price based on the loan note instrument with reference to the initial public offering price of the ADSs, and after deducting the underwriting discounts and commissions and estimated offering expenses payable by us, our as adjusted net tangible book value at September 30, 2021 would have been $15.6 million, or £11.6 million or $0.53 per share, or £0.40 per share. This represents an immediate increase in pro forma as adjusted net tangible book value of $1.76 per ADS to existing investors and immediate dilution of $3.71 per ADS to new investors attributable to this offering. The following table illustrates this dilution to new investors purchasing ADSs in this offering:

Assumed public sale price per ADS			$	4.24
Historical net tangible book value per ADS as at September 30, 2021	$	(0.85)		
Decrease in net tangible book value per ADS attributable to the proforma presentation of Convertible Loan Notes, as described above		(0.38)		
Pro forma net tangible book value per ADS as of September 30, 2021		(1.23)		
Increase in net tangible book value per ADS attributable to this offering and issue of Convertible Loan Notes		1.76		
Pro forma as adjusted net tangible book value per ADS after this offering and issue of Convertible Loan Notes				0.53
Dilution per ADS to new investors purchasing ADSs in this offering			$	3.71

The dilution information discussed above is illustrative only and will change based on the actual initial public offering price per ADS and other terms of this offering determined at pricing. A $1.00 increase (decrease) in the assumed initial public offering price of $4.24 per one ADS would increase (decrease) our pro forma as adjusted net tangible book value as of September 30, 2021, after this offering by $0.16 per ADS, and would increase (decrease) dilution to new investors by $0.16 per ADS, assuming that the number of ADSs offered by us, as set forth on the cover page of this prospectus, remains the same. An increase of 1,000,000 in the number of ADSs we are offering would increase our pro forma as adjusted net tangible book value as of September 30, 2021, after this offering by $0.11 per ADS, and would decrease dilution to new investors by $0.11 per ADS, assuming the assumed initial public offering price per ADS remains the same. A decrease of 1,000,000 in the number of ADS we are offering would decrease our pro forma as adjusted net tangible book value as of September 30, 2021, after this offering by $0.12 per ADS, and would increase dilution to new investors by $0.12 per ADS, assuming the assumed initial public offering price per ADS remains the same.

If the underwriters exercise their option to purchase additional ADSs and Warrants in full, the pro forma as adjusted net tangible book value per ADS after the offering would be $0.62, the increase in net tangible book value per ADS to existing shareholders would be $0.09 and the immediate dilution in net tangible book value per ADS to new investors in this offering would be $3.62.

The following table summarizes, after giving retrospective effect to the 10 for 1 forward share split, on the pro forma as adjusted basis described above as of September 30, 2021, the differences between the existing shareholders, those investors receiving shares from conversion of Convertible Loan Notes and the new investors in this offering with respect to the number of ADSs offered hereby, the total consideration paid to us and the average price per share, based on an assumed initial public offering price of $4.24 per ADS before deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us.

	Ordinary Shares Issued		Total Consideration		Average Price Per Ordinary
	Number	Percent	Amount	Percent	Share
Existing shareholders	20,782,246	71%	22,772,382	39%	1.10
New investors	5,176,468	18%	21,948,224	38%	4.24
Issue of shares on conversion of Convertible Loan Notes	3,158,508	11%	13,392,074	23%	4.24
Total	29,117,222	100%	58,112,680	100%	2.00

A $1.00 increase (decrease) in the assumed initial public offering price of $4.24 per ADS would increase or decrease the total consideration paid by new investors by $5.2 million and, in the case of an increase, would increase the percentage of total consideration paid by new investors by 5.1 percentage points and, in the case of a decrease, would decrease the percentage of total consideration paid by new investors by 6.1 percentage points, assuming that the number of ADSs offered by us, as set forth on the cover page of this prospectus, remains the same. An increase (decrease) of 1,000,000 in the number of ADSs offered by us, as set forth on the cover page of this prospectus, would increase or decrease the total consideration paid by new investors by $4.2 million and, in the case of an increase, would increase the percentage of total consideration paid by new investors by 4.2 percentage points and, in the case of a decrease, would decrease the percentage of total consideration paid by new investors by 4.9 percentage points, assuming no change in the assumed initial public offering price per ADS.

If the underwriters exercise their option to purchase additional ADSs and Warrants in full, the percentage of ordinary shares held by existing shareholders will decrease to 70% of the total number of ordinary shares outstanding immediately after the offering, and the number of ordinary shares underlying the ADSs held by new investors will be increased to 5,952,942 or 20% of the total number of ordinary shares outstanding after this offering.

The number of our ordinary shares (including shares represented by ADSs) to be outstanding after this offering is based on 19,547,600 ordinary shares outstanding as of September 30, 2021, which gives effect to our corporate reorganization (including the exchange of all issued shares into ordinary shares on a 10-for-1 basis), and the issue of up to a further 1,234,646 ordinary shares issuable, immediately prior to the IPO, under the terms of our Articles of Association to certain shareholders who, prior to the IPO, owned certain ordinary share which carried the right, to subscribe at nominal value for a certain number of additional shares, calculated by reference to the pre-money valuation of the IPO and excludes:

- Any exercise by the underwriters of the over-allotment option to purchase up to 776,470 ADSs and 970,588 Warrants or exercise of the Representative's Warrants for 258,824 ADSs (or 297,647 ADSs, if the over-allotment option is exercised);

- 5,329,230 ordinary shares issuable upon the exercise of options outstanding under our 2014 Share Option Scheme (as amended) as of September 30, 2021, with a weighted-average exercise price of £0.46 per share.

- Effective at the date of this offering, 4,166,411 ordinary shares issuable upon the exercise of options outstanding under our 2021 Share Option Scheme, as more fully described in the section titled "Management—Equity Incentive Plans";

- 794,540 ordinary shares issuable upon the exercise of options outstanding, at a future date based on the achievement of certain clinical and commercial milestones with an exercise price of £4.30 per share.

- Any ordinary share issuable upon exercise of a Warrant; and

- With respect to the Convertible Loan Notes, the potential further issuances of up to 1,117,034 ADSs and 1,396,293 Warrants, at the option of the holders of Convertible Loan Notes.

MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

You should read the following discussion and analysis of financial condition and operating results together with the information in our consolidated financial statements, unaudited condensed consolidated financial statements and the related notes to those statements included elsewhere in this prospectus. We present our consolidated financial statements in pounds sterling and in accordance with International Financial Reporting Standards, or IFRS, as issued by the International Accounting Standards Board, or IASB, which may differ in material respects from generally accepted accounting principles in other jurisdictions, including generally accepted accounting principles in the United States, or U.S. GAAP.

The statements in this discussion regarding industry outlook, our expectations regarding our future performance, liquidity and capital resources and other non-historical statements are forward-looking statements. These forward-looking statements are subject to numerous risks and uncertainties, including the risks and uncertainties described in the sections titled "Risk Factors." Our actual results may differ materially from those contained in the following discussion and analysis, as well as the section titled "Special Note Regarding Forward-Looking Statements.".

In October 2021, TC BioPharm (Holdings) Limited was incorporated under the laws of Scotland and in January 2022, re-registered as public limited company TC BioPharm (Holdings) plc, to become the holding company for TC BioPharm Limited pursuant to our corporate reorganization. See "Corporate Reorganization." Prior to this offering, TC BioPharm (Holdings) plc has only engaged in activities incidental to its formation, the corporate reorganization and this offering. Accordingly, a discussion and analysis of the results of operations and financial condition of TC BioPharm (Holdings) plc for the period of its operations prior to the corporate reorganization would not be meaningful and are not presented. Following the corporate reorganization, the historical consolidated financial statements of TC BioPharm (Holdings) plc will be the historical financial results of TC BioPharm Limited for all periods presented.

On December 17, 2021, the Company undertook a group reorganization and a share split such that one issued share was exchanged for ten new shares, all references in these financial statements and accompanying notes to units of ordinary shares or per share amounts are reflective of the forward share split for all periods presented. In addition, the exercise prices and the numbers of shares issuable upon the exercise of any outstanding options to purchase ordinary shares were proportionally adjusted pursuant to the respective anti-dilution terms of the share-based payment plans.

Overview

TC BioPharm is a clinical-stage biopharmaceutical company with a cell-based product pipeline capable of treating a variety of disorders including cancer and infectious disease.

TCB is currently developing a pipeline of unmodified allogeneic GD-T therapies and next generation GD CAR-T treatments with a number of advantages over conventional approaches. TC BioPharm owns its two main patent families in the GD CAR-T space, providing robust IP protection and manufactures all products in-house, leading to a much lower cost of goods than competitor products.

Conventional CAR-T treatments have seen many patients experience treatment-related adverse events and are limited to liquid tumors. Furthermore, the cost of manufacture of such treatments is high which can lead to difficulties in scaling an infrastructure to meet patient demand.

Our approach takes advantage of the inherent specificity of GD-T cells against phosphoantigens which are expressed only by cancerous and infected cells. This ensures that the cytotoxic effect of the CAR-expressing GD-T cells will be focused on the pathogenic cells expressing the target antigen whilst ignoring healthy cells. This is ensured by the fact that when the target antigen is expressed on a healthy cell, the GD CAR-T cell is not activated. This technology enables the targeting of cell surface antigens which have previously been deemed 'undruggable' due to their expression on healthy/non-diseased tissue. Thus, our CAR-T products have the potential to treat a wider range of tumors than can be targeted with present strategies.

Going concern

As of September 30, 2021, the Company had an accumulated deficit of £29.6 million. The Company has incurred recurring losses and has no sales as no products have obtained the necessary regulatory approval in order to market products. The Company expects to continue to incur losses as a result of costs and expenses related to the Company's clinical development and corporate general and administrative activities.

The Company had negative cash flows from operating activities during the nine month period ended September 30, 2021 of £3.0 million, and current projections indicate that the Company will have continued negative cash flows for the foreseeable future. Net losses incurred for the nine month period ended September 30, 2021 and 2020, amounted to £9.7 million and £4.2 million, respectively.

At September 30, 2021, the Company's cash and cash equivalents amounted to £1.6 million, current assets amounted to £2.8 million and current liabilities amounted to £15.2 million. At December 31, 2020, the Company's cash and cash equivalents amounted to £0.7 million, current assets amounted to £2.2 million and current liabilities amounted to £4.2 million. The Company received cash totaling £4.0 million through the issue of convertible loan notes in the nine month period to September 30, 2021 with a face value totaling $11.0 million. The loan note is issued with a 50% discount. The Company has additionally secured cash receipts from the issue of further convertible loan notes subsequent to September 30, 2021 through January 28, 2022 totaling £2.5 million with a face value totaling £5.0 million. The existing cash and cash equivalents will not be sufficient to enable the Company to meet its short-term obligations or long-term plans, including completing its short-term clinical program and subsequent commercialization of therapeutic products, if approved, or initiation or completion of future registration studies.

Management believes that the existing cash and cash equivalents will be sufficient to fund the current operating plans through to end of February 2022 and with the addition of the net proceeds from this offering it would extend the cash runway for at least twelve months from the completion of this offering. An additional equity raise is anticipated in the second half of 2022 to meet the funding requirements of the Company. Should the proceeds from listing its securities not materialize or occur as expected, management will need to consider alternative arrangements and such arrangements could have a potentially significant negative impact on the current net asset value of the Company. The Company will consider the following ways to fund its operations including: (1) raising additional capital through equity and/or debt financings; (2) new commercial relationships to help fund future clinical trial costs (i.e. licensing and partnerships); (3) reducing and/or deferring discretionary spending on one or more research and development programs; and/or (4) restructuring operations to change its overhead structure. The Company's future liquidity needs, and ability to address those needs, will largely be determined by the success of its product candidates and key development and regulatory events and its decisions in the future.

The accompanying financial statements have been prepared in conformity with IFRS as issued by IASB, which contemplate continuation of the Company as a going concern. The Company has not established a source of revenues sufficient to cover its operating costs, and as such, have been dependent on funding operations primarily through the sale of equity securities and collaboration revenue. The Company expects to incur further losses over the next several years as it develops its business. The Company has spent, and expects to continue to spend, a substantial amount of funds to implement its business strategy, including its planned product development efforts, preparation for its planned clinical trials, performance of clinical trials and its research and discovery efforts. Although proceeds from listing its securities have not yet been obtained by the Group, management believes it is likely that adequate funding from the anticipated proceeds from listing its securities will be received, such that the Company consequently will have sufficient liquidity to fund the Company's operating activities for at least the next 12 months. On this basis management continues to view the Company as a going concern.

Management's plans include continuing to finance operations through the issuance of additional equity instruments to enable the and continuing the ongoing development of the current pipeline, and/or through entering into a development partnerships or sales and licensing agreements with the acquisition of a third parties or license agreement. Any transactions which occur may contain covenants that restrict the ability of management to operate the business or may have rights, preferences or privileges senior to the Company's current shareholders and may dilute current shareholders of the Company.

Engaging in a transaction with a third party is contingent on negotiations among the parties; therefore, there is no certainty that the Company will enter into such agreements should the Company so desire.

There can be no assurance that the Company will achieve or sustain positive cash flows from operations or profitability. If the Company is unable to maintain adequate liquidity, future operations will need to be scaled back or discontinued. These conditions raise substantial doubt about the Company's ability to continue as a going concern. The Company's consolidated financial statements do not include any adjustments that might result from the outcome of this uncertainty.

Financial Operations Overview

Revenues

We do not have any approved products. Accordingly, we have not generated any revenue from the sale of products, and we do not expect to generate any such revenue unless and until we obtain regulatory approvals for, and commercialize any of, our product candidates. In the future, we will seek to generate revenue primarily from product sales and, potentially, regional or global collaborations with strategic partners, which may produce license fee income.

During the relevant periods we had two collaboration agreements with global pharmaceutical companies. Revenue arose under these contracts as a result of (i) our recharging development costs incurred by us under those agreements to our partners and (ii) on upfront payments received under those collaboration agreements, which are taken to revenue on a straight-line basis over the estimated term over which the services promised will be provided. In addition, we are entitled to receive contractual payments, which would be recorded as revenue, when and if certain clinical trial performance milestones are met on partnered programs. Our collaborations are at a pre-clinical stage and there can be no assurance that we will receive any future milestone revenues.

Since inception through September 30, 2021, the Company has received £14.5 million ($19.5 million) in pre-clinical payments connected with CAR-T development deals with listed pharma companies (NIPRO, Japan: Bluebird Bio, US).

Operating Expenses

We classify our operating expenses into two categories: research and development expenses and administrative expenses. Personnel costs, including salaries, benefits, bonuses and share-based payment expense, comprise a significant component of each of these expense categories. We allocate expenses associated with personnel costs based on the function performed by the respective employees.

Research and Development Expenses

The largest component of our total operating expenses since inception has been costs related to our research and development activities, including the preclinical and clinical development of our product candidates.

Research and development costs are expensed as incurred. Our research and development expense primarily consist of:

- consumable costs related to research and development of pharmaceutical or biologic therapy products for preclinical studies and clinical trials;
- costs related to manufacturing active pharmaceutical or biologic therapy products for preclinical studies and clinical trials;
- salaries and personnel-related costs, including bonuses, benefits and any share-based payment expense, for our personnel performing research and development activities or managing those activities that have been out-sourced;
- fees paid to consultants and other third parties who support our product candidate development;
- third party costs incurred in connection with preclinical studies and clinical trials from investigative sites and contract research organizations, or CROs;
- other costs incurred in seeking regulatory approval of our product candidates;
- costs of related office space allocated to our research and development function, materials and equipment; and
- payments under our license agreements.

The successful development of our product candidates is highly uncertain. Product candidates in later stages of clinical development generally have higher development costs than those in earlier stages of clinical development, primarily due to the increased size and duration of later-stage clinical trials. In addition, the cost of development of our CAR-T range of products is likely to be substantially higher than costs incurred historically in the development of our unmodified products. Accordingly, we expect research and development costs to increase significantly for the foreseeable future as programs progress. However, we do not believe that it is possible at this time to accurately project total program-specific expenses through commercialization. We are also unable to predict when, if ever, material net cash inflows will commence from our product candidates to offset these expenses. Our expenditures on current and future preclinical and clinical development programs are subject to numerous uncertainties in timing and cost to completion.

The duration, costs and timing of clinical trials and development of our product candidates will depend on a variety of factors including:

- the scope, rate of progress, results and expenses of our ongoing and future clinical trials, preclinical studies and research and development activities;
- the potential need for additional clinical trials or preclinical studies requested by regulatory agencies;
- potential uncertainties in clinical trial enrolment rates or drop-out or discontinuation rates of patients;
- competition with other drug development companies in, and the related expense of, identifying and enrolling patients in our clinical trials and contracting with third-party manufacturers for the production of the drug product needed for our clinical trials;
- the achievement of milestones requiring payments under in-licensing agreements;
- any significant changes in government regulation;
- the terms and timing of any regulatory approvals;
- the expense of filing, prosecuting, defending and enforcing patent claims and other intellectual property rights; and
- the ease, cost and ability to market, commercialize and achieve market acceptance for any of our product candidates, if approved.

We track research and development expenses on a program-by-program basis for both clinical-stage and preclinical product candidates. Manufacturing, clinical trial and preclinical research and development expenses are assigned or allocated to individual product candidates. We do not allocate employee costs or facility expenses, including depreciation or other indirect costs, to specific programs because these costs are deployed across multiple programs and, as such, are not separately classified. We use internal resources primarily to oversee research and development as well as for managing our preclinical development, process development, manufacturing and clinical development activities.

Administrative Expenses.

Administrative expenses consist of personnel costs, other administrative expenses and other expenses for outside professional services, including legal, audit and accounting services. Personnel costs consist of salaries, bonuses, benefits and share-based payment expense. Other administrative expenses include office space-related costs not otherwise allocated to research and development expense, professional fees and costs of our information systems. We anticipate that our administrative expenses will continue to increase in the future as we increase our headcount to support our continued research and development and potential commercialization of our product candidates. In future we expect to incur additional expenses as a public company, including expenses related to compliance with the rules and regulations of the SEC and Nasdaq, additional insurance expenses, and expenses related to investor relations activities and other administrative and professional services.

Change in fair value of convertible loan derivatives

The expense relates to the movement in the estimated fair value of the embedded derivatives related to the issue of Convertible Loan Notes from the point of recognition to the period end, calculated by using a Black Scholes option pricing model.

Finance Income–Interest

Finance income relates to interest earned on our cash and cash equivalents and short-term deposits.

Finance Costs

Finance expense includes the effective interest charge accrued in relation to the Convertible Loan Notes and interest expense representing the unwinding of discounted lease liabilities in respect of assets presented on our balance sheet in accordance with IFRS 16 “Leases”.

Income Tax Credit

We are subject to corporate taxation in the United Kingdom. Due to the nature of our business, we have generated losses since inception. Our income tax credit recognized represents the sum of the research and development tax credits recoverable in the United Kingdom.

As a company that carries out extensive research and development activities, we benefit from the U.K. research and development tax credit regime and are able to surrender some of our losses for a cash rebate of up to 33.35% of expenditures related to eligible research and development projects. Qualifying expenditures largely comprise clinical trial and manufacturing costs, employment costs for relevant staff and consumables incurred as part of research and development projects. Certain subcontracted qualifying research and development expenditures are eligible for a cash rebate of up to 21.68%. A large portion of costs relating to our research and development, clinical trials and manufacturing activities are eligible for inclusion within these tax credit cash rebate claims.

We may not be able to continue to claim research and development tax credits in the future under the current research and development tax credit scheme because we may no longer qualify as a small or medium-sized company. However, we may be able to file under a large company scheme.

Tax losses that have not been utilized to offset taxable income or surrendered in connection with the aforementioned research and development tax credits are carried forward to be offset against future taxable profits. After accounting for tax credits receivable, there were accumulated tax losses for carry forward in the United Kingdom of £15.1 million as of September 30, 2021 and £12.8 million as of December 31, 2020 (December 31, 2019: £11.3 million). Unrecognized deferred tax assets totaling £4.0 million as of September 30, 2021 and £3.6 million as of December 31, 2020 (December 31, 2019: £2.4 million) consist of temporary differences on tax losses and share-based compensation arrangements. No deferred tax asset is recognized in respect of accumulated tax losses or temporary differences on share-based compensation arrangements because future profits are not sufficiently certain.

In the event we generate revenues in the future, we may benefit from the UK government’s “patent box” initiative that allows profits attributable to revenues from patents registered in the United Kingdom or European Union or patented products to be taxed at a lower rate than other streams of revenue. The current rate of tax for relevant streams of revenue for companies receiving this relief is 10%.

Value Added Tax, or VAT, is charged on all qualifying goods and services by VAT-registered businesses. An amount of 20% of goods and services is added to all sales invoices and is payable to the U.K. tax authorities. Similarly, VAT paid on purchase invoices is reclaimable from the U.K. tax authorities.

Capital expenditure

Our capital expenditures for the years ended December 31, 2019 and 2020 amounted to £2.0 million and £Nil million, respectively. These capital expenditures primarily consisted of property, plant and equipment, computer equipment and office equipment in the United Kingdom.

Results of Operations

Comparison of the nine months ended September 30, 2021 and 2020

The following table summarizes the results of our operations for the nine months ended September 30, 2021 and 2020:

	Nine Months Ended September 30,		Change Increase/(Decrease)	
	2021	2020		
	£	£	£	%
	(in thousands, except for percentages)			
Revenue	1,484	**1,484**	**-**	**-%**
Research and development expenses	(4,511)	(5,112)	601	(12)%
Administrative expenses	(1,382)	(1,651)	269	(16)%
Administrative expenses – costs related to preparing for a listing	(550)	-	(550)	(100)%
Other (expenses)/income	(97)	555	(652)	(117)%
Change in fair value of convertible loan derivatives	(3,890)	-	(3,890)	100%
Finance income – interest	-	1	(1)	(100)%
Finance costs	(1,517)	(223)	(1,294)	(580)%
Loss before tax	**(10,463)**	**(4,946)**	**(5,517)**	**112%**
Income tax credit	787	809	(22)	(3)%
Net loss for the period	**(9,676)**	**(4,137)**	**(5,539)**	**134%**
Other comprehensive loss				
	-	**-**	**-**	**-**
Total other comprehensive loss	-	-	-	-
Total comprehensive loss for the period	**(9,676)**	**(4,137)**	**(5,539)**	**134%**

Revenue

Revenue was consistent at £1.5 million for the nine months ended September 30, 2021 and nine months ended September 30, 2020. The revenue in both periods is due to the release of performance obligations around upfront payments which are deemed to be satisfied over the estimated life of the services promised to be provided. There was no recharges of research and development spend to our collaboration partners, as those programs naturally progressed through phases of activity undertaken by partners rather than ourselves.

Research and development expenses

The table below summarizes our research and development expenses incurred by program:

	Nine Months Ended September 30,		Change
	2021	2020	
	£	£	£
		(in thousands)	
Direct research and development expenses by program:			
OmnImmune® (TCB 008-001)	153	260	(107)
ImmuniStim® (TCB 008-002)	628	231	397
Partner research and development programs	-	70	(70)
Other research and development programs(1)	65	169	(104)
Total direct research and development expense	846	730	116
Research and development and unallocated costs:			
Personnel related (including share-based compensation)	2,536	3,252	(718)
Indirect research and development expense(2)	1,130	1,130	-
Total research and development expenses	4,511	5,112	(601)

(1) Other research and development programs include expenditure on areas such as our CAR-T program, induced pluripotent stem cells (iPSCs) and the gammadelta1 (GD-T1) subtype.
(2) Indirect research and development expense includes property relates costs and depreciation and amortization.

Research and development expenses decreased by 12% to £4.5 million for the nine months ended September 30, 2021 from £5.1 million for the nine months ended September 30, 2020. Personnel costs reduced to £2.5 million for the nine months ended September 30, 2021 from £3.3 million for the nine months ended September 30, 2020 reflecting the reduced headcount from the second half of 2020 and in addition there were no share-based payment costs in the nine months to September 30, 2021 as all options had fully vested by December 31, 2020. We expect these costs to increase in Q4 2021 with increased activity.

Administrative expenses

Administrative expenses decreased by 16% to £1.4 million for the nine months ended September 30, 2021 from £1.7 million for the nine months ended September 30, 2020. The decrease reflected lower levels of activity and no employee option share-based payment charges in the nine month period to September 30, 2021.

Other (Expenses)/ Income

Other expenses includes unrealized and realized exchange differences in the period relate to retranslation of the US dollar denominated Convertible Loan Notes as at the period end totaling £0.1 million for the nine months ended September 30, 2021 (September 30, 2020: £Nil). Other income has decreased from £0.6 million in the nine months ended September 30, 2020 to £Nil for the nine months ended September 30, 2021. This is due to reduced receipts from employee furlough related government grants.

Change in fair value of convertible loan derivatives

The expense, totaling £3.9 million, for the nine months ended September 30, 2021 relates to the movement in the estimated fair value of the embedded derivatives related to the issue of Convertible Loan Notes from the point of recognition to the period end, calculated by using a Black Scholes option pricing model.

Finance Costs

Finance costs were £1.5 million for the nine months ended September 30, 2021 compared to £0.2 million for the nine months ended September 20, 2020. The increase reflected the effective interest rate calculated in respect of Convertible Loan Notes issued in the nine months ended September 30, 2021.

Income tax credit

The research and development tax credit remained at £0.8 million for the nine months ended September 30, 2021 (£0.8 million in the same period in 2020). This due so similar levels of expenditure eligible for research and development tax credits.

Comparison of the years ended December 31, 2020 and 2019

The following table summarizes the results of our operations for the years ended December 31, 2020 and 2019:

	Year Ended December 31,		Change Increase/(Decrease)	
	2020	**2019**		
	£	**£**	**£**	**%**
	(in thousands, except for percentages)			
Revenue	**1,979**	**3,427**	**(1,448)**	**(42)%**
Research and development expenses	(6,680)	(8,614)	1,934	22%
Administrative expenses	(2,207)	(3,015)	808	27%
Other income	569	1,561	(992)	(64)%
Finance income – interest	1	22	(21)	(95)%
Finance costs	(292)	(275)	(17)	(6)%
Loss before tax	**(6,630)**	**(6,894)**	**264**	**5%**
Income tax credit	1,172	826	346	42%
Net loss for the year	**(5,458)**	**(6,068)**	**610**	**10%**

Revenue

Revenue decreased by 42% to £2.0 million for the year ended December 31, 2020 from £3.4 million for the year ended December 31, 2019. This reflected more research and development work being done in 2020 by our collaboration partners to progress programs, as those programs naturally progress through phases of activity to be undertaken by partners rather than ourselves, resulting in a corresponding reduction in incurred research and development spend which is recharged (as revenue to us) to our collaboration partners.

Research and development expenses

The table below summarizes our research and development expenses incurred by program:

	Year Ended December 31,		
	2020	**2019**	**Change**
	£	**£**	**£**
		(in thousands)	
Direct research and development expenses by program:			
OmnImmune® (TCB 008-001)	283	977	(694)
ImmuniStim® (TCB 008-002)	323	-	323
Partner research and development programs	71	945	(874)
Other research and development programs (1)	223	681	(458)
Total direct research and development expense	900	2,603	(1,703)
Research and development and unallocated costs:			
Personnel related (including share-based compensation)	4,276	4,594	(318)
Indirect research and development expense(2)	1,504	1,417	87
Total research and development expenses	6,680	8,614	(1,934)

(1) Other research and development programs include expenditure on areas such as our CAR-T program, induced pluripotent stem cells (iPSCs) and the gammadelta1 (GD-T1) subtype.

(2) Indirect research and development expense includes property relates costs and depreciation and amortization.

Research and development expenses decreased by 22% to £6.7 million for the year ended December 31, 2020 from £8.6 million for the year ended December 31, 2019. The reduction in direct research and development expenses of £1.7 million in 2020 reflected the impact of a reduced level of clinical activity due to the impact of the coronavirus pandemic of £2.0 million offset by increased expense related to the new clinical program in response to the pandemic of £0.3 million. Personnel costs reduced to £4.3 million for the year ended December 31, 2020 from £4.6 million for the year ended December 31, 2019 reflecting the reduced headcount during 2020. Indirect research and development expense, which contains a number of fixed costs such as facility and property expenditure increased to £1.5 million for the year ended December 31, 2020 from £1.4 million for the year ended December 31, 2019. Our research and development expenses are highly dependent on the phases of our research projects and therefore fluctuate from year to year.

Administrative expenses

Administrative expenses decreased by 27% to £2.2 million for the year ended December 31, 2020 from £3.0 million for the year ended December 31, 2019. Similarly, to research and development expenses, the reduction reflected a reduced level of activity to the impact of the pandemic and we expect these costs to increase in 2021.

Other Income

Other income has decreased from £1.6 million in the year ended December 31, 2019 to £0.6 million for the year ended December 31, 2020. This is due to a reduced amount of program related grant claims being awarded and recognized during 2020. During the year ended December 31, 2020 the Company recognized employee furlough related government grants totaling £0.5 million.

Finance Income – Interest

Finance income – interest consisted of bank interest earned on cash balances and short-term deposits. Finance income – interest was less than £0.1 million for the year ended December 31, 2020 and the year ended December 31, 2019. Interest income reduced during 2020 due to lower levels of short-term deposits and cash at bank. Interest income consisted of bank interest earned on cash balances and short-term deposits.

Finance Costs

Finance costs related to sale and leaseback finance costs and interest computed on the liabilities associated with right of use assets. Finance costs were less than £0.3 million for the year ended December 31, 2020 and the year ended December 31, 2019. Interest expenses increased by 6% in 2020 reflecting a full year of lease costs from additional property leases established during the prior year.

Income tax credit

The research and development tax credit increased by 42% to £1.2 million for the year ended December 31, 2020 from £0.8 million in the same period in 2019. The increase was driven by the increase in the proportion of those expenditures that are eligible for research and development tax credits.

Liquidity and Capital Resources

Sources of Funds

For the nine months ended September 30, 2021 and September 30, 2020, we incurred net losses of £9.7 million and £4.1 million, respectively. We used £3.0 million of cash in operating activities in the nine months ended September 30, 2021 and used £1.9 million of cash in operating activities for the nine months ended September 30, 2020.

For the years ended December 31, 2020 and December 31, 2019, we incurred net losses of £5.5 million and £6.1 million, respectively. We used £3.4 million of cash in operating activities in the year ended December 31, 2020 and used £6.7 million of cash in operating activities for the year ended December 31, 2019.

As of September 30, 2021, we had cash and cash equivalents of £1.6 million. As of December 31, 2020, and December 31, 2019, we had cash and cash equivalents of £0.7 million and £1.0 million, respectively. From incorporation through to January 28, 2022, we have financed our operations primarily through private placements of equity securities, convertible loans, government grants, research and development tax credits, and payments for collaborative research and development services totaling £45.4 million.

During April 2021, TCB obtained shareholder approval to issue Convertible Loan Notes with a face value of up to an aggregate of $20,000,000. The loan note is issued with a 50% discount. Upon listing, 50% of the face value of the outstanding Convertible Loan Notes (including interest accrued to date), and any further balance as elected by the noteholders, will convert into ADSs and Warrants at a conversion price for a combination of one ADS and 1.25 Warrants, which is the lower of (a) the price per share calculated on a fully diluted basis (based on the number of shares in issue and vested share options immediately prior to the IPO being approved by the shareholders) on an assumed entity valuation of $120,000,000 and (b) the listing price. The remaining balance due on the loan notes is repayable or convertible (at the same value) at the loan note holders' option in two equal tranches at 90 days and 180 days after the offering date. From April 30, 2021 to January 28, 2022 the Company had issued Convertible Loan Notes with a face value of $17.7 million. In the event of a default (including if the Company does not complete its public offering before 15th February 2022) the outstanding notes become repayable on demand at their face value. Further details are provided within this section of the prospectus under the heading 'convertible loan'.

If we obtain regulatory approval to advance any of our GD-T cell therapeutic candidates into pivotal clinical trials or to commercialization, we will incur significant research and development expenses, and also commercialization expenses related to product sales, marketing, manufacturing and distribution and additional funding would be required. Where appropriate, we will seek to fund our operations through milestone payments under our agreements with collaboration partners and additional equity financings.

Cash Flows

The following tables summarize the results of our cash flows for the below respective periods:

	Nine Months Ended September 30,		Change	
	2021	2020	Increase/(Decrease)	
	£	£	£	%
	(in thousands, except for percentages)			
Consolidated Cash Flow Statement:				
Net cash flows used in operating activities	(3,034)	(1,911)	(1,123)	(59)%
Net cash flows used in investing activities	(91)	(152)	61	40%
Net cash flows from financing activities	3,910	3,538	372	11%
Net increase in cash and cash equivalents	785	1,475	(690)	(47)%

Operating Activities

Net cash used in operating activities was £3.0 million for the nine months ended September 30, 2021. The loss before taxation for the nine months ended September

30, 2021 was £10.5 million, which is offset by noncash items of £6.3 million, research and development tax credit receipts of £1.1 million and changes in working capital of £0.1 million. The noncash items consisted primarily of finance costs, changes in fair value of a derivative liability, depreciation and amortization. The changes in working capital in the period reflected an increase in trade and other payables offset by a decrease in deferred income.

Net cash used in operating activities was £1.9 million for the nine months ended September 30, 2020. The loss before taxation for the nine months ended September 30, 2020 was £4.9 million, which is offset by noncash items of £1.5 million, £1.2 million for tax credit receipts and changes in working capital of £0.6 million. The noncash items consisted primarily of finance costs, depreciation, amortization and share based payments. The changes in working capital in the period reflected an increase of amounts received in respect of accrued grant income and tax credits in the period and an increase in trade and other payables offset by a decrease in deferred income.

Investing Activities

Net cash used in investing activities was £0.1 million and £0.2 million for the nine months ended September 30, 2021 and nine months ended September 30, 2020, respectively. These amounts relate primarily to purchases of property, plant and equipment related to our facility and patent filing costs.

Financing Activities

Net cash from financing activities was £3.9 million and £3.5 million for the nine months ended September 30, 2021 and nine months ended September 30, 2020, respectively.

For the nine months ended September 30, 2021, these amounts consisted of net proceeds from the issue of Convertible Loan Notes (£4.0 million) and ordinary share capital (£0.3 million) offset by the repayment of sale and leaseback asset finance obligations and lease liabilities (£0.3 million). For the nine months ended September 30, 2020, these amounts consisted of proceeds from the issue of ordinary share capital (£3.9 million) offset by the repayment of sale and leaseback asset finance obligations and lease liabilities (£0.3 million).

	Year Ended December 31,		**Change**	
	2020	**2019**	**Increase/(Decrease)**	
	£	**£**	**£**	**%**
	(in thousands, except for percentages)			
Consolidated Cash Flow Statement:				
Net cash flows used in operating activities	(3,432)	(6,730)	3,298	49%
Net cash flows used in investing activities	(205)	(2,197)	1,992	91%
Net cash flows from financing activities	3,430	3,274	156	5%
Net decrease in cash and cash equivalents	(207)	(5,653)	5,446	96%

Operating Activities

Net cash used in operating activities was £3.4 million for the year ended December 31, 2020. The loss before taxation for the year ended December 31, 2020 was £6.6 million, which was offset by noncash items of £2.2 million and changes in working capital of £0.1 million. The noncash items consisted primarily of depreciation, amortization and equity-settled share-based compensation expense. The changes in working capital in the period reflected the receipt of accrued grant income and tax credits in the year offset by a decrease in deferred income

Net cash used in operating activities was £6.7 million for the year ended December 31, 2019. The loss before taxation for the year ended December 31, 2019 was £6.9 million, which was offset by noncash items of £2.1 million. The noncash items consisted primarily of depreciation, amortization and equity-settled share-based compensation expense. The cash used in operations resulting from changes in working capital in the period was £1.8 million reflecting the anticipated receipt of accrued grant income and tax credits post year end.

Investing Activities

Net cash used in investing activities was £0.2 million and £2.2 million for the year ended December 31, 2020 and year ended December 31, 2019, respectively. These amounts related primarily to purchases of property, plant and equipment related to the expansion of our laboratory facilities in the United Kingdom during 2019.

Financing Activities

Net cash from financing activities was £3.4 million and £3.3 million for the year ended December 31, 2020 and year ended December 31, 2019, respectively.

For the year ended December 31, 2020, these amounts consisted of net proceeds from the issue of ordinary share capital (£3.9 million) offset by the repayment of sale and leaseback asset finance obligations and lease liabilities (£0.4 million). For the period ended December 31, 2019, these amounts consisted of proceeds from the issue of ordinary share capital and stock subscription received (£3.1 million) and receipt of sale and leaseback asset finance (£0.3 million), which was offset by the repayment of sale and leaseback asset finance obligations and lease liabilities (£0.2 million).

Convertible loan

During the nine months ended September 30, 2021, the Group issued US dollar denominated Convertible Loan Notes with a face value totaling $11.0 million (£8.2 million). The loan note is issued with a 50% discount. In the event of and at the time of a listing, 50% of the face value of the outstanding Convertible Loan Notes (including interest accrued to date), and any further balance as elected by the noteholders, will convert into ADSs and Warrants at a conversion price for a unit comprised of one ADS and 1.25 Warrants, which is the lower of (a) the price per share calculated on a fully diluted basis (based on the number of shares in issue and vested share options immediately prior to the IPO being approved by the shareholders) on an assumed entity valuation of $120,000,000 and (b) the listing price. The remaining amount due under the loan notes are repayable or convertible (on the same value) into shares in the listed entity at the loan note holders' option in two equal tranches at 90 days and 180 days after the listing date.

Subsequent to September 30, 2021 and in the period to January 28, 2022, Convertible Loan Notes with a face value of $6.7 million were issued by the Group. The loan note is issued with a 50% discount.

In the event of an act of default (including if the Group does not list despite its and its bankers' efforts before February 15, 2022) the outstanding notes become repayable at their face value.

As the loan notes have two elements, the debt instrument and the conversion option which is accounted for as an embedded derivative liability, the fair value of the conversion option is calculated first and then subtracted from the fair value of the entire instrument which in this case management concluded is the same as the cash consideration received net of issuance costs totaling £100,000.

When considering the fair value of the conversion option at the points of recognition management took into account the probability of a listing happening before maturity and what the expected fair value of the shares would be at the listing. The embedded derivative was measured at fair value on the date of issuance (based on the Black-Scholes valuation model).

The loan is subsequently measured at amortized cost. Management calculates the effective interest rate ("EIR") to consider the potential repayment at redemption date by reference to the face value amount after taking into account the 5% of interest rate.

The value of the embedded derivative is remeasured at fair value at each reporting date (based on the Black-Scholes valuation model) with recognition of the changes in fair value in the statement of consolidated statement of comprehensive loss in accordance with IFRS 9- Financial Instruments.

The model inputs were as follows:

		2021
Exercise price in USD	$	4.82
Share price in USD		8.00
Time to maturity		3 to 9 months
Expected volatility		71%
Risk free interest rate (US treasury bond)		0.08%
Dividend yield		-
Probability, as at the reporting date, of IPO completion		75%

Funding Requirements

We expect our expenses to increase substantially in connection with our ongoing activities, particularly as we advance the preclinical activities and clinical trials of our product candidates. Our expenses will increase as we (i) advance our product candidates through phases of clinical development and, potentially, registration, (ii) fund our research and development activities to further expand our GD-T cell technologies and develop future product candidates and follow-on versions of our more advanced product candidates, (iii) fund our manufacturing activities and the expansion of our plant to support our ongoing and future clinical trials and potential commercial launch; and (iv) fund our general operations.

Following this offering, we will be a publicly traded company and will incur significant legal, accounting and other expenses that we were not required to incur as a private company. In addition, the Sarbanes-Oxley Act of 2002, as well as rules adopted by the SEC and The Nasdaq Stock Market, requires public companies to implement specified corporate governance practices that are currently inapplicable to us as a private company. We expect these rules and regulations will increase our legal and financial compliance costs and will make some activities more time-consuming and costly.

We expect that our cash resources immediately after this offering will enable us to fund our current operating expenses and capital expenditure requirements for at least twelve months from the completion of this offering. We have based these estimates on assumptions that may prove to be wrong, and we could utilize our available capital resources sooner than we expect. We will require additional capital to continue to conduct our business and implement our business plans.

Because of the numerous risks and uncertainties associated with research, development and commercialization of pharmaceutical product candidates, we are unable to estimate the amount of our future working capital requirements, which will depend on and are likely to increase significantly as a result of many uncertain factors, including:

- the scope, progress, outcome and costs of our clinical trials and other research and development activities;
- the costs, timing, receipt and terms of any marketing approvals from applicable regulatory authorities;
- the costs of future sales and marketing activities, including cost of product sales, medical regulatory affairs, marketing, manufacturing and distribution, for any of our product candidates for which we receive marketing approval;
- the amount and timing of the receipt of any future revenue from commercial sale of our products, should any of our product candidates receive marketing approval and become successful in the market;
- the impact of the COVID-19 pandemic on our ability to progress research and development and clinical trials;
- the costs and timing of hiring new employees to support our future growth;
- the costs of preparing, filing and prosecuting patent applications, maintaining and enforcing our intellectual property rights and defending intellectual property-related claims; and
- the cost of and extent to which we in-license or acquire additional product candidates or technologies.

Until such time, if ever, that we can generate product revenue sufficient to achieve profitability, we expect to finance our future cash needs through equity offerings and debt and a combination thereof, including securities convertible into ordinary shares and through development collaborations with partners.

To the extent that we raise additional capital through the sale of equity, our shareholders' ownership interest will be diluted.

If we raise additional funds through other third-party funding, collaborations agreements, strategic alliances, licensing arrangements or marketing and distribution arrangements, we may have to relinquish valuable rights to our technologies, future revenue streams, research programs or product candidates or grant licenses on terms that may not be favorable to us.

If we are unable to raise additional funds through equity financings when needed, we may be required to delay, limit, reduce or terminate our product development or future commercialization efforts or grant rights to develop and market products or product candidates that we would otherwise prefer to develop and market ourselves. If we raise funding through borrowings, we may have to enter into onerous covenants which may adversely impact our operations and our ability to obtain further funding.

There is no assurance that we will be able to raise any further funding, or if further funding is offered, it will be on terms that are acceptable to us and may bring dilution which is unacceptable to our shareholders.

Contractual Obligations and Commitments

The following table summarizes our contractual obligations as of September 30, 2021 and the effects that such obligations are expected to have on our liquidity and cash flows in future periods**:**

		Payments Due by Period				
	Carrying amounts	Total	2 months or less	2-12 months	12-24 months	More than 2 years
				(in thousands)		
Trade payables	£ 1,372	£ 1,372	£ 1,372	£ -	£ -	£ -
Lease liabilities and similar	2,700	3,609	116	578	564	2,351
Convertible loan	4,931	8,410	4,167	4,243	-	-
Other payables	2,200	2,200	554	1,646	-	-
	£ 11,203	£ 15,591	£ 6,209	£ 6,467	£ 564	£ 2,351

Lease liabilities and similar

Amounts shown as lease liabilities and similar in the table reflect minimum payments due for our leases of office, laboratory and manufacturing space and finance leases in respect of certain plant and equipment. We entered into a lease for our corporate headquarters in April 2014 and, as part of this agreement, exercised an option to lease additional space in January 2017 and March 2019. The overall lease expires in March 2027.

Convertible loan

In respect of the convertible loan noted as a financial liability as at September 30, 2021, a proportion of the loan under the loan agreement is expected to convert to equity and will not result in a cash outflow.

Other commitments

We enter into contracts in the normal course of business with third parties who support us in the conduct of certain specialist aspects of clinical trials and preclinical research studies and testing. These contracts are generally cancellable by us upon prior notice. Payments due upon cancellation consist only of payments for services provided or expenses incurred, including noncancelable obligations of our service providers, up to the date of cancellation. These payments are not included in the preceding table, as the amount and timing of such payments are not known.

We have not included any contingent payment obligations that we may incur upon achievement of clinical, regulatory and commercial milestones, as applicable, or royalty payments that we may be required to make under in-licensing agreements which we have or may enter into which could be payable if any of our products generate future sales or license revenue as the amount, timing and likelihood of such payments are not known and are not anticipated in the near term or before we generate significant revenues.

Off-Balance Sheet Arrangements

During the periods presented, we did not have any off-balance sheet arrangements that have or are reasonably likely to have a current or future effect on our financial condition, revenues or expenses, results of operations, liquidity, capital expenditures or capital resources.

Critical Judgments in Applying Our Accounting Policies

In the application of our accounting policies, we are required to make judgments, estimates, and assumptions about the value of assets and liabilities for which there is no definitive third-party reference. The estimates and associated assumptions are based on historical experience and other factors that are considered to be relevant. Actual results may differ from these estimates.

Our estimates and assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognized in the period in which the estimate is revised if the revision affects only that period or in the period of the revisions and future periods if the revision affects both current and future periods.

The following are our critical judgments, except those involving estimation uncertainty, that we have made in the process of applying our accounting policies and that have the most significant effect on the amounts recognized in our consolidated financial statements included elsewhere in this prospectus.

Going Concern

Our evaluation of our ability to continue as a going concern requires us to evaluate our future sources and uses of cash sufficient to fund our currently expected operations in conducting research and development activities one year from the date our consolidated financial statements are issued. We evaluate the probability associated with each source and use of cash resources in making our going concern determination. The research and development of cell therapies is inherently subject to uncertainty.

Management believes that the net proceeds from this offering and the existing cash and cash equivalents will be sufficient to fund the current operating plans for at least twelve months from the completion of this offering. Should the proceeds from listing its securities not materialize or occur as expected, management will need to consider alternative arrangements and such arrangements could have a potentially significant negative impact on the current net asset value of the Group. The Company will consider the following ways to fund its operations including: (1) raising additional capital through equity and/or debt financings; (2) new commercial relationships to help fund future clinical trial costs (i.e. licensing and partnerships); (3) reducing and/or deferring discretionary spending on one or more research and development programs; and/or (4) restructuring operations to change its overhead structure. The Company's future liquidity needs, and ability to address those needs, will largely be determined by the success of its product candidates and key development and regulatory events and its decisions in the future.

Further detail about the Company's ability to continue as a going concern are described in Note 1 to the consolidated financial statements.

Revenue from contracts with customers

Identification of contracts with pharma partners

The Company has entered into collaboration agreements with a number of parties. Application of IFRS 15 "Revenue from contracts and customers" on collaboration agreements requires judgement around whether these contracts were within the scope of IFRS 15.

The Company's core business is around researching and developing immunotherapies and the contracts entered into with pharma partners are consistent with those objectives and the outputs are in line with the Company's ordinary activities.

The contracts with pharma partners do not involve sharing the risks and benefits of a joint arrangement in the sense of IFRS 11 "Joint arrangements".

In light of work being undertaken with pharma partners, and the fact that these agreements have commercial substance with clearly defined milestones and rights and obligations for each party, management concluded that these collaboration agreements meet the definition of a contract with a customer and fall within the scope of IFRS 15.

Identification of performance obligations in contracts

The collaboration agreements entered into by the Company include obligations to fulfil the research and development programs. The Company identified, from reviews of the relevant agreements, that there are no specific obligations but an implied performance obligation to deliver each overall contracted research and development program. Reflecting the broad nature of these obligations, spanning the full duration of the contract, the obligations are satisfied over the expected duration of the relevant contract.

Determination and allocation of the transaction price

The collaboration agreements include a number of elements of consideration and are allocated to the satisfaction of the relevant obligation.

The Company can receive upfront payments as part of the consideration. The Company has determined that upfront payments are in connection with the performance of the research and development program and are satisfied during the duration of the contract.

The business is entitled to receive contractual milestone payments on achievement of certain performance obligations, with revenue being recognized in the same way. The relevant transaction price is allocated to the related milestone.

Key Sources of Estimation Uncertainty

The key assumptions concerning the future, and other key sources of estimation uncertainty at the balance sheet date, that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next year are discussed below.

Revenue from contracts with customers

Timing of revenue recognition

Revenue from upfront payments in connection with collaboration agreements is recognized over the estimated term over which the services promised will be provided. This term was estimated by management at the inception of each contract and evaluated at the year end. The estimated time to complete as at the year end is 35 months.

The resulting deferred income liabilities are disclosed in the consolidated financial statements attached to this prospectus. Due to the uncertainty around the time to complete multi-year collaboration programs it is possible that the estimated terms may be extended. If the estimated term of the current contracts had been adjusted by one year, then it would be expected that the corresponding revenue for the nine months ended September 30, 2021 would have decreased by £0.44 million and deferred income liabilities would have increased by £0.44 million as at September 30, 2021 and for the year ended December 31, 2020 would have decreased by £0.6 million and deferred income liabilities would have increased by £0.6 million as at December 31, 2020. The business is entitled to receive contractual milestone payments on achievement of certain performance obligations. Due to significant uncertainties associated with the achievement of contractual milestones, no revenue has been recognized to date from milestone payments and these will be recognized when the milestones are certain to occur.

Valuation of ordinary shares

As there has been no public market for the Group's ordinary shares to date, the estimated fair value of the ordinary shares has been determined by management, considering the most recently available third-party valuations of the Group's ordinary shares, and the assessment of additional objective and subjective factors that it believed were relevant and which may have changed from the date of the most recent valuation through the date of the grant.

After considering the Market Approach, the Income Approach and the Asset-based Approach, we utilized the Market Approach to determine the estimated fair value of our ordinary shares based on management's determination that this approach was most appropriate for a clinical-stage biopharmaceutical company at this point in its development, using the option-pricing method ("OPM"). Consideration was given to the American Institute of Certified Public Accountants' Practice Aid: "Valuation of Privately-Held Company Equity Securities Issued as Compensation," or the Practice Aid, in addition to input from management, the likelihood of completing an IPO and recent transactions with investors.

Once a public trading market for the ADSs that represent our ordinary shares has been established in connection with the completion of this offering, it will no longer be necessary to estimate the fair value of our ordinary shares in connection with our accounting for share-based payment expenses, as the fair value of our ordinary shares will be determinable by reference to the trading price of the ADSs on Nasdaq.

Share option and other share-based payment assumptions

The determination of the value of share-based payments requires management to use professional expertise to arrive at assumptions to be used to calculate the value of the share-based payment. The estimated fair value of the options outstanding in the period was calculated by applying a Monte Carlo simulation for those options issued in 2020 and a Black Scholes Model for those options issued in prior periods. The most appropriate approach is selected with reference to the share capital structure at the time of grant and the directors need to use judgement in setting the key assumptions. Further details are included in the consolidated financial statements attached to this prospectus.

The Company determines the share price used in the fair value calculation in line with the methods discussed in above in connection with the "Valuation of ordinary shares". As a privately held company, the Company's share price does not have sufficient historical volatility to adequately assess the fair value of the share option grants. As a result, management considered the historical volatility of other comparable publicly traded companies and, based on this analysis, concluded that volatility of 70% was appropriate for the valuation of our share options.

The expected life of the option, beginning with the option grant date, was used in valuing our share options. The expected life used in the calculation of share-based payment expense is the time from the grant date to the expected exercise date. The life of the options, which is a subjective estimate that can materially alter the valuation, depends on the option expiration date, volatility of the underlying shares and vesting features.

IFRS 2 "Share-based Payment" requires the use of the risk-free rate of the country in which the entity's shares are principally held with a remaining term equal to the expected life of the option. This should also be the risk-free interest rate of the country in whose currency the exercise price is expressed. The Company has applied the appropriate risk-free rate, based on 4-year, 3-year and 2-year UK government bond yields as at the respective grant dates.

Convertible loan redemption date

The Group calculates the effective interest rate ("EIR") to consider the potential repayment at redemption date by reference to the face value amount and including the 5% of interest rate in each relevant cash outflow period. At the time of a listing, 50% of the face value of loan notes in issue at the time (including interest accrued to date) convert, and any further balance as elected by the noteholders, to equity in the listed with the remaining loan notes are repayable or convertible at the loan note holders' option in two equal tranches at 90 days and 180 days after the listing date. For the purpose of calculating the EIR, management had estimated as at September 30, 2021 the listing date to be December 15, 2021. The expected listing date has subsequently been revised to January 2022, however, for reporting purposes the accounts have been prepared based on management estimates as at the period end.

Embedded derivative assumptions

The estimated fair value of the embedded derivatives related to the issue of Convertible Loan Notes at the point of recognition and at the period end was calculated by using a Black Scholes option pricing model.

The Group determined the share price used in the fair value calculation in line with the methods discussed in Note 2 in connection with the 'Valuation of ordinary shares', in particular noting the recent valuation obtained from advisers in connection with the IPO. As a privately held company, the Group's share price does not have sufficient historical volatility to adequately assess the fair value of the embedded derivatives. As a result, management considered the historical volatility of other comparable publicly traded companies and, based on this analysis, concluded that a volatility of 71% was appropriate for the valuation of embedded derivatives in in existence as at September 30, 2021.

The expected life of the embedded derivative was directly linked to expected redemption dates of the convertible loan note, as noted above.

The Black-Scholes option pricing model requires the use of the risk-free rate of the currency in which the convertible loan note is denominated (US dollars). The Group has applied the appropriate risk-free rate, US treasury bond yields as at the respective redemption dates.

Quantitative and Qualitative Disclosure about Market Risk

We are exposed to a variety of risks in the ordinary course of our business, including, but not limited to, currency risk, liquidity risk and credit risk, as discussed below. We regularly assess each of these risks to minimize any adverse effects on our business as a result of those factors. See Note 22 to our audited consolidated financial statements for further discussion of our exposure to these risks.

Currency risk

We have transactions denominated in various currencies, with the principal currency exposure being fluctuations in U.S. Dollars and Euros against pound sterling. The Group's exposure to the risk of changes in foreign exchange rates relates primarily to the Group's Convertible Loan Notes that are denominated in US Dollars and a limited number of supplier agreements denominated in currencies other than pound sterling. As at September 30, 2021, a 1% increase in GBPUSD exchange rate would reduce the liability for the Convertible Loan Notes by £48,822. As at September 30, 2021, a 1% decrease in GBPUSD exchange rate would reduce the liability for the Convertible Loan Notes by £49,808.

Liquidity risk

We manage liquidity risk by maintaining adequate reserves, banking facilities and reserve borrowing facilities, by continuously monitoring forecast and actual cash flows, and by matching the maturity profiles of financial assets and liabilities.

We utilize shareholder funds, convertible loans, collaboration agreements, grant funding and asset finance to support our working capital requirements. All cash funds are held with a maturity of three months or less.

Credit risk

We only engage with banks and financial institutions with a long-term credit rating from S&P Global Ratings of BBB or greater.

We have a small number of customers through our collaboration agreements. To manage the credit risks around collaboration agreements we will assess the creditworthiness of partners as part of the engagement process.

We have monitoring procedures in place to identify and follow up on any overdue debts.

Interest rate risk

The Company is exposed to no material interest rate risk.

Equity price risk

The Convertible Loan Notes issued by the Group contain an embedded derivative component that is accounted for at fair value at each period end. A change in the estimated underlying price per share will impact on the valuation of the embedded derivative. As at September 30, 2021, a 5% increase in the estimated share price would increase the value of the embedded derivative by £471,981. As at September 30, 2021, a 5% decrease in the estimated share price would increase the value of the embedded derivative by £463,933.

BUSINESS

Overview

TC BioPharm is a clinical-stage biopharmaceutical company focused on developing novel immunotherapy products based on our proprietary allogeneic gamma delta T (GD-T) cell platform. Harnessing the innate ability of GD-Ts has enabled TCB to develop a range of clinical-stage cell therapies designed to combat cancer and viral infection.

In-house clinical studies have demonstrated that TCB's unmodified allogeneic GD-T products are (i) well tolerated and (ii) show preliminary evidence of disease modification in patients with the late-stage blood cancer, known as acute myeloid leukemia – AML. Based on clinical data generated by TCB, we believe that unmodified GD-Ts have the potential to treat all blood cancers.

TCB now is embarking on phase 2b-into-pivotal (phase 3) clinical studies with a view to launching its first oncology product for the treatment of AML during 2023. Clinical results generated thus far have enabled TCB to obtain FDA orphan drug status for treatment of AML.

In addition to unmodified allogenic GD-Ts for treatment of blood cancers, TCB also is developing an innovative range of genetically-modified CAR-T products for treatment of solid cancers. We believe that solid cancers are more difficult to treat than blood cancers and may require the addition of a CAR "chimeric antigen receptor" (i) to help therapeutic cells to "navigate" into diseased cancerous tissue and (ii) to retain therapeutic cells in-situ at the lesion for maximal efficacy (increased persistence).

In response to the recent pandemic, TCB is planning clinical studies to treat patients with both acute and long COVID-19 symptoms.

In order to manufacture our portfolio of allogeneic products, we select the highest quality GD-T cells from healthy donors, activate the cells and grow them in large numbers at our in-house GMP-compliant manufacturing facility before administration to a patient in order to target and then destroy malignant or virally-infected tissues. We believe that TCB has introduced a step-change to our manufacturing platform by implementing a freeze-thaw process that will allow product to be shipped from cleanroom to patient without any shelf-life issue. Resulting products, we believe, will be more cost-effective and straightforward to ship form cleanroom to clinic.

Business Strategy

TC BioPharm has taken a step-wise approach to clinical development and commercialization. To achieve this, we have made the clinical transition from autologous GD-Ts to allogeneic GD-Ts to CAR-modified allogeneic GD-Ts. Our commercialization strategy is to introduce products firstly in blood cancers (AML initially) and then solid tumor indications.

Our strategic objective is to build a global therapeutic business with an extensive portfolio of GD-T (GD-T1 & GD-T2) cell-based products with the potential to significantly improve the outcomes of patients with cancer and infectious disease. In order to achieve our objective, TCB is focused on delivering success in the following areas:

Progress unmodified GD-T2s into Phase 2/3 clinical trials for the treatment of blood cancers

Having generated meaningful clinical data showing our product is well-tolerated in late-stage AML patients with no remaining treatment options, TCB aims to commence phase 2b-into pivotal (phase 3) clinical studies (with OmnImmune®) during the fourth quarter of 2021 in AML patients who have failed to respond adequately to induction therapy. The aim is to provide a form of salvage therapy which will either stabilize the patient, thereby preventing disease progression, or delay the requirement for human stem cell transplant. Initial trial centers will be UK-based followed by patient treatment in the EU/US later during 2022. The aim is to partner sales and marketing for the US market whilst retaining such rights for the UK/EU market. Product launch in the EU is anticipated to be in 2023.

Working on the premise that other blood cancers should respond to GD-Ts in a similar manner to AML, TCB is planning a phase 1b/2a “umbrella” clinical study in other hematological malignancies to commence 2022. The trial will target three blood cancers, specifically multiple myeloma, chronic lymphoid leukemia and acute lymphoid leukemia.

OmnImmune® clinical program

Our OmmImmune clinical program is an example of our stepwise approach to clinical development. The initial phase 1b/2a trials were undertaken using fresh cell-based product under the program number TCB002. For ease of reference, when discussing that specific trial, we refer the program as OmnImmune® (TCB002). The subsequent planned phase 2b-into pivotal (phase 3) clinical studies will use a frozen cell-based product un the program number TCB008-001. When discussing that specific trial, we refer the program as OmnImmune® (TCB008-001).

Progress unmodified GD-T2s into Phase 1 clinical trials for the treatment of infectious disease

Gamma-delta T cells are dysfunctional in patients with COVID-19 and many other severe viral diseases. TCB plans to commence treatment of COVID-19 patients with the aim of preventing infected individuals being admitted into intensive care as the disease progresses. Our approach, supplied under the name ImmuniStim®, is complementary with, as some individuals will not take the vaccine and some infected individuals will not respond to vaccination. Moreover, TCB’s approach to COVID-19 is not “strain-specific” and will target both the current virus and future mutated strains. Phase 1b/2a clinical studies are anticipated in the UK and EU during 2021, with potential preliminary efficacy data available early 2022. TCB expects to co-develop the COVID-19 treatment with pharmaceutical companies for phase 2b/3 studies and market access.

Progress CAR-modified GD-Ts into Phase 1 clinical trials for treatment of solid CNS tumors (B7-H3)

TCB aims to treat patients with central nervous system (CNS) tumors such as neuroblastoma and glioblastoma using CAR-modified (tissue resident) gamma-delta1 T cells. Phase 1b/2a cancer studies are anticipated to commence 2022/3 and would initially be conducted in the UK using frozen product manufactured in the EU. This phase 1b/2a study could include up to 20 patients and take up to two years to complete. We expect to submit a regulatory package to UK regulators (the MHRA) during 2022, and will not treat patients until approval is granted.

Progress GD-T1s into Phase 1 clinical trials for treatment of GI-tract cancers

TCB aims to treat a range of gut-related solid cancers using GD-T1 cells. Due to complexities of formulation and manufacture, clinical studies using the co-stim approach will commence in 2023 and would be conducted in the USA using frozen product manufactured in the EU. This Phase 1b/2a study could include up to 20 patients and could take up to two years to complete.

Grow our business operations to support the increasing number of clinical-phase products in development

We believe that our existing cell and gene manufacturing facility in the UK has the capacity to support our committed clinical development plans. We plan to continue to build upon this to support expansion of our product pipelines to new assets and to grow our clinical team. We also will work closely with vendors to embrace emerging technologies in our manufacturing operations that are appropriate and optimized for our products to continually improve the quality and efficiency of our manufacturing systems. We believe that maintaining in-house control of these activities is critical to effective and efficient progression and we will continue to seek to build integrated business functions where possible.

Apply our discovery engine to target further diseases and add additional functionality to our products

As a platform technology, the co-stimulatory CAR-T GD-T cell system has a wealth of potential options to build added functionality into our cell-based platform. We plan to continue to innovate and partner in the field to augment our drug products and introduce next generation attributes. We also plan to continue to innovate our manufacturing and supply chains to efficiently scale our processes and simplify the interface with patients and healthcare professionals, whilst continually seeking to reduce manufacturing costs to improve patient access.

Expand our intellectual property portfolio and acquire additional technologies to augment our strong IP position

We intend to continue building on our technology platform, comprised of intellectual property, proprietary methods and know-how in the field of GD-T cells. These assets form the foundation for our ability, not only to strengthen our product pipeline, but also to successfully defend and expand our position as a leader in the field of GD-T based immune-oncology.

Our Pipeline

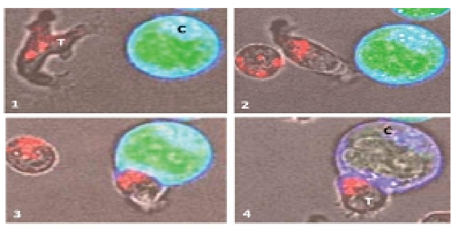
What are gamma delta T cells?

The immune system plays an important role in targeting and destroying cancer cells. One component has evolved to scan the body for diseased cells and eradicate them. In humans, GD-Ts arise as a number of different subtypes, defined by the sequence of the gamma and delta chains of the T-cell receptor (TCR) on the cell surface. The gammadelta2 (GD-T2) subtype typically is the most abundant of these cells in healthy humans, and its TCR- of anti-cancer immunity is GD-T cells – a type of white blood cell that express a variety of innate receptors, which mediated signaling has been fully characterized by researchers.

Virally-infected or cancerous cells become stressed and accumulate cell surface phosphoantigens (isopentenyl pyrophosphate – IPP's) which are recognized by GD-T2 cells. Our proprietary technology platform includes the manufacturing of unmodified and genetically modified (CAR-T) GD-T cells as therapeutic candidates for use in clinical trials and commercialization. Almost all aspects of the value-chain from product manufacture, quality systems, clinical and regulatory are operated in-house by TC BioPharm. We believe this is one of our core competitive advantages, which we believe will contribute materially to our ability to overcome the challenging nature of developing new products.

Human lymphocytes comprise two groups of cells, B cells that generate antibodies for humoral immunity, and T cells that are responsible for cellular immune responses. In healthy individuals, GD-T cells generally represent between 1% and 10% of peripheral blood T lymphocytes and present one of the first lines of defense against a wide range of bacterial and viral pathogens, as well as surveillance for cancerous cells. GD-T cells have the ability to regulate the initial immune response in several ways, including recruitment of other immune cells such as neutrophils, dendritic cells and macrophages through production of various chemokines (Kirby *et al*., 2007). Depletion of GD-T cells leads to impaired host defense to lung infections, for example (Moore *et al*., 2000; Lockhart *et al*., 2006). The predominant subset of GD-T cells in the blood is the GD-T2, which mediates a variety of immune responses by direct cytolysis of cancer cells and infected cells, development of memory phenotypes and modulation of other immune cells. The gammadelta1 (GD-T1) is a functionally distinct subset of GD-T cells and are a predominantly tissue resident population. GD-T1s are less well characterized, but their cytotoxic function also has been described in different liquid and solid tumors (Siegers & Lamb, 2014).

Both subsets of GD-T cells are thought to play a role in autoimmune disorders such as celiac disease, rheumatoid arthritis, autoimmune polyglandular syndrome and sarcoidosis where such lymphocytes are seen to accumulate in high numbers.



GD-T cell killing a cancer cell.

(1) A human GD-T (labelled 'T') identifies and scans (2) the surface of a cancer cell (labelled 'C'). On contact with the cancer cell (3) the GD-T releases perforin granules (stained red) into the cancer cell, rupturing its membrane (4) destroying the cancer cell (adapted from – Enc Life Sci, Jul-2007).

How can GD-Ts be used to treat disease?

Cellular immunotherapy is a form of treatment that harnesses the cells of the immune system to combat disease and is one of the most actively pursued areas of research by biotechnology and pharmaceutical companies today. Interest in immunotherapy is largely driven by recent compelling efficacy data in cancers and by the potential to achieve a cure or functional cure for some patients. While the field of immunotherapy in cancer, in general, has achieved proof of concept and yielded significant durable responses in multiple tumor types, there remain major tumor types such as colon, breast, and prostate cancers as well as patient groups within responsive tumors, that do not respond to current immunotherapy treatments. One theory to explain this non-responsiveness is that certain tumors require direct immune stimulation. T cell-based technologies seek to deliver activated T cells towards malignancies to initiate an immune response. The primary challenges in the field have been to couple an acceptable efficacy and safety profile to successfully target solid tumors.

Adoptive T cell transfer typically involves administration of autologous, allogeneic, or genetically-modified T cells (see footer below) into a recipient host with the specific goal of boosting or transferring enhanced immunologic functionality. One of the most advanced cell-based approaches – chimeric antigen receptor modified T cells (CAR-T) – has gained momentum. In a recent study, patients with refractory B cell acute lymphoblastic leukemia were treated with autologous genetically-modified T cells, with almost 90% of patients showing a marked improvement (Pan *et al.,* 2017*)*. Although the treatment is showing promise for specific tumor types, the safety profile remains a concern, as serious adverse events have previously been reported following CAR-T therapy (Grigor *et al.,* 2017). As a consequence of safety issues related to this approach, regulatory approval may be more complex for this genetically modified T cell therapy which effectively has two 'starting materials' – (i) the cellular component, and (ii) a lentiviral vector. The therapeutic premise is well-established – T cells are transduced with a viral vector encoding a chimeric antigen receptor capable of recognizing cancer-specific antigens, for example, CD19 which is commonly expressed on several tumors such as myeloma and B cell lymphomas. Transduction is the process by which DNA is transferred from one cell to another by a virus; in this specific case DNA is introduced via a viral vector (a tool commonly used by molecular biologists to deliver genetic material).

Following transduction, the T cells are genetically primed to recognize and kill specific tumor cells expressing the target antigen. The process involves extracting a patient's T cells (or growing an allogeneic T cell bank), transfecting the cells with a gene for a chimeric-antigen-receptor (CAR), and re-infusing transfected T cells into the patients. The use of cancer-specific cell therapies has gained momentum as several companies demonstrated that genetically modified CAR-T cells are efficacious when directed against blood tumors. These breakthrough findings have moved cell-based immunotherapy into the forefront of clinical oncology with two drugs now in the market.

T lymphocytes have long been known to play an important role in cancer suppression and modulation of tumor growth and numerous experimental studies have demonstrated the anti-cancer potential of GD-T lymphocytes. Indeed, GD-T cells can recognize a number of specific tumor-associated molecules including non-peptidic antigens (IPP's – isopentenyl pyrophosphate) and immune surveillance stress signals (such as HSP60/70, MICA, MICB, and ULBP) present on the surface of transformed cells. The GD-T cell overexpresses IL-2 receptors and this cytokine is necessary to activate them (Kjeldsen-Kragh, 1993). On recognizing a tumor cell, GD-T cells exert their anti-cancer properties *via* release of both perforin and of granzyme, a serine protease which enters the target cell to trigger cell death (apoptosis). Our research efforts are focused entirely on targeting tumors in ways that may result in an improved therapeutic index and that have potential applications in solid tumors as well as hematological malignancies. In contrast to conventional AB CAR-T cells, our GD-T cell technology provides greater specificity in targeting tumors through recognition of IPP-expressing cells, whilst avoiding on-target, off-tumor effects on healthy tissue lacking in IPPs.

Liquid cancers

For cell therapies to be effective several parameters need to be addressed. These include (i) viability, (ii) homing to the tumor, (iii) persistence at the tumor, and (iv) target-specificity.

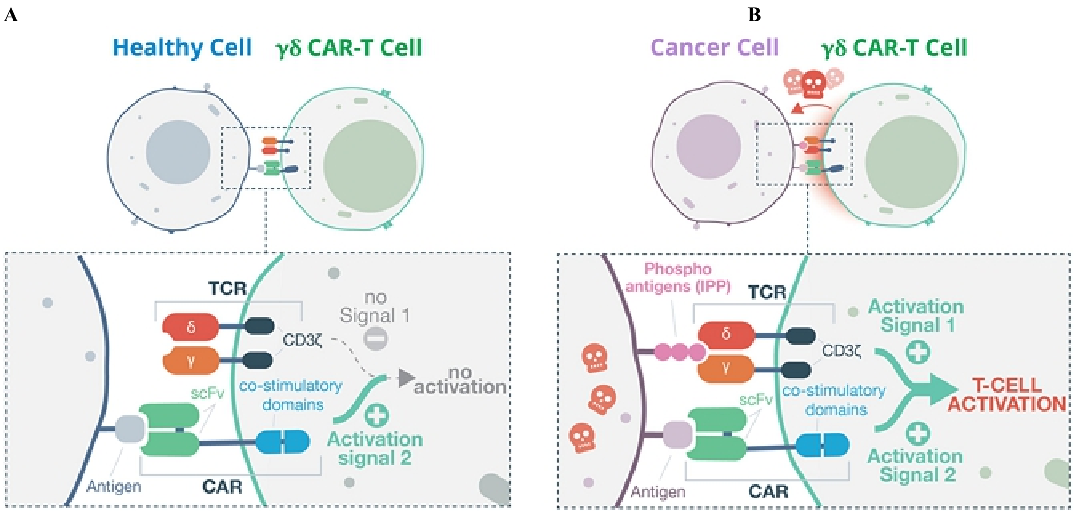
Use of unmodified GD-Ts to treat blood cancers addresses all the above factors. We believe that (i) we have demonstrated therapeutic cells remain viable when injected into the bloodstream of cancer patients; (ii) our research shows GD-Ts injected into the bloodstream remain in-situ; and (iii) they persist for up to 100 days after administration. Moreover, we believe we have demonstrated that certain late-stage blood cancer patients treated with multiple GD-T doses have shown significantly positive responses. These findings lead TCB to believe that all patients with similar blood cancers may respond to GD-T cell therapy in a positive manner.

Solid cancers

We believe that it may be necessary to use CAR-T technology (i) to maximize therapeutic cell homing into the solid tumor site, and (ii) to increase GD-T cell persistence by 'tethering' the cell to antigens present on the cancer cell surface.

In order to overcome toxicities seen with conventional CAR-T approaches, we believe that we have developed a 'co-stimulatory' GD-T CAR which will only attack and kill cancerous cells whilst leaving healthy cells unharmed. This is important as many of the current conventional CAR-T therapies cannot distinguish target antigens expressed on healthy cells from those on cancerous cells, which results in various pathologies, including cytokine release syndrome, that in some cases had led to patient death. Such targeting of health cells with conventional CAR-T makes their use in solid cancers difficult, as too much healthy tissue is likely to be destroyed as 'collateral' damage in the treatment process.

The diagram below illustrates how TCB's approach works, using the innate receptors on the GD-T cell surface to act as a 'safety switch' – such receptors are generally not triggered by healthy cells, only by disease markers (IPP's) on the surface of cancerous or virally infected cells.



Co-stimulatory CAR-T: A) No GD-T cell activation in healthy cell. B) GD-T activation and cell-killing in cancer cell.

Autologous cells are derived from 'self', using patients own cells to treat their specific disease

Allogeneic cells are derived from donor material, giving rise to cell banks able to treat numerous patients

Genetically-modified cells are typically engineered with a 'chimeric' receptor to target specific cancer antigens

Commercialization of conventional CAR-T cell therapy has taken decades of high-quality research in academia and industry, and it has provided transformational results for a number of patients with B cell malignancies. However, as noted, there are numerous barriers to widespread adoption, including:

- Severe Toxicities. The significant risk of severe toxicities, especially cytokine release syndrome (CRS) and neurotoxicity occurring up to 3 weeks from treatment. These toxicities have resulted in the need for implementing specific clinical pathways to certify staff and facilities in the administration of the drugs and the management of the toxicities.

- On-target, off tumor toxicities. Conventional CAR-T products have no mechanism for discriminating between diseased and healthy cells. Activation is governed solely by the expression of the target antigen, which can lead to toxicity when the target antigen is expressed on healthy cells. In marketed products targeting CD19 (present in the vast majority of B cells), this can be tolerated as B-cell aplasia, albeit with the need for regular long-term immunoglobulin replacement therapy. However, in experimental CAR-T products targeting other antigens this has been shown to cause serious side-effects, up to and including fatality.

- Complex supply chains associated with autologous treatments. By definition, autologous treatments require the source cells to have been collected from the patient. It therefore requires a personalized supply chain with multiple touch points and the manufacturing process can only ever be performed on a single-patient batch size. This adds complexity to each treatment and has required the introduction of completely new processes and infrastructure in able to commercialize the products.

- Inherent variability of the drug product. Each patient has a different cell population and so the starting material of each manufacturing batch is always variable, leading to variable final product. This can be minimized during pre-screening, which eliminates some patients from treatment, but there are still significant challenges in manufacturing to provide consistent batches of drug products and in understanding which variables are critical to product quality.

- High list price of the products. The need for personalized manufacturing, new supply chain processes and management of acute and chronic toxicities have all contributed to the high prices associated with the first CAR-T products reaching the market. In the USA, Kymriah® has a list price of $475,000 for pediatric ALL, and Yescarta® lists at $373,000 for DLBCL patients. The associated treatment costs and ongoing management can increase this price significantly.

The combination of the co-stimulatory CAR, with GD-T cells, provides TCB with a proprietary platform which we believe addresses the problems with existing CAR-T products in the following ways:

- Using the natural T cell signaling of the GD-T cell will, we believe, result in less risk of hyperactivation and tonic signaling with an overall reduction in the risk of CRS and less exhaustion of the cells.

- The requirement on cell activation remains on the endogenous GD-T cell TCR signal, which detects stress signals associated with cancerous cells, so healthy cells are not targeted for destruction even if the target antigen is expressed and the CAR binds, thus off-tumor toxicity is avoided.

- Manufacturing in batches of high dose numbers, without the complex patient collection of personalized supply chain steps, we believe will result in a dramatic reduction in cost of goods. This will be reflected in a list price which is in line with current biologicals. With the reduced likelihood of associated toxicities, the treatment and management costs should also be significantly lower, and the products can be made available to many more patients as a result.

- The combination of a well-tolerated product and simplified supply chain (by virtue of our proprietary CryoTC freeze-thaw process), we believe, will make the therapy suitable for administration in local oncology centers without patients having to locate in centralized specialist centers of excellence, further reducing financial and logistic barriers to treatment.

- The tolerance of “off tumor” antigen binding without associated toxicity allows for a complete change in the current target identification paradigm. Instead of identifying targets that are exclusively expressed on tumor cells, we believe our co-stimulatory CAR-T approach confers an advantage to select targets that can be highly expressed on tumors and at low levels on healthy tissue. We select targets based on their relative therapeutic index increase in expression, their homogeneity in tumors and the antigen density. This allows us to target significantly more tumor associated antigens and to significantly expand the therapeutic index into higher doses or repeat administration.

- GD-T cells have multiple roles in humans, possessing both innate and adaptive functions. One role is a sentinel surveillance cell, and they are biologically primed to travel through tissue searching for sites of cellular stress. This ability to penetrate tissue makes them advantageous agents for treating solid tumors. We can add additional function to the GD-T cells by using one or more co-stimulatory CAR-T constructs to add targeting to appropriate antigen(s) and to provide armor or strategies to overcome environmental and immune suppression in the tumor microenvironment. Therefore, we believe that the platform offers a promising approach to target the full spectrum of cancer diseases.

Viral infections

GD-Ts are natural killers of virally infected cells, as well as cancerous cells. We believe that our unmodified GD-T therapy offers substantial potential as a first line of attack against future viral pandemics and can play an important ongoing role in managing COVID-19. During the COVID-19 pandemic, we took the opportunity to develop a trial protocol to treat patients with COVID-19, which was approved by the MHRA and we anticipate conducting a phase 1b/2a trial in H1 2022. TCB plans to commence treatment of COVID-19 patients at an early stage with the aim of boosting their levels of GD-Ts, which are often dysfunctional in patients with severe viral infections, and thus preventing the disease from progressing. This approach is complementary with vaccines, as some individuals will not take the vaccine and others may not respond to vaccination. One unique difference over use of vaccines is that GD-T therapy will not distinguish between viral variants providing a robust treatment irrespective of mutation.

Autologous versus allogeneic

Commercially available cell therapies typically are either autologous or allogeneic. Autologous products are taken from one donor (the patient) and used to treat that same donor (self-to-self), whilst allogeneic products are usually taken from a single donor (not a patient) and used as the starting material to treat a large number of different individuals (patients). GD-T lymphocytes are known to exert their biological effect in a non-MHC restricted manner. This means the potential for graft-versus-host mediated rejection is significantly reduced if allogeneic (non-self) cells are used as a treatment compared with many other immune cell therapies. As many patients with late-stage cancer or severe viral infections are also immunosuppressed, potential for host-mediated rejection of allogeneic cells is also reduced. When compared with autologous variants, commercial benefits of allogenic treatment include the following:

- significant reduction in cost of goods;

- product can be campaign manufactured and stockpiled frozen;

- increased capacity to treat more patients;

- logistics of shipping product are simplified;

- higher doses of (reproducible) product are possible; and

- product is immediately available for acute disorders

Our strategy for developing an allogeneic solution for CAR-T is to select a pathway which will allow us to bring our products to patients as quickly as possible. These concepts build upon decades of previous development in allogeneic cell therapies and have clear understanding of development requirements in terms of manufacturing, clinical and regulatory execution.

Although manufacture of allogeneic cell therapies allows product to be “pharmaceuticalized” by virtue of campaign manufacture and storage, the approach is however not without technical and logistic challenges. To manufacture allogeneic banks, donor cells need to be screened for numerous adventitious agents, including for example, HIV, hepatitis, CMV and syphilis. Additional tumorgenicity testing is required, and assays conducted to ensure the cell bank is free from karyotypic aberrations. In order to overcome any potential for rejection, TCB has developed allogeneic GD-T cell banks that are unlikely to elicit a graft-versus-host (GvH) or host-versus-graft (HvG) immune response.

Donors are screened and selected based on clinically-relevant history and then based on the proliferative capacity and phenotypic character of their GD-Ts, based on a small volume blood draw and in-house assays. In this way, only good quality GD-T cells are selected for repeat apheresis and banking. The banks are HLA-typed and become the starting material for all of the allogeneic CAR-T products. These banks are cryopreserved in our facilities and can later be thawed, genetically engineered with the CAR, activated and expanded into final product, before being frozen again as multiple individual doses of drug product.

Generation of Gamma Delta T cells from IPSC cells

Identification of appropriate donors whilst possible is challenging as only a limited number of batches can be created from a single donation. GD-T cells can be routinely expanded from peripheral blood over 14 days. This provides a short window of opportunity for cell modification/engineering.

Induced pluripotent stem cells (iPSCs) have the potential to overcome these issues because they are capable of unlimited proliferation and multidirectional differentiation. In 2013, several research groups from Japan reported the successful reprogramming of αβT-cells, followed by re-differentiation back to αβT cells (Vizcardo *et al.,* 2013; Nishimura *et al.,* 2013; Themeli *et al.,* 2013). While re-differentiated αβT cells-maintained antigen specificity, they were also characterized by higher proliferation ability than an original T-cell clone.

We hypothesized that GD-T derived iPSCs cells that carry the rearrangements at the TCRG and TCRD gene locus will be able to generate GD-T but not αβT cells. Furthermore, iPSC cells will provide a vast opportunity for the gene-editing without any time constraints of terminally differentiated cells.

Reprogramming GD-T cells has proven to be a challenge, as these cells are not tolerant of cell sorting. Therefore, GD-T cells can be reprogrammed in a bulk culture with the rest of peripheral blood cells or at the end of 14 days expansion, when the purity of GD-T is highest. After several unsuccessful reprogramming attempts, we have optimized the conditions favoring GD-T cells reprogramming. In the last round of reprogramming >50 clones were created. After extensive analysis of DNA rearrangements in δ- and γ-locus of 5 pre-selected clones, it was confirmed that they are derived from GD-T cells with different TCR sequences.

IPSC technology is an attractive approach for the limitless source of GD-T cells are successful progress in reprogramming has been demonstrated. Further work is now required for the establishment of a GMP compatible T-cell differentiation protocol. Generation of DT cells from iPSC cells presents TCB with a vast opportunity for scaling without any time constraints of terminally differentiated cells.

Fresh versus frozen product

Commercial and clinical development of cellular therapy products will invariably require cryopreservation and frozen storage of cellular starting materials, intermediates and/or final product.

Optimizing cryopreservation is important to obtaining maximum yield and a consistent end-product. Suboptimal cryopreservation can lead not only to batch-to-batch variation, lowered cellular functionality and reduced cell yield, but also to the potential selection of subpopulations with genetic or epigenetic characteristics divergent from the original cell line.

Regulatory requirements also impact on cryopreservation, requiring a robust and reproducible approach to freezing, storage and thawing of the product. This requires attention to all aspects of the application of low temperatures; from the choice of freezing container and cryoprotectant, the cooling rate employed and its mode of delivery, correct handling of the frozen material during storage and transportation, to eventual thawing of the product by the end-user. Each of these elements influences all of the others to a greater or lesser extent and have been taken into consideration as TCB moves from fresh to cryopreserved cell-based product.

In a recent submission to UK regulators, we provided batch manufacture and supporting data, and TCB was granted approval to commence treatment of cancer patients using frozen allogeneic product. This represents a significant milestone for TCB, as we pioneer use of cryopreserved-donated cells to treat cancer and COVID-19 patients. Obvious benefits include increased product reproducibility, ability to ship product globally on request and significant economy of scale (through batch manufacture and storage).

Clinical studies – unmodified GD-Ts in blood cancer

Management of acute myeloid leukemia (AML) is based on intensive chemotherapy and/or stem cell transplant, but these therapies lead to high relapse rates amongst treated patients. Particularly for the relapsed/refractory AML population or those who are not eligible for alloHSCT or intensive chemotherapy, the therapy options are limited, and patients are often placed in experimental protocol therapies or palliative care. As a result, there is a need for additional therapies, particularly for these cohorts.

GD-T cells have emerged as a promising therapy due to their ability to specifically target cancer cells. Nonclinical studies performed in AML cell lines suggest that GD-T cells specifically target AML tumor cells and lead to cell lysis in vitro (Kirk *et al.,* 1993). Additionally, in xenotransplantation animal models, GD-T cells obtained from healthy volunteers specifically target AML cells and result in increased survival and diminished tumor burden in NOD mice (Gertner-Dardenne *et al.*, 2012). Similarly, in vitro experiments conducted by TCB further support such findings whilst providing evidence that OmnImmune® (TCB002) specifically targets stress induced cells and effectively kills AML cells lines.

In the clinic, allogeneic treatment in AML patients in the phase 1b/2a trial OmnImmune® (TCB002) has shown our product is well-tolerated with some preliminary evidence of anticancer activity. Firstly, there were no signs of graft vs. host disease (GvHD) following therapy and secondly, CR (complete response) and MLFS (morphologic leukemia free state) were observed. Earlier results with autologous product demonstrated good tolerability. For the allogeneic product, OmnImmune® (TCB002), additional procedures were included to prevent GvHD (e.g. AB T cell depletion). Literature reports were also supportive of the use of OmnImmune® (TCB002) in cancer patients. The phase 1b/2a trial tested OmnImmune® (TCB002) in active relapsed or refractory AML who were not eligible for or did not consent to high dose salvage chemotherapy and/or allogeneic hematopoietic stem cell transplantation (alloHSCT). The trial was conducted to identify a tolerable dose and better understand the safety of this therapy in the chosen indication as well as generate preliminary information on potential clinical benefit. The primary, secondary and exploratory endpoints were as follows:

Primary endpoints:

- Assessment of adverse events (Aes) graded by Common Terminology Criteria for Adverse Events (CTCAE) v5.0, vital signs and evaluation of laboratory parameters
- Incidence of dose-limiting toxicities (DLTs) during the first 28 days after γδ T cell administration.
- Establish Maximum Tolerated Dose (MTD) of OmnImmune®

Secondary endpoints:

- Complete Remission (CR) rate
- Overall survival (OS)
- Quality of life determined by EORTC QLQ-C30 questionnaire

Exploratory endpoints:

- Changes in γδ T cell count and phenotype before and after OmnImmune® infusion

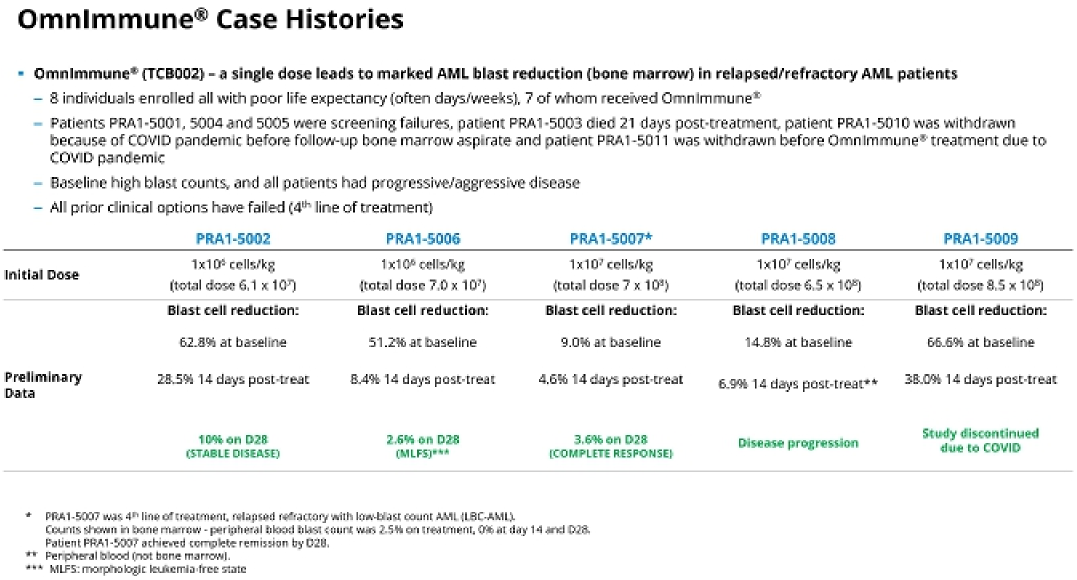
No formal statistical analysis was planned. The incidence of DLTs were to be summarized descriptively by γδ T cells dose for evaluable patients. The recommended dose would be determined as the greatest with an incidence of DLTs no greater than 1/3. All other data including efficacy results were summarized descriptively by γδ T cells dose.

The trial enrolled 8 patients and healthy donors aged >18 years.

Clinical outcome

Seven patients were treated with OmnImmune® (TCB002). The eighth patient could not be dosed because the study was terminated as a result of the COVID-19 pandemic, which prevented the importation of investigational product from Scotland to the Czech Republic. No safety concerns were raised during Safety Review Committee (SRC) meetings. No treatment related Serious Adverse Reactions (SARs) were reported in any of the patients who were enrolled in the trial. No grade 3≥ OmnImmune® (TCB002) treatment related toxicities were noted in any of the treated patients. No dose-limiting toxicities were observed and no emergency safety measures have occurred for any subjects receiving OmnImmune® (TCB002). Two patients at 28 days post-treatment achieved a CR (one patient) or MLFS (one patient); another patient was classified as attaining stable disease with > 50% reduction in bone marrow blast count; one additional patient exhibited reduction in blast levels at 14 days; and one patient had disease progression (see table below). One patient (PRA1-5003) died 21 days after TCB002 due to bilateral pneumonia, determined unrelated to study medication. One patient (PRA1-5010) was withdrawn because of the COVID-19 pandemic before bone marrow aspiration on day 28 post-treatment. These preliminary indications of anticancer activity were not expected given the refractory profile of the enrolled patients.

The EORTC QLQ-C30 questionnaire resulted in scoring from six of the seven patients dosed with OmnImmune® (TCB002) for varying periods of time depending on their study duration. At 7 days post dosing, the average QoL score from six patients had decreased from 55.7 to 47.2 out of a possible maximum of 100. This negative impact on QoL reflects the well characterized side effects of preconditioning therapy with cyclophosphamide and fludarabine given between 6 and 2 days prior to OmnImmune® (TCB002) administration. The score remained lower in the four patients assessed at 28 days at a level of 50.0. In the two patients (one CR and one MLFS) who were assessed at the end of the study (week 24), both had recovered to an improved QoL score, each of 67.0.



OmnImmune® Case Histories

- **OmnImmune® (TCB002) – a single dose leads to marked AML blast reduction (bone marrow) in relapsed/refractory AML patients**
  - 8 individuals enrolled all with poor life expectancy (often days/weeks), 7 of whom received OmnImmune®
  - Patients PRA1-5001, 5004 and 5005 were screening failures, patient PRA1-5003 died 21 days post-treatment, patient PRA1-5010 was withdrawn because of COVID pandemic before follow-up bone marrow aspirate and patient PRA1-5011 was withdrawn before OmnImmune® treatment due to COVID pandemic
  - Baseline high blast counts, and all patients had progressive/aggressive disease
  - All prior clinical options have failed (4th line of treatment)

	PRA1-5002	PRA1-5006	PRA1-5007*	PRA1-5008	PRA1-5009
Initial Dose	1×10^6 cells/kg (total dose 6.1×10^7)	1×10^6 cells/kg (total dose 7.0×10^7)	1×10^7 cells/kg (total dose 7×10^8)	1×10^7 cells/kg (total dose 6.5×10^8)	1×10^7 cells/kg (total dose 8.5×10^8)
Preliminary Data	**Blast cell reduction:** 62.8% at baseline 28.5% 14 days post-treat **10% on D28 (STABLE DISEASE)**	**Blast cell reduction:** 51.2% at baseline 8.4% 14 days post-treat **2.6% on D28 (MLFS)*****	**Blast cell reduction:** 9.0% at baseline 4.6% 14 days post-treat **3.6% on D28 (COMPLETE RESPONSE)**	**Blast cell reduction:** 14.8% at baseline 6.9% 14 days post-treat** **Disease progression**	**Blast cell reduction:** 66.6% at baseline 38.0% 14 days post-treat **Study discontinued due to COVID**

* PRA1-5007 was 4th line of treatment, relapsed refractory with low-blast count AML (LBC-AML).
Counts shown in bone marrow - peripheral blood blast count was 2.5% on treatment, 0% at day 14 and D28.
Patient PRA1-5007 achieved complete remission by D28.
** Peripheral blood (not bone marrow).
*** MLFS: morphologic leukemia-free state

FDA Orphan Drug Designation

About 60 million people living in the European Union (EU) and USA suffer from a rare disease. The European Medicines Agency (EMA) and FDA play a central role in facilitating the development and authorization of medicines for rare diseases, which are termed 'orphan medicines' in the medical world. Developing medicines intended for small numbers of patients has little commercial incentive under normal market conditions. Therefore, the EU and USA offer a range of incentives to encourage the development of designated orphan medicines.

The general therapeutic strategy for the treatment of AML has not changed substantially over the past 30 years. Excluding APL (which should be treated with trans-retinoic acid), AML management is based primarily on induction, incorporating an anthracycline and cytarabine, and consolidation therapy, and/or allogeneic Hematopoietic Stem Cell Transplantation (alloHSCT). Induction/consolidation therapy leads to high CRs rates in those who are eligible for treatment and present a favorable risk profile.

Several novel agents are in various stages of development for the treatment of AML. Novel approaches include antibody-based immunotherapy and adoptive cell therapy that aim to improve anti-leukemia T cell function, such as the therapies developed by TCB (OmnImmune®).

OmnImmune® (TCB002) was initially studied in patients with active relapsed or refractory AML who are not eligible or do not consent to high dose salvage chemotherapy and/or alloHSCT. In July 2019, OmnImmune® (TCB002) was granted 'orphan medicine' status from the FDA for Acute Myeloid Leukemia (AML). TCB intends to conduct a further clinical phase 2/3 study (OmnImmune® (TCB008-001)) in 2021/2 aimed at treating earlier stage AML patients.

AML phase 1b/2a synopsis

AML patients, late-stage, non-responders:

- Poor life expectancy (often days/weeks)
- Prior clinical options have failed in all patients
- **Average cancer levels in bone went from 38% to 6%**
- One patient had a complete response; another classified MLFS* following treatment; and one stable disease
- No serious adverse treatment-related safety events
- No grade 3≥ OmnImmune® (TCB002) treatment related toxicities were noted
- One patient died because of bilateral pneumonia determined unrelated to study medication
- **Phase 2/3 planned H2, 2021 (non-responsive to induction), planned product launch H1, 2023**

*MLFS: morphologic leukemia-free state

Based on compelling clinical data in non-responding patients TCB aims to progress phase 2/3 studies in EU/US during 2021

Summary of TCB's phase 1b/2a clinical trial in patients with fourth-line-of-treatment acute myeloid leukemia. Following completion of the study, TCB plans to commence phase 2b into 3 (pivotal) patient treatment during H1, 2022.

Pipeline and plan

Our future pipeline is focused on treating liquid cancers with our unmodified GD-T therapies and the treatment of solid cancers with next-generation allogeneic GD-T CAR-T therapies. The following table summarizes our current product pipeline:

Pipeline Clinical Development

Includes focused CAR-GDT cell therapy pipeline

Program	Indication	Pre-clinical	Phase 1	Phase 2	Phase 3	Status / Upcoming Milestone
TCB001 Autologous (unmodified)	Melanoma	✓	✓	2a		Phase 1b/2a POC complete – evidence of tumor shrinkage (not pursuing further development)
OmnImmune (Vδ2 subtype) Allogeneic unmodified)	**AML/Haem**	✓	✓	2a		Phase 1b/2a complete H1 2020 – PR/CR achieved **Phase 2b into pivotal commences H1 2022** **Launch planned 2023**
ImmuniStim (Vδ2 subtype)	**Viral/Covid**	✓	1b			**Phase 1b/2a commenced H1 2022**
TCB009 (Vδ1 subtype)	**GI Tract**	✓				**Phase 1b/2a planned 2023 (GI-tract cancers)**
TCB005/6 (Vδ2 CAR-T)	**Solid tumors**	✓				**Phase 1b/2a planned 2023 (B7H3/5T4)**

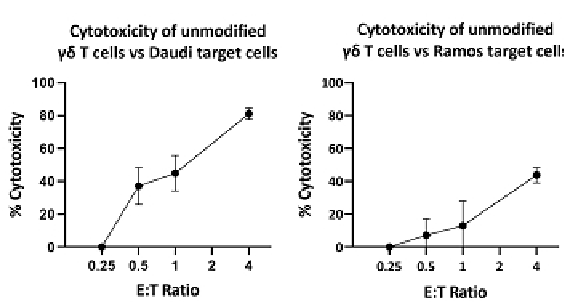
Note: Programs indicated by grey bars do not involve any current development or clinical activity by the Company.

Our unmodified cell therapy, used in the treatment of Acute Myeloid Leukemia, is supplied under the name OmnImmune®; and our unmodified cell therapy, used to treat COVID-19, is supplied under the name ImmuniStim®.

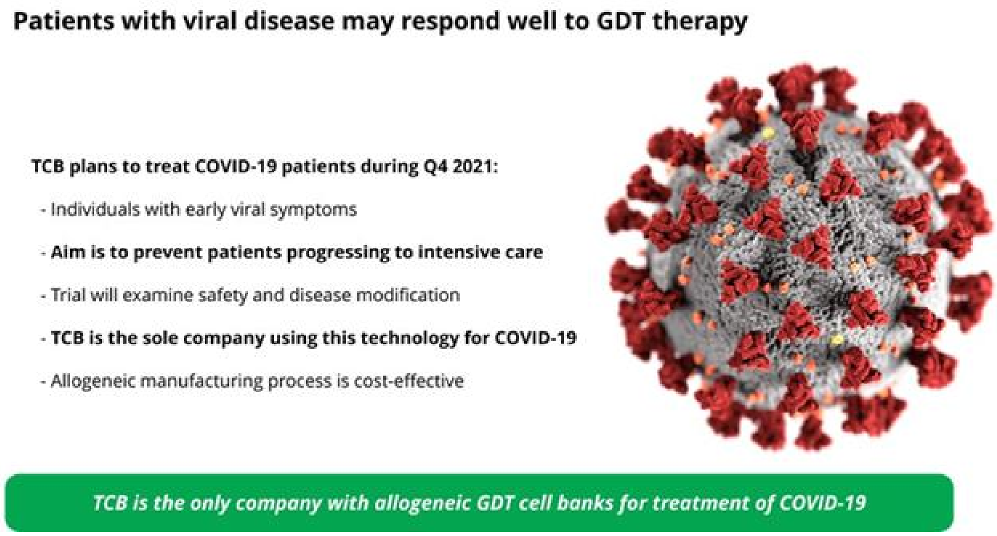
OmnImmune® is an allogeneic unmodified GD-T (GD-T2) cell product. Donor-derived GD-T cells for proliferative capacity, were activated and expanded in our manufacturing facility before being infused into the patient as part of our OmnImmune® (TCB002) phase 1 trial. This trial was completed in H1 2020 at the Institute of Hematology and Blood Transfusion in Prague, Czech Republic. The product will continue being developed as the frozen variant, OmnImmune® (TCB008-001), towards phase 2/3 follow-up clinical trials and commercialization.

ImmuniStim®: We have recently been granted MHRA approval for a phase 1b/2a clinical trial of our allogeneic unmodified GD-T (GD-T2) cell product to target COVID-19. We expect to treat our first patient during H1 2022. Numerous peer-reviewed publications have demonstrated that GD-T cells innate killers of cells which have become virally infected. Using Epstein-Barr virus infected cells as an exemplar, TCB has conducted pre-clinical studies to demonstrate that our GMP-compliant manufacturing process results in GD-T with potent anti-viral cytotoxicity – this is shown in below:

- Ramos (EBV-) and Daudi (EBV+) target cells labelled with PKH
- Expanded, Vγ9Vδ2 T cells added at different effector:target ratios
- Cytotoxicity against PKH⁺Vγ9⁻ cells quantified at 48hrs
- GD-T's show low cytotoxicity against Ramos cells (EBV-); greater killing of Daudi cells (EBV+)

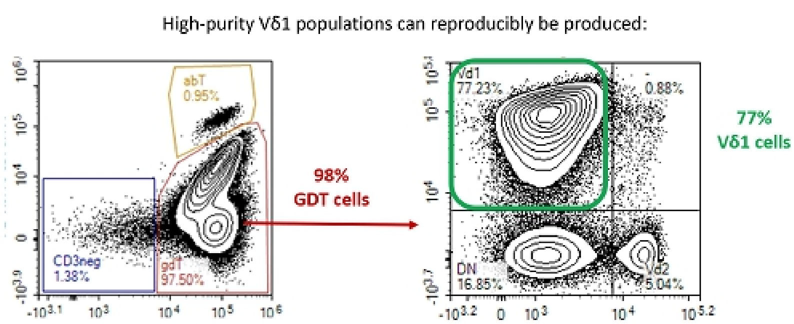


This table illustrates two B-cell lymphoma lines, one infected with Epstein Barr virus (Daudi) and another line which is virus free (Ramos). When each of the lymphocyte lines are incubated with TCB's GD-T cells, killing (cytotoxicity) is demonstrably increased in virally infected cells (Daudi) compared with the non-infected control. The above pre-clinical results, combined with clinical data from cancer patients facilitated UK regulatory approval to commence phase 1b/2a clinical studies on covid-positive patients. The trial will aim to prevent covid-infected individuals progressing to intensive care. We expect to treat first patients in the UK during H1, 2022.

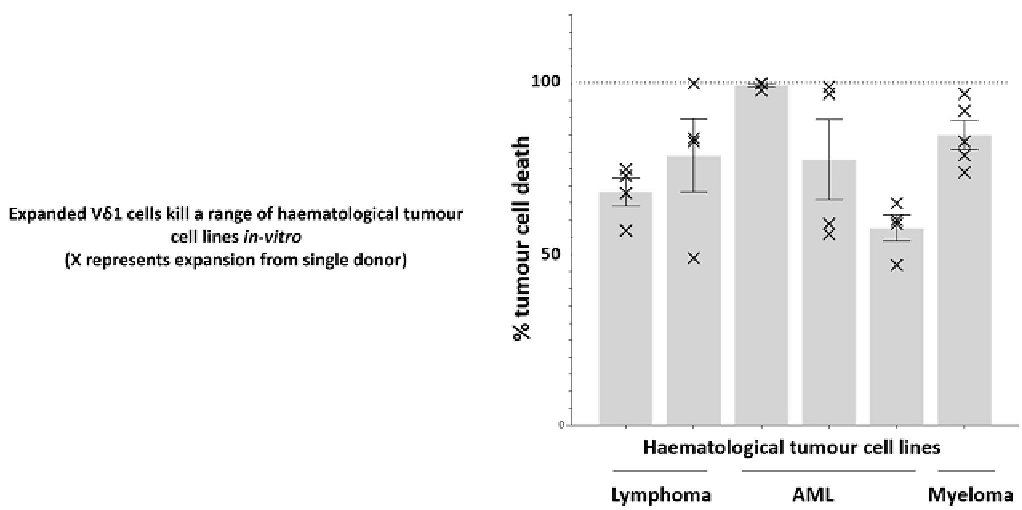


TCB plans to treat early-stage COVID-19 patients using allogeneic GD-T's in an attempt to slow down disease progression, boosting the immune-system and preventing individuals being admitted into intensive care.

TCB009: In addition to developing GD-T2 based cell therapies, we are also evaluating the GD-T1 subtype as a possible treatment (initially for GI-tract cancer). The GD-T1 subtype is present in high numbers throughout the gut, potentially having unique therapeutic potential within such tissues. Our preclinical studies have shown that we can reproducibly manufacture high-purity (typically 75-80%) GD-T1 cells (below).

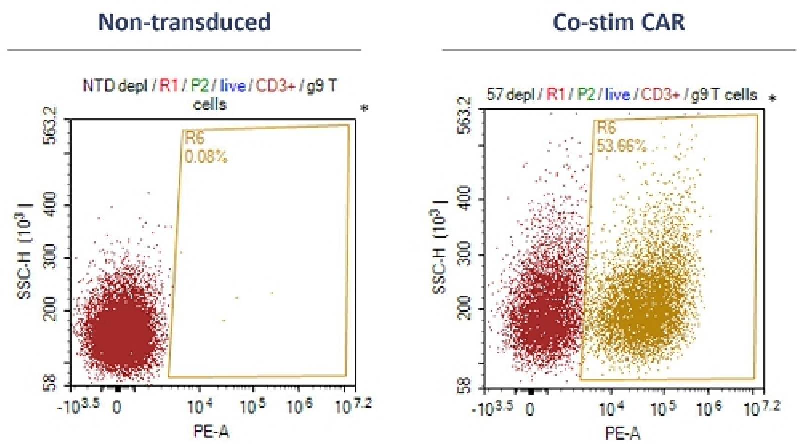


Taking these high-purity GD-T1 cells we were able to demonstrate potent cell killing in different human cancer lines (see below – cells derived from different patients with either lymphoma, acute myeloid leukemia or multiple myeloma, data taken from 7 day incubation at 2:1 effector target ratio).



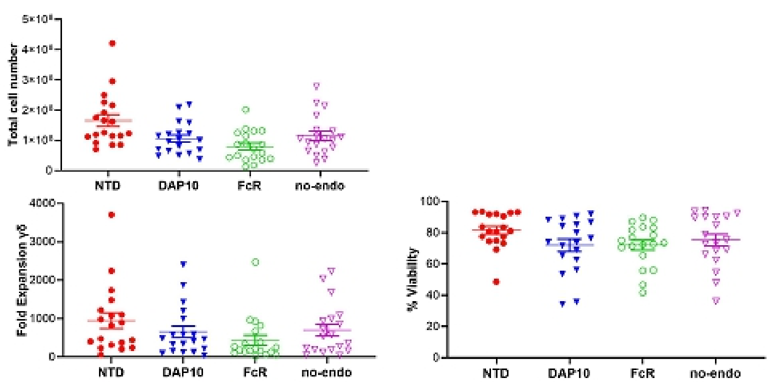
We are currently scaling-up manufacture of the GD-T1 subtype to GMP-compliance and anticipate UK regulatory submission for a phase 1b/2a clinical study during 2023.

TCB005/TCB006: These allogeneic co-stimulatory GD-T CAR pre-clinical drug candidates will target antigens expressed on a number of solid tumor types. We plan to progress initial clinical studies in 2023 targeting antigen-positive solid tumors. Our lead CAR candidates are B7-H3 and 5T4 which provisionally would be targeted against CNS cancers (such as glioblastoma) and ovarian cancer respectively. TCB has generated in-vitro preclinical data as part of our CAR-T program which demonstrated that GD-Ts are very high purity and can be CAR-transduced with high efficiency (see diagram below). Gamma delta cell purity and transduction efficiency have been measured using flow cytometry. CAR positive cells were measured by a detection reagent labelled with the fluorophore Phycoerythrin (PE). Flow cytometry analysis used the parameters of side scatter height (SSC-H) and PE area (PE-A) to define the cell populations. This is demonstrated in the figure below comparing non-transduced (NTD) and transduction with a co-stimulatory CAR construct (co-stim CAR).



CAR Expression	0%	54%
γδ T Cell Purity	99%	99%

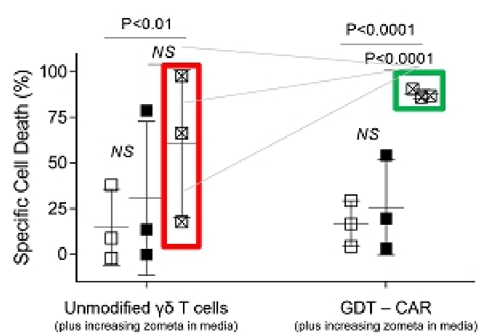
We have also demonstrated that following transduction with different CAR constructs, GD-T's can be effectively and reproducibly expanded in-vitro whilst exhibiting increased cytotoxicity in a zoledronate-dependent manner (see diagrams below – zoledronate-dependency reflects TCB's proprietary process for commercial expansion of GD-T's). The CAR constructs contained different endodomains including DNAX-activating protein 10 (DAP-10) and the high affinity IgE receptor (FcR) with no endodomain (no-endo) and non-transduced (NTD) as controls. These data outline the key preclinical parameters investigated in advance of progressing our CAR-T products into clinical trials. TCB has engaged with UK regulators to discuss the design of GD-T CAR phase1b/2a clinical studies (specifically relating to patient dosing and quality systems), we expect make a UK regulatory submission for a phase 1b/2a clinical study during 2023.



PBMCs from multiple donors were initiated into culture and γδ T cells expansion stimulated by zoledronic acid. On day 2 of expansion, cells were transduced with LVV to deliver the indicated CAR constructs. After routine feeding through the expansion process, cells were harvested on day 14 and the number, purity and viability of γδ T cells evaluated. Data present a compilation of experiments across multiple individual donors (N=9; n=1-5)

Peripheral blood mononuclear cells (PBMCs) were initiated into culture and GD-T cells expansion stimulated by zoledronic acid. On day 2 of expansion, cells were transduced with lentiviral vectors (LVV) to deliver the indicated CAR constructs. After routine feeding through the expansion process, cells were harvested on day 14 and the total cell number, fold expansion and viability of GD-T cells evaluated. Data present a compilation of experiments across multiple individual donors (N=9; n=1-5).

- GD-T cells taken from 3 donors
- High-dose zometa + CAR significantly increased target cell killing and reproducibility between donors



Manufacturing

Unlike many pre-clinical and early clinical stage biotech companies that rely on outsourcing key manufacturing and development functions with consequent complex and expensive supply chains and delays in delivery and execution, we have built a world-class fully integrated GMP grade specialist GD-T manufacturing center in Glasgow, Scotland. This facility undertakes all key functions associated with our GD-T cell development, testing, quality assurance, product manufacture, clinical trial recruitment, management design, support and interaction with regulators. This has resulted in rapid, focused development; highly efficient cost control;, controlled supply chain; speed of development and clinical delivery. We employ over 80 highly qualified people at our facility. The inspiration to create a fully integrated facility came from our founders' vision and considerable experience in cell therapy.

All advanced therapy medicinal products in the UK must be manufactured by law under a manufacturer's license granted by the MHRA. TCB received its Manufacturer's Authorisation for Investigational Medicinal Products MIA (IMP) from the MHRA in January 2015 (license number MIA (IMP) 42803). In April 2016, the MHRA granted the 'Specials' license to TCB as well as approving the facility for ongoing GMP compliance, which permits the manufacture and release of Advanced Therapy Medicinal Products (ATMPs) for use in clinical trials.

The backbone of our company is TCB's Quality Management System, which TCB based on the principles of the current GMP as described in the 'Rules and Guidance for Pharmaceutical Manufacturers and Distributors' and EudraLex Volume 4 as revised. This is achieved by the application of a Quality Management System based around the requirements of ICH Q10 and the EU GMP Guide, which address factors affecting the desired quality, namely the personnel, facilities, equipment, materials, processes, procedures training, vendor selection and approval, User Requirement Specification (URS) qualification and validation of assays and systems and the record keeping. All personnel joining TCB undergo rigorous training on everything from GMP through to formalized systems for measuring and evaluating risk.

*MHRA approved GMP compliant (last inspection December 2020 – observations only)

TCB's manufacturing facilities are equipped with two Class B clean rooms with space secured for future expansion for production of our products as it progresses from phase I to phase III clinical trials. The facility is also equipped with Development and Quality control testing laboratories together and ample stores for goods inwards and product release plus storage for intermediate and final product. Equipment is controlled and monitored through a Management Information System with 24/7 monitoring. All laboratory equipment undergoes a formal URS and once installed undergoes full qualification prior to it being put into routine use.

TCB's Quality Control team are responsible for the majority of release testing for our products. The Quality Control departments (analytical and microbiology) are responsible for product characterization using bespoke phenotyping and potency assays, safety testing assays and final release of the product to the clinic. In-house testing within TCB's Quality Control laboratories eliminates the necessity for third party involvement, resulting in reduced costs and gaining full control of scheduling. The Quality Control departments remit also extends to the microbiological monitoring of the facility to measure, assess and control the exceptionally high levels of sterility required within the aseptic manufacturing suites. Extensively equipped Quality Control microbial laboratories allow environmental monitoring of the manufacturing cleanrooms to GMP standards. The laboratories house incubators, biological safety cabinets, centrifuges, fridges, freezers, air and particle monitors.

Competition

The biotechnology and pharmaceutical industries are characterized by rapidly advancing technologies, intense competition and a strong emphasis on proprietary products. While we believe that our scientific knowledge, technology and development experience provide us with competitive advantages, we face potential competition from many different sources, including major pharmaceutical, specialty pharmaceutical and biotechnology companies, academic institutions, governmental agencies and public and private research institutions. Any GD-T cell therapeutic candidates that we successfully develop and commercialize will compete with existing products and new products that may become available in the future. We believe our advanced clinical products in allogeneic and unmodified GD-Ts provide us a first mover advantage in oncology and viral indications. Our continued efforts in advancing our modified platform technologies, along with our efforts in banked GD-Ts, are in direct competition with a number of public and private companies in the cell therapy space.

Company	Lead Indication	Pre-Clinical	Phase 1/2	Phase 2/3	Status / Upcoming Milestone
TC Biopharm*	AML		1b/2a	2b	Phase 2a complete Commencing Phase 2b into pivotal (AML)
Adicet Bio**	NHL		1b/2a		Phase 1/2a allogeneic GDT1 CD20 CAR
Allogene**	Haem & renal		1b/2a		Multiple allogeneic AB-CAR - blood cancer & renal Phase 1/2a ongoing
Autolus**	Haem & NHL		1b/2a		Autologous AB CAR
GD Therapeutics**	AML				IND filed for AML with GDT1 cells
In8Bio**	Haem & CNS		1b/2a		Multiple auto/allo-matched GDT's in phase 1

* Formulation GMP of product in-house
** Formulation with contract development and manufacture organization

TC BioPharm is part of a growing number of companies commercially active in the cellular immunotherapy space. Such companies developing call-based products include AdicetBio who recently presented phase 1 data from patients with non-Hodgkin lymphoma using allogeneic GDT-1's modified with a CAR against CD20 – published initial results documented safety and CR/PR in some patients. Other companies include Allogene who are using various CAR-modified allogeneic alpha-beta cells to treat non-Hodgkin lymphoma, multiple myeloma, acute myeloid leukemia and renal cell carcinoma; Autolus who are conducting two phase 1 clinical studies using autologous alpha-beta T cells using CAR's directed against either CD19/22 or CD20, listed indications include acute lymphoblastic leukemia, B cell non-Hodgkin lymphomas and chronic lymphoblastic leukemia; Gamma Delta Therapeutics who are developing a GDT-1 variant for hematological malignancies, IND filed; and In8Bio who have several ongoing phase 1 clinical programs including an autologous DRI resistant to alkylating agents for treating glioblastoma and an allogeneic product for treating patients with acute leukemia, In8Bio also have a bespoke GDT therapy for AML derived from hematopoietic stem cell transplantation. Apart from TCB who manufacture cell-based product in-house, we believe the above companies contract-out GMP formulation of clinical product to third-party organizations.

Commercial leaders in the CAR-T space are Novartis AG (Basel, Switzerland) and Gilead (Foster City, CA). Both of these companies market autologous CD19-targeted AB CAR-T products. Bristol Myers Squibb (New York, NY) is looking to gain approval for its CD19-directed CAR-T before the end of 2020. Via third party collaborations, all three of the commercial leaders in autologous CAR-T, have accessed gene editing technology with a view to creating allogeneic products. Novartis have partnered with Intellia (Cambridge, MA), Gilead have an agreement with Sangamo Therapeutics (Richmond, CA) and Bristol Myers Squibb have an agreement with Editas Medicine (Cambridge, MA).

We do not believe that any of these competitors will offer the same commercial proposition as our GD-T cell therapeutic candidates due to our:

- Ownership of foundation IP of the co-stimulatory CAR technology within GD-Ts.
- First-mover advantage in the field of modified GD-Ts as therapeutics.
- Ability to GMP manufacture large numbers of modified GD-T cells to a high purity in a cost-effective manner.
- Established banks of allogeneic products which may be used in future (following appropriate regulatory approvals) to treat both cancer and severe viral disease.
- The potential to create CAR-T therapies with significantly improved safety profile, suitable for widespread market adoption.
- Experience of, and in-house management of, our clinical trial programs.
- Pipeline development strategy and screening tools to develop a deep pipeline of platform products for a range of diseases.

Our Strengths

Our clinical trials have provided very strong evidence of drug-toleration and some preliminary evidence of clinical benefit.

Our clinical trial of TCB001 involved treatment of patients with autologous unmodified GD-Ts. In a phase 1b/2a dose-ranging safety study (maximum total dose $30x10^9$ cells) we saw no evidence of drug-related severe adverse events. A total of eight patients were treated with escalating doses of TCB001, and no treatment-related toxicities were reported during the full six-week therapeutic course. Data from OmnImmune® (TCB002) suggests an excellent tolerability, with no observed Host versus Graft Disease (HvGD) and some preliminary indication of clinical benefit. OmnImmune® (TCB002) has been granted Orphan Drug Designation by the FDA.

Our CAR-T platform is centered on development of safer and more widely applicable therapeutic candidates and associated process and manufacturing capabilities.

Our proprietary co-stimulatory CAR-T technology platform covers identification of target cancer antigens, successful design and engineering of target sequences, preclinical safety testing and optimized manufacturing processes suitable for producing therapeutic candidates for use in clinical trials and commercialization. We believe the platform will enable development of additional GD-T cell therapeutic candidates targeting cancers that have previously been difficult to treat. We believe the products will be demonstrably safer than the current generation of AB T cell CAR-T products because they will not attack healthy non-cancerous cells and augment the natural biological process rather than bypassing it.

We have identified a large and growing pool of cancer targets for which we can develop additional therapeutic candidates.

We have identified over 20 antigens that are preferentially expressed in cancer cells and have established ongoing research programs to develop several of these into our GD-T platform. Within the terms of our agreement, bluebird bio, we have first right of refusal on a further three oncology targets. Each antigen target presents an opportunity to target many cancer types and therefore presents multiple potential represents a development, collaboration and/or an out-licensing opportunity as each target could be used to target specific cancer types. Growing the pipeline of products built on our co-stimulatory CAR-T and reaching patients is our priority.

We have historically entered collaborative arrangements with partners (bluebird bio, Inc. (USA) and Nipro Corporation (Japan), which involve funded or partly funded preclinical collaboration. It is uncertain at this time whether TCB will receive any significant revenues from these collaborations.

We retain control of key business elements, such as product manufacture and clinical research.

Whilst many companies contract out product manufacture, quality systems and clinical trial management, we have elected to build these skills in-house. TC BioPharm has a GMP (Good Manufacturing Practice) cleanroom facility where our products are manufactured. We also retain all the quality support systems such as product testing and release of final product to the clinic. Keeping these systems in-house allows the Company to control all aspects of the manufacturing process whilst significantly reducing costs of goods (CoGs). Further saving on costs are accrued by in-house manufacture, as contract manufacturing organizations (CMOs) will typically charge several times more than the actual costs to maintain their profit margins. Rather than fully outsource our clinical trial management, data management and pharmacovigilance, we maintain an inhouse clinical team that partners with a contract clinical research organization (CRO) for data management and pharmacovigilance services. The inhouse clinical team conducts and manages our own clinical trials in-house. In addition to significant cost savings, this allows us to build a strong working relationship with physicians who are treating the cancer patients; we believe this is key to successful product development as the physicians participating in our clinical studies will also be our future customers. We believe that retaining control of key elements of our business such as GMP manufacture and clinical operations, has allowed TC BioPharm to move quickly and efficiently since incorporation.

We continue to file new patent applications from new in-house product development, and have a strong growing intellectual property portfolio to protect our products and proprietary platform.

We have a strong intellectual property portfolio covering the key aspects of our manufacturing processes and product platforms. Our in-house product development team consists of 14 scientists who are dedicated to developing new therapeutic candidates and optimizing current manufacturing processes. All of our patent families are currently in various stages of the patent approval process, and as leaders in the path towards the commercialization of GD-Ts we hold significant first-mover advantage captured by trade secrets and know-how.

Our policy of developing strategic alliances has and will provide additional support for product development and commercialization.

We believe that strategic alliances, both historic and potential future alliances, have and will provide extensive experience in scale-up and automation, culture media manufacture and post-authorization sales and marketing with regional expertise. Additionally, we expect to use knowledge gained from our collaborations to improve development pathways for our unpartnered CAR-T therapeutic candidate programs.

We have a highly knowledgeable and experienced management team with extensive industry experience and expertise in the United States and in Europe.

Our senior management has substantial experience in the biopharmaceutical industry, including our Chief Executive, Chairman and co-Founder, Dr Michael Leek, who has 30 years' experience of commercial regenerative medicine, serving on senior management teams and boards of public and private companies in the biotechnology sector, including several years as a founding director of Intercytex – a UK-based cell therapy company which listed on AIM in 2006. Our Chief Operating Officer and co-founder, Angela Scott, has 38 years of experience in cancer research and commercial biotechnology, working across several disciplines including preclinical and clinical development plus GMP manufacture; she was also one of the small team directly responsible for cloning Dolly the Sheep at PPL. Bryan Kobel, our recently appointed Chief Executive of TC BioPharm (North America) Inc and CEO designate (post listing) of TC BioPharm (Holdings) plc brings a US presence to our executive team and over 15 years' experience in Healthcare and Life Sciences capital markets. Martin Thorp, Chief Financial Officer has over 30 years' experience in implementing capital strategies globally from seed investment to IPO. He was global CEO of Arthur Andersen Corporate Finance based in New York. Dr Alan Clark, Chief Technical Officer has over 20 years' experience biotech and pharma including Organon NV and Alere Inc. Dr Sebastian Wanless, who heads our clinical and regulatory team, has over 30 years industry experience in clinical research and medical affairs. Sebastian was VP of Intercontinental Research at Bristol-Myers Squibb in the United States with international experience in Europe and Japan.

Ability to treat patients under the 'Specials' regulatory framework.

European regulations (Regulation 167 of the Human Medicines Regulations 2012) set out the exemption from the requirement for a medicinal product, placed on the market in the UK to hold a marketing authorization. This exemption flows from Article 5(1) of EU Directive 2001/83/EC, which states that a member of the EU may, in accordance with legislation in force and to fulfil special needs, excludes from the provisions of this Directive medicinal products supplied in response to a bona fide unsolicited order, formulated in accordance with the specifications of an authorized healthcare professional and for use by an individual patient under his or her direct personal responsibility. Such an unlicensed medicinal product may only be supplied in order to meet the special needs of an individual patient. An unlicensed medicinal product should not be supplied where an equivalent licensed medicinal product can meet the special needs of the patient. Responsibility for deciding whether an individual patient has "special needs" which a licensed product cannot meet should be a matter for the doctor, dentist, nurse independent prescriber, pharmacist independent prescriber or supplementary prescriber responsible for the patient's care.

In 2016 we were granted 'Specials' License by the UK Medicines and Healthcare Regulatory Agency (MHRA). We have embraced the opportunity for broadening patient population by treating individual patients with different tumor types through a 'Specials' License. Clinicians have expressed strong initial interest in treating patients with solid tumors; along with blood-borne tumors such as multiple myeloma, chronic myeloid leukemia (CML) and chronic lymphocytic leukemia (CLL) with OmnImmune®.

In terms of time and cost, the 'Specials' scheme is an attractive strategy. We believe that accumulating evidence by this route could lead to rapid and wider product uptake through 'off-label' use.

Intellectual Property

We have a strong portfolio of patents covering manufacture and commercialization of GD-T cell products and their modification*via* CAR-T (summarized below). Our technology platform and clinical programs have enabled us to raise over $50 million in grant, equity and collaboration funding since becoming operational in 2017. This financing has allowed us to enhance and expand our clinical and preclinical programs as well as build our team of world-class scientists.

The following table provides an overview of our core technology platforms, technology assets and competencies across the business. Additional details of our intellectual property portfolio are provided below.

ASSET SUMMARY	ATTRIBUTES
GD-T Vehicle	● Readily available and expanded to high numbers. ● Not MHC-restricted, therefore no graft vs host disease – an allogeneic platform. ● Pre-programmed tropism for infiltration of diseased tissue. ● Multiple modes of innate cytotoxicity and coordinating a wider immune response. ● Clinical tolerability of the allogeneic vehicle demonstrated at high dose level. ● Naturally arising in different subtypes offering a menu of vehicles with unique properties.
Allogeneic Cell Banks	● Donor GD-Ts selection based on highest therapeutic quality.

	●	Reproducible product with low cost-of-goods compared with autologous (patient-bespoke) therapies, can be frozen-shipped, thawed at clinic.
	●	Well understood clinical and regulatory pathway to commercialization.
Co-stimulatory CAR-T	●	Elimination of off-tumor toxicity.
	●	Reduction of cytokine release from killing healthy cells.
	●	Reliance on natural T cell activation and no tonic signaling
	●	Antigen expression on healthy tissue tolerated – greatly expanded range.
	●	Ability to use multiple co-stimulatory receptors to add functionality.
Integrated Business Model	●	Full control of critical stages of development projects, which increases speed and reliability of development and production, optimizes operations to our specialized products and materially reduces our cost base
	●	No pass-through or transaction costs form external service providers, which increases efficiency and speed of development and manufacturing and materially reduces our cost base
	●	In-house clinical management ensures best chance of clinical success and avoids use of very expensive clinical management in early-stage trials, materially reducing our cost base.

The strength of our patents involves complex legal and scientific questions and can be uncertain. We currently own over 60 pending patent applications worldwide.

We actively seek to protect the intellectual property and proprietary technology that we believe is important to our business, including seeking, maintaining, enforcing and defending patent rights for our therapeutics and processes, whether developed internally or licensed from third parties. Our success will depend on our ability to obtain and maintain patent and other protection including data/market exclusivity for our therapeutic products and platform technology, preserve the confidentiality of our know-how and operate without infringing the valid and enforceable patents and proprietary rights of third parties.

Our policy is to seek to protect our proprietary position generally by filing an initial priority filing at the U.K. Intellectual Property Office, or UKIPO. This is followed by the filing of a patent application under the Patent Co-operation Treaty claiming priority from the initial application(s) and then progressing to national applications in, for example, the United States, Europe, Japan, Australia, New Zealand, China and Canada. In each case, we determine the strategy and territories required after discussion with our patent professionals to ensure that we obtain relevant coverage in territories that are commercially important to us and our GD-T therapeutic candidates. We will additionally rely on data exclusivity, market exclusivity and patent term extensions when available, including as relevant exclusivity through orphan or pediatric drug designations. We also rely on trade secrets and know-how relating to our underlying platform technology and therapeutic products. Prior to making any decision on filing any patent application, we consider, with our patent professionals, whether patent protection is the most sensible strategy for protecting the invention concerned or whether the invention should be maintained as confidential.

As of December 1, 2021, we owned 2 granted patents and 48 patent applications in 6 families, and have an exclusive license to an additional 1 family of 1 granted patent application and 13 patent applications. Consistent with the filing strategy outlined above, all of our applications are either UK applications, PCT applications or national phase applications derived from a corresponding PCT application. All sets of national phase applications include a US application. These patent applications include claims directed to our therapeutic products and platform technology or other manufacturing and process technology to further enable our therapeutic products and manufacturing methods.

WO 2016/166544 (Modified Gamma Delta T Cells and uses thereof). International filing date April 14, 2016, earliest priority date April 15, 2015.

We own a patent application covering a method of treatment for cancer using GD-T cells that express chimeric antigen receptors (CARs). The patent application claims are directed to GD-T cells expressing a co-stimulatory CAR, the advantages of the co-stimulatory CAR by inhibiting on-target, off-tumor activation due to its design, to the method and process of modifying a GD-T cell to express the co-stimulatory CAR, and to medical uses of the modified GD-T cell. Application has issued as a granted patent in the US (US 10881688 B2, expires October 7, 2036). Application has been allowed in Israel (IL 255011), the statutory opposition period has now elapsed with no opposition proceedings being raised, and we expect to receive notification of grant in due course. Applications have been allowed in Japan (JP 2017-554035) and grant in South Africa we expect to receive notification of grant shortly. National applications remain pending in: Australia, Brazil, Canada, China, Hong Kong, Japan, South Korea, New Zealand, Singapore, the US. Regional applications are pending before the European and Eurasian Patent Offices.

WO 2016/174461 (T cell which expresses a Gamma Delta T cell receptor and a Chimeric Antigen Receptor). International filing date April 29, 2016, earliest priority date April 30, 2015. Expiry date will be April 28, 2036 in most jurisdictions. Further patent term adjustments may apply in the US.

We are the exclusive licensee of a patent application owned by UCL Business plc covering a method of treatment using a T cell which expresses a Gamma Delta T cell receptor and a chimeric antigen receptor. The patent application claims are directed to GD-T cells expressing a co-stimulatory CAR, the advantages of the co-stimulatory CAR by inhibiting on-target, off-tumor activation due to its design, to the method and process of modifying a GD-T cell to express the co-stimulatory CAR, and to medical uses of the modified GD-T cell. National applications have been granted in Australia (AU 2016255611, expires April 28, 2036), allowed in Japan, and allowed in Israel (IL 255186) pending the statutory opposition period. Additional national applications are pending in:, Brazil, Canada, China, Hong Kong, South Korea, New Zealand, Singapore, South Africa, and the US. Regional applications are pending before the European and Eurasian Patent Offices.

WO 2016/005752 (Gamma Delta T cells and uses thereof). International filing date July 8, 2015, earliest priority date July 9, 2014. Expiry date for the patent granted in Israel will be July 7, 2035.

We own a patent application covering the method of preparing and using GD-T cells in the allogeneic treatment of subjects suffering from viral infection, fungal infection, protozoal infection or cancer. The patent application claims are directed to the process of providing GD-T cells from a first subject to a second subject (allogeneic transfer). Patent has been granted in Israel, national applications are pending in the US and Japan, and a regional application is pending before the European Patent Office

WO 2018/138522 (Immune cells with modified metabolism and their use thereof). International filing date January 26, 2018, earliest priority date January 26, 2017.

We own a patent application directed to gamma-delta T cells which overexpress the SLC1A5 amino acid transporter thereby improving tryptophan uptake in those cells and providing them with resistance to proliferative arrest in low tryptophan environments such as the tumour microenvironment. The patent also covers methods of engineering SLC1A5 overexpressing T cells. National applications are pending in: Australia, Brazil, Canada, China, Hong Kong, Israel, Japan, South Korea, New Zealand, Singapore, South Africa, and the US. Regional applications are pending before the European and Eurasian Patent Offices.

WO 2019/064030 (Modified CAR-T). International filing date October 1, 2018, earliest priority date September 29, 2017.

We own a patent application covering chimeric antigen receptors comprising an intracellular signaling domain derived from GD-T cell surface receptors. When expressed in GD or natural killer (NK) cells, the resultant CAR-T cells exhibit improved cytotoxicity. National applications are pending in: Australia, Brazil, Canada, China, Hong Kong, Israel, Japan, South Korea, New Zealand, Singapore, South Africa, and the US. Regional applications are pending before the European and Eurasian Patent Offices.

GB 2114059.5 CAR-Towed: Gamma Delta T cells modified with CARs without an endodomain. Filing date September 30, 2021.

We own a patent application covering chimeric antigen receptor constructs which lack a functional intracellular signaling domain and which are capable of binding to a target antigen which identifies a stressed or transformed cell. The constructs may be expressed in GD-T cells or natural killer (NK) cells. We anticipate that GB 2015543.8 will include composition of matter, methods of manufacture and method of use claims. A priority application has been filed in the UK.

GB 2104070.4 (Antigen binders and uses thereof). Filing date March 23, 2021

We own a patent application covering novel antibodies and antibody fragments capable of binding the B7H4 protein, to chimeric antigen receptors (CARs) incorporating a said antibody fragment, to T cells expressing the said CARs and to medical uses of those T cells. We anticipate that GB 2104070.4 will include composition of matter, methods of manufacture and method of use claims. A priority application has been filed in the UK.

GB 2569692 (T cell antigen receptor chimera). Filing date October 30, 2018.

In addition to the above 6 patent families and license for a patent family, we own a published patent application covering antigen receptor chimeras incorporating the antigen-binding specificity of an alpha-beta T cell receptor with a costimulatory only intracellular signaling domain, for example as discussed in the above pending patent applications derived from WO2016/166544. This application was allowed to publish in the UK, thereby establishing it as prior art against potential competitors, but was not progressed to examination.

Platform technology patent applications – We have several other patent applications in the process of being drafted, improving T cell efficacy by modulating PD1 expression, additional methods of expanding GD-T1 gamma-delta T cell populations and improvements to our GD CAR-T platform

Government Regulation and Product Approval

As a biopharmaceutical company, we are subject to extensive regulation. Our product candidates, if approved, will be regulated as biological medicines. With this classification, commercial production of our products will need to occur in registered and licensed facilities in compliance with current Good Manufacturing Practices, or cGMPs, for biologics.

Human immunotherapy products are a new category of therapeutics. The FDA categorizes human cell- or tissue-based products as either minimally manipulated or more than minimally manipulated and has determined that more than minimally manipulated products require clinical trials to demonstrate product safety and efficacy and the submission of a Biologics License Application, or BLA, for marketing authorization.

Government authorities in the United States (at the federal, state and local level) and in other countries and jurisdictions, including the European Union, extensively regulate, among other things, the research, development, preclinical and clinical testing, manufacturing, quality control, labeling, packaging, storage, record-keeping, promotion, advertising, sale, distribution, post-approval monitoring and reporting, marketing and export and import of biopharmaceutical products such as those we are developing. Our product candidates must be approved by the FDA before they may be legally marketed in the United States and by the appropriate foreign regulatory agency before they may be legally marketed in foreign countries. Generally, our activities in other countries will be subject to regulation that is similar in nature and scope as that imposed in the United States, although there can be important differences. Additionally, some significant aspects of regulation in Europe are addressed in a centralized way, but country-specific regulation remains essential in many respects. The process for obtaining regulatory marketing approvals and the subsequent compliance with applicable federal, state, local and foreign statutes and regulations require the expenditure of substantial time and financial resources.

United States Product Development Process

In the United States, the FDA regulates biological products under the Public Health Service Act, or PHSA, and the Federal Food, Drug and Cosmetic Act, or FDCA, and implementing regulations. Products are also subject to other federal, state and local statutes and regulations. The process of obtaining regulatory approvals and the subsequent compliance with appropriate federal, state, local and foreign statutes and regulations require the expenditure of substantial time and financial resources. Failure to comply with the applicable U.S. requirements at any time during the product development process, approval process or after approval, may subject an applicant to administrative or judicial sanctions. FDA sanctions could include, among other actions, refusal to approve pending applications, withdrawal of an approval, a clinical hold, warning letters and similar public notice of alleged non-compliance with laws, product recalls or withdrawals from the market, product seizures, total or partial suspension of production or distribution, fines, refusals of government contracts, restitution, disgorgement of profits, or civil or criminal penalties. Any agency or judicial enforcement action could have a material adverse effect on us. The process required by the FDA before a biological product may be approved for marketing in the United States generally involves the following:

- completion of preclinical laboratory tests and animal studies according to Good Laboratory Practices, or GLPs, and applicable requirements for the humane use of laboratory animals or other applicable regulations;

- submission to the FDA of an Investigational New Drug Application, or IND, which must become effective before human clinical trials may begin;

- performance of adequate and well-controlled human clinical trials according to the FDA's regulations commonly referred to as Good Clinical Practices, or GCPs, and any additional requirements for the protection of human research subjects and their health information, to establish the safety and efficacy of the proposed biological product for its intended use;

- preparation and submission to the FDA of a Biologics License Application, or BLA, for marketing approval that includes substantive evidence of safety, purity, and potency from results of nonclinical testing and clinical trials;

- satisfactory completion of one or more FDA inspections of the manufacturing facility or facilities where the biological product is produced to assess compliance with cGMP to assure that the facilities, methods and controls used in product manufacture are adequate to preserve the biological product's identity, strength, quality and purity and, if applicable, the FDA's current Good Tissue Practices, or GTPs, for the use of human cellular and tissue products;

- potential FDA audit of the nonclinical study and clinical trial sites that generated the data in support of the BLA;

- payment of user fees for FDA review of the BLA; and

- FDA acceptance, review and approval, or licensure, of the BLA, which might include review by an advisory committee, a panel typically consisting of independent clinicians and other experts who provide recommendations as to whether the application should be approved and under what conditions.

Before testing any biological product candidate, including our product candidates, in humans, the product candidate must undergo rigorous the preclinical testing.

Preclinical tests, also referred to as nonclinical studies, include laboratory evaluations as well as in vitro and animal studies to assess the potential safety and efficacy of the product candidate. After sufficient preclinical testing has been conducted, the conduct of the preclinical tests must comply with federal regulations and requirements including GLPs. The clinical trial sponsor must submit an IND to the FDA before clinical testing can begin in the United States. An IND must contain the results of the preclinical tests, manufacturing information, analytical data, any available clinical data or literature, a proposed clinical protocol, an investigator's brochure, a sample informed consent form, and other materials. Clinical trial protocols detail, among other things, the objectives of the clinical trial, dosing procedures, subject selection and exclusion criteria, and the parameters to be used to monitor subject safety, including stopping rules that assure a clinical trial will be stopped if certain adverse events should occur. Each protocol and any amendments to the protocol must be submitted to the FDA as part of the IND. Some preclinical testing, such as toxicity studies, may continue even after the IND is submitted.

The IND automatically becomes effective 30 days after receipt by the FDA, unless the FDA raises concerns or questions regarding the proposed clinical trials or places the trial on a clinical hold within that 30-day time period. In such a case, the IND sponsor and the FDA must resolve any outstanding concerns before the clinical trial can begin. The FDA may also impose clinical holds on a biological product candidate at any time before or during clinical trials due to safety concerns or non-compliance. If the FDA imposes a clinical hold, trials may not recommence without FDA authorization and then only under terms authorized by the FDA. Accordingly, we cannot be sure that submission of an IND will result in the FDA allowing clinical trials to begin, or that, once begun, issues will not arise that suspend or terminate such trials.

Further, each clinical trial must be reviewed and approved by an independent institutional review board, or IRB, at or servicing each institution at which the clinical trial will be conducted. An IRB is charged with protecting the welfare and rights of trial participants and considers such items as whether the risks to individuals participating in the clinical trials are minimized and are reasonable in relation to anticipated benefits. The IRB also approves the form and content of the informed consent that must be signed by each clinical trial subject or his or her legal representative and must monitor the clinical trial until completed. Clinical trials involving recombinant or synthetic nucleic acid molecules also must be reviewed by an institutional biosafety committee, or IBC, a local institutional committee that reviews and oversees basic and clinical research conducted at that institution. The IBC assesses the safety of the research and identifies any potential risk to public health or the environment.

Clinical trials involve the administration of the biological product candidate to healthy volunteers or patients under the supervision of qualified investigators, generally physicians not employed by or under the trial sponsor's control. Clinical trials must be conducted and monitored in accordance with the FDA's regulations comprising the GCP requirements, including the requirement that all research patients provide informed consent.

Human clinical trials are typically conducted in three sequential phases that may overlap or be combined:

- *Phase 1*. The biological product is initially introduced into healthy human subjects and tested for safety. In the case of some products for severe or life-threatening diseases, especially when the product may be too inherently toxic to ethically administer to healthy volunteers, the initial human testing is often conducted in patients with the target disease or condition.

- *Phase 2*. The biological product is evaluated in a limited patient population to identify possible adverse effects and safety risks, to preliminarily evaluate the efficacy of the product for specific targeted diseases and to determine dosage tolerance, optimal dosage and dosing schedule.

- *Phase 3*. Clinical trials are undertaken to further evaluate dosage, clinical efficacy, potency, and safety in an expanded patient population, generally at geographically dispersed clinical trial sites. These clinical trials are intended to generate enough data to statistically evaluate the efficacy and safety of the product for approval, to establish the overall risk to benefit profile of the product and to provide an adequate basis for product labeling.

Phase 1, Phase 2 and Phase 3 clinical trials may not be completed successfully within any specified period, if at all.

Post-approval clinical trials, sometimes referred to as Phase 4 clinical trials, may be conducted after initial marketing approval. These clinical trials are used to gain additional experience from the treatment of patients in the intended therapeutic indication, particularly for long-term safety follow-up.

During all phases of clinical development, regulatory agencies require extensive monitoring and auditing of all clinical activities, clinical data, and clinical trial investigators. Annual progress reports detailing the results of the clinical trials must be submitted to the FDA. Written IND safety reports must be promptly submitted to the FDA, and the investigators for serious and unexpected adverse events, any findings from other studies, tests in laboratory animals or *in vitro* testing that suggest a significant risk for human patients, or any clinically important increase in the rate of a serious suspected adverse reaction over that listed in the protocol or investigator brochure. The sponsor must submit an IND safety report within 15 calendar days after the sponsor determines that the information qualifies for reporting. The sponsor also must notify the FDA of any unexpected fatal or life-threatening suspected adverse reaction within seven calendar days after the sponsor's initial receipt of the information. The FDA or the sponsor or its data safety monitoring board, an independent group of experts that evaluates study data for safety and makes recommendations concerning continuation, modification, or termination of clinical trials, may suspend or terminate a clinical trial at any time on various grounds, including a finding that the research patients are being exposed to an unacceptable health risk, including risks inferred from other unrelated immunotherapy trials. Similarly, an IRB can suspend or terminate approval of a clinical trial at its institution if the clinical trial is not being conducted in accordance with the IRB's requirements or if the biological product has been associated with unexpected serious harm to patients.

Because this is a relatively new and expanding area of novel therapeutic interventions, there can be no assurance as to the length of the trial period, the number of patients the FDA will require to be enrolled in the trials in order to establish the safety, efficacy, purity and potency of immunotherapy products, or that the data generated in these trials will be acceptable to the FDA to support marketing approval.

Concurrently with clinical trials, companies usually complete additional nonclinical studies and must also develop additional information about the physical characteristics of the biological product as well as finalize a process for manufacturing the product in commercial quantities in accordance with cGMP requirements. To help reduce the risk of the introduction of adventitious agents with use of biological products, the PHSA emphasizes the importance of manufacturing control for products whose attributes cannot be precisely defined. The manufacturing process must be capable of consistently producing quality batches of the product candidate and, among other things, the sponsor must develop methods for testing the identity, strength, quality, potency and purity of the final biological product. Additionally, appropriate packaging must be selected and tested and stability studies must be conducted to demonstrate that the biological product candidate does not undergo unacceptable deterioration over its shelf life.

United States Review and Approval Processes

After the completion of clinical trials of a biological product, FDA approval of a BLA must be obtained before commercial marketing of the biological product. The BLA must include results of product development, laboratory and animal studies, human trials, information on the manufacture and composition of the product, proposed labeling and other relevant information. The testing and approval processes require substantial time and effort and there can be no assurance that the FDA will accept the BLA for filing and, even if filed, that any approval will be granted on a timely basis, if at all as the FDA has significant discretion to approve or reject the BLA and to require additional preclinical or clinical studies.

Under the Prescription Drug User Fee Act, or PDUFA, as amended, each BLA must be accompanied by a significant user fee. The FDA adjusts the PDUFA user fees on an annual basis. PDUFA also imposes an annual program fee for approved biological products. Fee waivers or reductions are available in certain circumstances, including a waiver of the application fee for the first application filed by a small business. Additionally, no user fees are assessed on BLAs for products designated as orphan drugs, unless the product also includes a non-orphan indication.

Within 60 days following submission of the application, the FDA reviews a BLA submitted to determine if it is substantially complete before the agency accepts it for filing. The FDA may refuse to file any BLA that it deems incomplete or not properly reviewable at the time of submission and may request additional information. In this event, the BLA must be resubmitted with the additional information. The resubmitted application also is subject to review before the FDA accepts it for filing. Once the submission is accepted for filing, the FDA begins an in-depth substantive review of the BLA. The FDA reviews the BLA to determine, among other things, whether the proposed product is safe, potent, and/or effective for its intended use, and has an acceptable purity profile, and whether the product is being manufactured in accordance with cGMP to assure and preserve the product's identity, safety, strength, quality, potency and purity. The FDA may refer applications for novel biological products or biological products that present difficult questions of safety or efficacy to an advisory committee, typically a panel that includes clinicians and other experts, for review, evaluation and a recommendation as to whether the application should be approved and under what conditions. The FDA is not bound by the recommendations of an advisory committee, but it considers such recommendations carefully when making decisions. During the biological product approval process, the FDA also will determine whether a Risk Evaluation and Mitigation Strategy, or REMS, is necessary to ensure that the benefits of the product outweigh its risks and to assure the safe use of the biological product, which could include medication guides, physician communication plans, or elements to assure safe use, such as restricted distribution methods, patient registries and other risk minimization tools. FDA determines the requirement for a REMS, as well as the specific REMS provisions, on a case-by-case basis. If the FDA concludes a REMS is needed, the sponsor of the BLA must submit a proposed REMS. The FDA will not approve a BLA without a REMS, if required.

Before approving a BLA, the FDA will inspect the facilities at which the product is manufactured. The FDA will not approve the product unless it determines that the manufacturing processes and facilities are in compliance with cGMP requirements and adequate to assure consistent production of the product within required specifications. For immunotherapy products, the FDA also will not approve the product if the manufacturer is not in compliance with the GTPs, to the extent applicable. These are FDA regulations and guidance documents that govern the methods used in, and the facilities and controls used for, the manufacture of human cells, tissues, and cellular and tissue based products, or HCT/Ps, which are human cells or tissue intended for implantation, transplant, infusion, or transfer into a human recipient. The primary intent of the GTP requirements is to ensure that cell and tissue based products are manufactured in a manner designed to prevent the introduction, transmission and spread of communicable disease. FDA GTP regulations also require tissue establishments to register and list their HCT/Ps with the FDA and, when applicable, to evaluate donors through screening and testing. Additionally, before approving a BLA, the FDA will typically inspect one or more clinical sites to assure that the clinical trials were conducted in compliance with IND trial requirements and GCP requirements.

To assure cGMP, GTP and GCP compliance, an applicant must incur significant expenditure of time, money and effort in the areas of training, recordkeeping, production, and quality control.

Notwithstanding the submission of relevant data and information, the FDA may ultimately decide that the BLA does not satisfy its regulatory criteria for approval and deny approval. If the agency decides not to approve the BLA in its then current form, the FDA will issue a Complete Response Letter, which generally outlines the specific deficiencies in the BLA identified by the FDA and may require additional clinical or other data or impose other conditions that must be met in order to secure final approval of the application. The deficiencies identified may be minor, for example, requiring labeling changes, or major, for example, requiring additional clinical trials. Even with the submission of additional information, the FDA may ultimately decide that the application does not satisfy the regulatory criteria for approval. If a Complete Response Letter is issued, the applicant may either resubmit the BLA, addressing all of the deficiencies identified in the letter, or withdraw the application.

If a product receives regulatory approval, the approval is limited to the conditions of use (*e.g.*, patient population, indication) described in the application.

Further, the FDA may require that certain contraindications, warnings or precautions be included in the product labeling, or otherwise limit the scope of any approval. In addition, the FDA may require post marketing clinical trials, sometimes referred to as Phase 4 clinical trials, designed to further assess a biological product's safety and effectiveness, and testing and surveillance programs to monitor the safety of approved products that have been commercialized. After approval, many types of changes to the approved product, such as adding new indications, manufacturing changes and additional labeling claims, are subject to further testing requirements and FDA review and approval.

In addition, under the Pediatric Research Equity Act, or PREA, a BLA or supplement to a BLA must contain data to assess the safety and effectiveness of the product for the claimed indications in all relevant pediatric subpopulations and to support dosing and administration for each pediatric subpopulation for which the product is safe and effective. The FDA may grant deferrals for submission of data or full or partial waivers.

United States Post-Approval Requirements

Any products for which we receive FDA approvals are subject to continuing regulation by the FDA, including, among other things, record-keeping requirements, reporting of adverse experiences with the product, providing the FDA with updated safety and efficacy information, product sampling and distribution requirements, and complying with FDA promotion and advertising requirements, which include, among others, standards for direct-to-consumer advertising, restrictions on promoting products for uses or in patient populations that are not described in the product's approved uses (known as "off-label use"), limitations on industry-sponsored scientific and educational activities, and requirements that important safety information and material facts related to the product be disclosed. Although physicians may prescribe legally available products for off-label uses, if the physicians deem to be appropriate in their professional medical judgment, manufacturers may not market or promote such off-label uses. The FDA and other agencies actively enforce the laws and regulations prohibiting the promotion of off-label uses, and a company that is found to have improperly promoted off-label uses may be subject to significant civil, criminal and administrative liability.

In addition, quality control and manufacturing procedures must continue to conform to applicable manufacturing requirements after approval to ensure the long-term stability of the product. We currently are making clinical trial product in our own facilities in Scotland, United Kingdom. In the future, however, we expect to rely, on third parties for the production of commercial quantities of our products in accordance with cGMP regulations. cGMP regulations require among other things, quality control and quality assurance as well as the corresponding maintenance of records and documentation and the obligation to investigate and correct any deviations from cGMP. Manufacturers and other entities involved in the manufacture and distribution of approved products are required to register their establishments with the FDA and certain state agencies, and are subject to periodic unannounced inspections by the FDA and certain state agencies for compliance with cGMP and other laws. Accordingly, manufacturers must continue to expend time, money, and effort in the area of production and quality control to maintain cGMP compliance. Discovery of problems with a product after approval may result in restrictions on a product, manufacturer, or holder of an approved BLA, including, among other things, recall or withdrawal of the product from the market.

The FDA also may require post-marketing testing, known as Phase 4 testing, and surveillance to monitor the effects of an approved product. Discovery of previously unknown problems with a product, including adverse events of unanticipated severity or frequency, with manufacturing processes, or the failure to comply with applicable FDA requirements can have negative consequences, including adverse publicity, judicial or administrative enforcement, complete withdrawal from the market, product recalls, warning letters from the FDA, mandated corrective advertising or communications with doctors, product seizure or detention, injunctions, and civil or criminal penalties, among others. Newly discovered or developed safety or effectiveness data may require changes to a product's approved labeling, including the addition of new warnings and contraindications, and also may require the implementation of other risk management measures. Also, new government requirements, including those resulting from new legislation, may be established, or the FDA's policies may change, which could delay or prevent regulatory approval of our products under development.

United States Marketing Exclusivity

The Biologics Price Competition and Innovation Act amended the PHSA to authorize the FDA to approve similar versions of innovative biologics, commonly known as biosimilars. Biosimilars are approved pursuant to an abbreviated pathway whereby applicants need not submit the full slate of preclinical and clinical data, and approval is based in part on the FDA's findings of safety, purity, and potency for the original biologic (i.e., the reference product). Original BLAs are eligible to receive 12 years of exclusivity from the time of first licensure of the product, which prevents the FDA from approving any biosimilars to the reference product through the abbreviated pathway, but does not prevent approval of BLAs that are accompanied by a full data package and that do not rely on the reference product. A biosimilar may be approved if the product is highly similar to the reference product notwithstanding minor differences in clinically inactive components and there are no clinically meaningful differences with the reference product in terms of the safety, purity, and potency.

Pediatric exclusivity is another type of regulatory market exclusivity in the United States. Pediatric exclusivity, if granted, adds six months to existing exclusivity periods and patent terms. This six-month exclusivity, which runs from the end of other exclusivity protection or patent term, may be granted based on the voluntary completion of a pediatric trial in accordance with an FDA-issued "Written Request" for such a trial.

United States Coverage, Pricing and Reimbursement

Significant uncertainty exists as to the coverage and reimbursement status of any product candidates for which we obtain*regulatory* approval. In the United States and markets in other countries, sales of any products for which we receive regulatory approval for commercial sale will depend, in significant part, on the extent to which third-party payors provide coverage, and establish adequate reimbursement levels for such products. In the United States, third-party payers include federal and state healthcare programs, private managed care organizations, health insurers and other organizations. The process for determining whether a third-party payer will provide coverage for a product may be separate from the process of establishing the reimbursement rate that such a payor will pay for the product. Third-party payors may limit coverage to specific products on an approved list, also known as a formulary, which might not include all of the FDA-approved products for a particular indication. Third-party payors are increasingly challenging the price, examining the medical necessity of and reviewing the cost-effectiveness of medical products, therapies and services, in addition to questioning their safety and efficacy.

Reimbursement may impact the demand for, and/or the price of, any product candidate which obtains marketing approval. Even if coverage and reimbursement is obtained for a given product candidate by a third-party payor, the resulting reimbursement payment rates may not be adequate or may require co-payments that patients find unacceptably high. Patients who are prescribed medications for the treatment of their conditions, and their prescribing physicians, generally rely on third-party payors to reimburse all or part of the costs associated with those medications. Patients are unlikely to use a product, and physicians may be less likely to prescribe a product, unless coverage is provided and reimbursement is adequate to cover all or a significant portion of the cost of the product. Therefore, coverage and adequate reimbursement is critical to new drug product acceptance.

Different pricing and reimbursement schemes exist in other countries. In the EU, governments influence the price of pharmaceutical products through their pricing and reimbursement rules and control of national healthcare systems that fund a large part of the cost of those products to consumers. Some jurisdictions operate positive and negative list systems under which products may only be marketed once a reimbursement price has been agreed. To obtain reimbursement or pricing approval, some of these countries may require the completion of additional clinical trials that compare the cost-effectiveness of a particular product candidate to currently available therapies. Other member states allow companies to fix their own prices for medicines, but monitor and control company profits. In addition, in some countries, cross-border imports from low-priced markets exert a commercial pressure on pricing within a country.

The downward pressure on healthcare costs in general, particularly prescription drugs and biologics, has become very intense. Governments have shown significant interest in implementing cost-containment programs, including price controls, restrictions on reimbursement and requirements for substitution of generic products. As a result, increasingly high barriers are being erected to the entry of new products. The marketability of any product candidates for which we receive regulatory approval for commercial sale may suffer if the government and third-party payors fail to provide coverage and adequate reimbursement. In addition, emphasis on managed care in the United States has increased and we expect will continue to increase the pressure on healthcare pricing. Coverage policies and third-party reimbursement rates may change at any time. Even if favorable coverage and reimbursement status is attained for one or more products for which we receive regulatory approval, less favorable coverage policies and reimbursement rates may be implemented in the future.

United States Healthcare Laws Governing Interactions with Healthcare Providers

In addition to FDA restrictions on marketing of pharmaceutical products, several other types of state and federal laws restrict our business activities, including certain marketing practices. These laws include, without limitation, anti-kickback laws, false claims laws, data privacy and security laws, as well as transparency laws regarding payments or other items of value provided to healthcare providers.

The U.S. federal Anti-Kickback Statute prohibits any person or entity from, among other things, knowingly and willfully offering, paying, soliciting or receiving remuneration, directly or indirectly, in cash or in kind, to induce or reward, or in return for, purchasing, leasing, ordering or arranging for the purchase, lease or order of any healthcare item, good, facility or service reimbursable, in whole or in part, under Medicare, Medicaid or other federal healthcare programs. The term "remuneration" has been broadly interpreted to include anything of value. This statute has been interpreted to apply to arrangements between pharmaceutical manufacturers on the one hand and prescribers, purchasers and formulary managers on the other hand. Although there are a number of statutory exceptions and regulatory safe harbors protecting certain common activities from prosecution or other regulatory sanctions, the exceptions and safe harbors are drawn narrowly, and practices that involve remuneration that are alleged to be intended to induce prescribing, purchases or recommendations may be subject to scrutiny if they do not qualify for an exception or safe harbor. Failure to meet all of the requirements of a particular applicable statutory exception or regulatory safe harbor does not make the conduct per se illegal under the U.S. federal Anti-Kickback Statute. Instead, the legality of the arrangement will be evaluated on a case-by-case basis based on a cumulative review of all its facts and circumstances. Several courts have interpreted the statute's intent requirement to mean that if any one purpose of an arrangement involving remuneration is to induce referrals of federal healthcare covered business, the U.S. federal Anti-Kickback Statute has been violated. Additionally, the intent standard under the U.S. federal Anti-Kickback Statute was amended by the Patient Protection and Affordable Care Act of 2010, as amended by the Health Care and Education Reconciliation Act of 2010, collectively the Affordable Care Act, or ACA, to a stricter standard such that a person or entity no longer needs to have actual knowledge of the statute or specific intent to violate it in order to have committed a violation. In addition, the ACA codified case law that a claim including items or services resulting from a violation of the U.S. federal Anti-Kickback Statute constitutes a false or fraudulent claim for purposes of the U.S. federal False Claims Act.

Federal civil and criminal false claims laws and civil monetary penalties laws, including the U.S. federal False Claims Act, which can be enforced through civil whistleblower or qui tam actions, prohibit any person or entity from, among other things, knowingly presenting, or causing to be presented, a false claim for payment to the federal government, or knowingly making, or causing to be made, a false statement to have a false claim paid. Pharmaceutical and other healthcare companies have been prosecuted under these laws for, among other things, allegedly inflating drug prices they report to pricing services, which in turn were used by the government to set Medicare and Medicaid reimbursement rates, and for allegedly providing free product to customers with the expectation that the customers would bill federal programs for the product. In addition, certain marketing practices, including off-label promotion, may also violate false claims laws. Further, pharmaceutical manufacturers can be held liable under the U.S. federal False Claims Act even when they do not submit claims directly to government payors if they are deemed to "cause" the submission of false or fraudulent claims.

The U.S. federal Health Insurance Portability and Accountability Act of 1996, or HIPAA, created new federal criminal statutes that prohibit among other actions, knowingly and willfully executing, or attempting to execute, a scheme to defraud any healthcare benefit program, including private third- party payors, knowingly and willfully embezzling or stealing from a healthcare benefit program, willfully obstructing a criminal investigation of a healthcare offense, and knowingly and willfully falsifying, concealing or covering up a material fact or making any materially false, fictitious or fraudulent statement in connection with the delivery of or payment for healthcare benefits, items or services. Like the U.S. federal Anti-Kickback Statute, the ACA amended the intent standard for certain healthcare fraud under HIPAA such that a person or entity no longer needs to have actual knowledge of the statute or specific intent to violate it in order to have committed a violation.

HIPAA, as amended by the Health Information Technology for Economic and Clinical Health Act, or HITECH, and their implementing regulations, impose certain requirements on "covered entities," including certain healthcare providers, health plans and healthcare clearinghouses, as well as their respective "business associates" that create, receive, maintain or transmit individually identifiable health information for or on behalf of a covered entity, and their covered subcontractors, relating to the privacy, security, transmission and breach of individually identifiable health information. Further, HITECH also created four new tiers of civil monetary penalties, amended HIPAA to make civil and criminal penalties directly applicable to business associates, and gave state attorneys general new authority to file civil actions for damages or injunctions in U.S. federal courts to enforce HIPAA and seek attorneys' fees and costs associated with pursuing federal civil actions.

Additionally, the federal Physician Payments Sunshine Act, created under the ACA, and its implementing regulations, require certain manufacturers of drugs, devices, biologics and medical supplies for which payment is available under Medicare, Medicaid or the Children's Health Insurance Program (with certain exceptions) to annually report to the Centers for Medicare and Medicaid Services, or CMS, information related to certain payments or other transfers of value provided to physicians (defined to include doctors, dentists, optometrists, podiatrists and chiropractors) and teaching hospitals, or to entities or individuals at the request of, or designated on behalf of, the physicians and teaching hospitals as well as certain ownership and investment interests held by physicians and their immediate family members. Beginning in 2022, applicable manufacturers also will be required to report information regarding payments and transfers of value provided to physician assistants, nurse practitioners, clinical nurse specialists, certified nurse anesthetists, anesthesiologist assistants, and certified nurse-midwives.

Additionally, similar healthcare laws and regulations in the European Union and other jurisdictions, including reporting requirements detailing interactions with and payments to healthcare providers and laws governing the privacy and security of certain protected information, such as GDPR, which imposes obligations and restrictions on the collection and use of personal data relating to individuals located in the European Union (including health data).

Finally, the majority of states also have statutes or regulations similar to the aforementioned federal laws, some of which are broader in scope and apply to items and services reimbursed under Medicaid and other state programs, or, in several states, apply regardless of the payor. Some state laws require pharmaceutical companies to comply with the pharmaceutical industry's voluntary compliance guidelines and the relevant compliance guidance promulgated by the federal government in addition to requiring drug manufacturers to report information related to payments to clinicians and other healthcare providers or marketing expenditures. Some states and local jurisdictions require the registration of pharmaceutical sales representatives. State and foreign laws also govern the privacy and security of health information in some circumstances, many of which differ from each other in significant ways and often are not preempted by HIPAA, thus complicating compliance efforts.

Because of the breadth of these laws and the narrowness of their exceptions and safe harbors, it is possible that business activities can be subject to challenge under one or more of such laws. The scope and enforcement of each of these laws is uncertain and subject to rapid change in the current environment of healthcare reform, especially in light of the lack of applicable precedent and regulations. Federal and state enforcement bodies have recently increased their scrutiny of interactions between healthcare companies and healthcare providers, which has led to a number of investigations, prosecutions, convictions and settlements in the healthcare industry.

Ensuring that business arrangements with third parties comply with applicable healthcare laws and regulations is costly and time consuming. If business operations are found to be in violation of any of the laws described above or any other applicable governmental regulations a pharmaceutical manufacturer may be subject to penalties, including civil, criminal and administrative penalties, damages, fines, disgorgement, individual imprisonment, exclusion from governmental funded healthcare programs, such as Medicare and Medicaid, contractual damages, reputational harm, diminished profits and future earnings, additional reporting obligations and oversight if subject to a corporate integrity agreement or other agreement to resolve allegations of non-compliance with these laws, and curtailment or restructuring of operations, any of which could adversely affect a pharmaceutical manufacturer's ability to operate its business and the results of its operations.

United States Healthcare Reform Efforts

A primary trend in the United States healthcare industry and elsewhere is cost containment. Over the last several years, there have been federal and state proposals and legislation enacted regarding the pricing of pharmaceutical and biopharmaceutical products, limiting coverage and reimbursement for drugs and other medical products, and making changes to healthcare financing and the delivery of care in the United States.

There continues to be heightened Congressional scrutiny in the United States of pharmaceutical pricing practices designed to, among other things, bring more transparency in product pricing, review the relationship between pricing and manufacturer patient programs, and reform government program reimbursement methodologies for products. At the state level, legislatures have increasingly enacted legislation and implemented regulations designed to control pharmaceutical and biological product pricing, including price or patient reimbursement constraints, discounts, restrictions on certain product access and marketing cost disclosure and transparency measures, and, in some cases, designed to encourage importation from other countries and bulk purchasing. In addition, regional healthcare authorities and individual hospitals are increasingly using bidding procedures to determine what pharmaceutical products and which suppliers will be included in their prescription drug and other healthcare programs.

In addition, other federal health reform measures have been proposed and adopted in the United States that could impact cell therapy. Most notably, there has been political support for rules related to value-based payment alternatives in the Medicaid program. Medicaid is a jointly run federal and state program that provides health benefits coverage for low-income residents and children. In exchange for broad coverage in Medicaid, drug manufacturers are required to sign a Medicare Drug Rebate agreement which requires them to offer Medicaid programs the "best price" available for a particular product. This "best price" takes into consideration any rebates or concessions manufacturers offer, with some exceptions. The final rule would exempt value-based or outcomes-based payment arrangements from the definition of "best price" which provides manufacturers more flexibility to work with commercial payers and states on innovate payment mechanisms for high-cost cell and gene therapies. While Medicaid is not a significant driver of cell therapy sales it is a bellwether program and one we watch closely.

United States FCPA, the Bribery Act and Other Laws

The FCPA, prohibits any U.S. individual or business from paying, offering, or authorizing payment or offering of anything of value, directly or indirectly, to any foreign official, political party or candidate for the purpose of influencing any act or decision of the foreign entity in order to assist the individual or business in obtaining or retaining business. The FCPA also obligates companies whose securities are listed in the United States to comply with accounting provisions requiring the company to maintain books and records that accurately and fairly reflect all transactions of the corporation, including international subsidiaries, and to devise and maintain an adequate system of internal accounting controls for international operations. Activities that violate the FCPA, even if they occur wholly outside the United States, can result in criminal and civil fines, imprisonment, disgorgement, oversight, and debarment from government contracts.

Our operations are also subject to non-U.S. anti-corruption laws such as the Bribery Act. As with the FCPA, these laws generally prohibit us and our employees and intermediaries from authorizing, promising, offering, or providing, directly or indirectly, improper or prohibited payments, or anything else of value, to government officials or other persons to obtain or retain business or gain some other business advantage. Under the Bribery Act, we may also be liable for failing to prevent a person associated with us from committing a bribery offense.

We are also subject to other laws and regulations governing our international operations, including regulations administered by the governments of the United Kingdom and the United States and authorities in the European Union, including applicable export control regulations, economic sanctions and embargoes on certain countries and persons, anti-money laundering laws, import and customs requirements and currency exchange regulations, collectively referred to as trade control laws.

Failure to comply with the Bribery Act, the FCPA and other anti-corruption laws and trade control laws could subject us to criminal and civil penalties, disgorgement and other sanctions and remedial measures, and legal expenses.

Review and Approval of New Drug Products in the European Union

In the European Union, medicinal products, including advanced therapy medicinal products, or ATMPs, are subject to extensive pre- and post-market regulation by regulatory authorities at both the European Union and national levels. ATMPs comprise gene therapy products, somatic-cell therapy products and tissue engineered products, which are cells or tissues that have undergone substantial manipulation and that are administered to human beings in order to regenerate, repair or replace a human tissue. We anticipate that our therapy products will be regulated as ATMPs in the European Union. There is legislation at a European Union level relating to the standards of quality and safety for the collection and testing of human blood and blood components for use in cell-based therapies, which could apply to our products. Additionally, there may be local legislation in various European Union Member States, which may be more restrictive than the European Union legislation, and we would need to comply with such legislation to the extent it applies.

EU Clinical Trials

Clinical trials of medicinal products in the European Union must be conducted in accordance with European Union and national regulations and the International Conference on Harmonization, or ICH, guidelines on Good Clinical Practices, or GCP. Additional GCP guidelines from the European Commission, focusing in particular on traceability, apply to clinical trials of ATMPs. The sponsor must take out a clinical trial insurance policy, and in most European Union countries, the sponsor is liable to provide "no fault" compensation to any study subject injured in the clinical trial.

Prior to commencing a clinical trial, the sponsor must obtain a clinical trial authorization from the competent authority, and a positive opinion from an independent ethics committee. The application for a clinical trial authorization must include, among other things, a copy of the trial protocol and an investigational medicinal product dossier containing information about the manufacture and quality of the medicinal product under investigation. Currently, clinical trial authorization applications must be submitted to the competent authority in each EU Member State in which the trial will be conducted. Under the new Regulation on Clinical Trials, which is to take effect in December 2021, there will be a centralized application procedure where one national authority takes the lead in reviewing the application and the other national authorities have only a limited involvement. Any substantial changes to the trial protocol or other information submitted with the clinical trial applications must be notified to or approved by the relevant competent authorities and ethics committees. Medicines used in clinical trials must be manufactured in accordance with cGMP. Other national and European Union-wide regulatory requirements also apply.

During the development of a medicinal product, the EMA and national medicines regulators within the European Union provide the opportunity for dialogue and guidance on the development program. At the EMA level, this is usually done in the form of scientific advice, which is given by the Scientific Advice Working Party of the Committee for Medicinal Products for Human Use, or CHMP. A fee is incurred with each scientific advice procedure. Advice from the EMA is typically provided based on questions concerning, for example, quality (chemistry, manufacturing and controls testing), nonclinical testing and clinical studies, and pharmacovigilance plans and risk-management programs. In accordance with the EMA's policy, scientific advice will not be legally binding with regard to any future marketing authorization application of the product concerned.

EU Marketing Authorizations

In order to market a new medicinal product in the European Union, a company must submit and obtain approval from regulators of a marketing authorization application, or MAA. The process for doing this depends, among other things, on the nature of the medicinal product.

The centralized procedure results in a single marketing authorization, or MA, granted by the European Commission that is valid across the EEA (i.e., the European Union as well as Iceland, Liechtenstein and Norway). The centralized procedure is compulsory for human drugs that are: (i) derived from biotechnology processes, such as genetic engineering, (ii) contain a new active substance indicated for the treatment of certain diseases, such as HIV/AIDS, cancer, diabetes, neurodegenerative diseases, autoimmune and other immune dysfunctions and viral diseases, (iii) officially designated orphan medicines and (iv) advanced-therapy medicines, such as gene therapy, somatic cell therapy or tissue-engineered medicines. The centralized procedure may at the request of the applicant also be used in certain other cases. Therefore, the centralized procedure would be mandatory for the products we are developing.

The Committee for Advanced Therapies, or CAT, is responsible in conjunction with the CHMP for the evaluation of ATMPs. The CAT is primarily responsible for the scientific evaluation of ATMPs and prepares a draft opinion on the quality, safety and efficacy of each ATMP for which a marketing authorization application is submitted. The CAT's opinion is then taken into account by the CHMP when giving its final recommendation regarding the authorization of a product in view of the balance of benefits and risks identified. Although the CAT's draft opinion is submitted to the CHMP for final approval, the CHMP may depart from the draft opinion, if it provides detailed scientific justification. The CHMP and CAT are also responsible for providing guidelines on ATMPs and have published numerous guidelines, including specific guidelines on gene therapies and cell therapies. These guidelines provide additional guidance on the factors that the EMA will consider in relation to the development and evaluation of ATMPs and include, among other things, the preclinical studies required to characterize ATMPs; the manufacturing and control information that should be submitted in a marketing authorization application; and post-approval measures required to monitor patients and evaluate the long-term efficacy and potential adverse reactions of ATMPs. Although these guidelines are not legally binding, we believe that our compliance with them is likely necessary to gain and maintain approval for any of our product candidates.

Under the centralized procedure in the European Union, the maximum timeframe for the evaluation of an MAA by the EMA is 210 days. This excludes so-called clock stops, during which additional written or oral information is to be provided by the applicant in response to questions asked by the CHMP. At the end of the review period, the CHMP provides an opinion to the European Commission. If this is opinion favorable, the Commission may then adopt a decision to grant an MA. In exceptional cases, the CHMP might perform an accelerated review of an MAA in no more than 150 days. This is usually when the product is of major interest from the point of view of public health and, in particular, from the viewpoint of therapeutic innovation.

The European Commission may grant a so-called "marketing authorization under exceptional circumstances". Such authorization is intended for products for which the applicant can demonstrate that it is unable to provide comprehensive data on the efficacy and safety under normal conditions of use, because the indications for which the product in question is intended are encountered so rarely that the applicant cannot reasonably be expected to provide comprehensive evidence, or in the present state of scientific knowledge, comprehensive information cannot be provided, or it would be contrary to generally accepted principles of medical ethics to collect such information. Consequently, marketing authorization under exceptional circumstances may be granted subject to certain specific obligations, which may include the following:

- the applicant must complete an identified program of studies within a time period specified by the competent authority, the results of which form the basis of a reassessment of the benefit/risk profile;

- the medicinal product in question may be supplied on medical prescription only and may in certain cases be administered only under strict medical supervision, possibly in a hospital and in the case of a radiopharmaceutical, by an authorized person; and

- the package leaflet and any medical information must draw the attention of the medical practitioner to the fact that the particulars available concerning the medicinal product in question are as yet inadequate in certain specified respects.

A marketing authorization under exceptional circumstances is subject to annual review to reassess the risk-benefit balance in an annual reassessment procedure. Continuation of the authorization is linked to the annual reassessment and a negative assessment could potentially result in the marketing authorization being suspended or revoked. The renewal of a marketing authorization of a medicinal product under exceptional circumstances, however, follows the same rules as a "normal" marketing authorization. Thus, a marketing authorization under exceptional circumstances is granted for an initial five years, after which the authorization will become valid indefinitely, unless the EMA decides that safety grounds merit one additional five-year renewal.

The European Commission may also grant a so-called "conditional marketing authorization" prior to obtaining the comprehensive clinical data required for an application for a full marketing authorization. Such conditional marketing authorizations may be granted for product candidates (including medicines designated as orphan medicinal products), if (i) the risk-benefit balance of the product candidate is positive, (ii) it is likely that the applicant will be in a position to provide the required comprehensive clinical trial data, (iii) the product fulfills an unmet medical need and (iv) the benefit to public health of the immediate availability on the market of the medicinal product concerned outweighs the risk inherent in the fact that additional data are still required. A conditional marketing authorization may contain specific obligations to be fulfilled by the marketing authorization holder, including obligations with respect to the completion of ongoing or new studies, and with respect to the collection of pharmacovigilance data. Conditional marketing authorizations are valid for one year, and may be renewed annually, if the risk-benefit balance remains positive, and after an assessment of the need for additional or modified conditions and/or specific obligations. The timelines for the centralized procedure described above also apply with respect to the review by the CHMP of applications for a conditional marketing authorization.

EU Data Exclusivity

Marketing authorization applications for generic medicinal products do not need to include the results of preclinical and clinical trials, but instead can refer to the data included in the marketing authorization of a reference product for which regulatory data exclusivity has expired. If a marketing authorization is granted for a medicinal product containing a new active substance, that product benefits from eight years of data exclusivity, during which generic marketing authorization applications referring to the data of that product may not be accepted by the regulatory authorities, and a further two years of market exclusivity, during which such generic products may not be placed on the market. The two-year period may be extended to three years if during the first eight years a new therapeutic indication with significant clinical benefit over existing therapies is approved.

There is a special regime for biosimilars, or biological medicinal products that are similar to a reference medicinal product but that do not meet the definition of a generic medicinal product, for example, because of differences in raw materials or manufacturing processes. For such products, the results of appropriate preclinical or clinical trials must be provided, and guidelines from the EMA detail the type of quantity of supplementary data to be provided for different types of biological product. There are no such guidelines for complex biological products, such as gene or cell therapy medicinal products, and so it is unlikely that biosimilars of those products will currently be approved in the European Union. However, guidance from the EMA states that they will be considered in the future in light of the scientific knowledge and regulatory experience gained at the time.

EU Pediatric Development

In the European Union, companies developing a new medicinal product must agree to a Pediatric Investigation Plan, or PIP, with the EMA and must conduct pediatric clinical trials in accordance with that PIP, unless a deferral or waiver applies, (e.g., because the relevant disease or condition occurs only in adults). The marketing authorization application for the product must include the results of pediatric clinical trials conducted in accordance with the PIP, unless a waiver applies, or a deferral has been granted, in which case the pediatric clinical trials must be completed at a later date. Products that are granted a marketing authorization on the basis of the pediatric clinical trials conducted in accordance with the PIP are eligible for a six-month extension of the protection under a supplementary protection certificate (if any is in effect at the time of approval) or, in the case of orphan medicinal products, a two-year extension of the orphan market exclusivity. This pediatric reward is subject to specific conditions and is not automatically available when data in compliance with the PIP are developed and submitted.

EU Post-Approval Controls

The holder of a marketing authorization must establish and maintain a pharmacovigilance system and appoint an individual qualified person for pharmacovigilance, or QPPV, who is responsible for oversight of that system. Key obligations include expedited reporting of suspected serious adverse reactions and submission of periodic safety update reports, or PSURs.

All new marketing authorization applications must include a risk management plan, or RMP, describing the risk management system that the company will put in place and documenting measures to prevent or minimize the risks associated with the product. The regulatory authorities may also impose specific obligations as a condition of the marketing authorization. Such risk-minimization measures or post-authorization obligations may include additional safety monitoring, more frequent submission of PSURs, or the conduct of additional clinical trials or post-authorization safety studies. RMPs and PSURs are routinely available to third parties requesting access, subject to limited redactions. All advertising and promotional activities for the product must be consistent with the approved summary of product characteristics, and therefore all off-label promotion is prohibited. Direct-to-consumer advertising of prescription medicines is also prohibited in the European Union. Although general requirements for advertising and promotion of medicinal products are established under EU directives, the details are governed by regulations in each EU Member State and can differ from one country to another.

EU Pricing and Reimbursement in the European Union

Governments influence the price of medicinal products in the European Union through their pricing and reimbursement rules and control of national healthcare systems that fund a large part of the cost of those products to consumers. Some jurisdictions operate positive and negative list systems under which products may only be marketed once a reimbursement price has been agreed. To obtain reimbursement or pricing approval, some of these countries may require the completion of clinical trials that compare the cost-effectiveness of a particular product candidate to currently available therapies. Other EU Member States allow companies to fix their own prices for medicines, but monitor and control company profits. The downward pressure on healthcare costs in general, particularly prescription medicines, has become very intense. As a result, increasingly high barriers are being erected to the entry of new products.

Brexit and the Regulatory Framework in the United Kingdom

The United Kingdom officially withdrew from the European Union on January 31, 2020 ("Brexit"). Pursuant to the formal withdrawal arrangements agreed between the United Kingdom and the European Union, the United Kingdom was subject to a transition period until December 31, 2020, or the Transition Period, during which European Union rules continued to apply. A trade and cooperation agreement, or the Trade and Cooperation Agreement, that outlines the future trading relationship between the United Kingdom and the European Union was agreed in December 2020.

Brexit may influence the attractiveness of the United Kingdom as a place to conduct clinical trials. The European Union's regulatory environment for clinical trials is being harmonized as part of the Clinical Trial Regulations, which come into full effect at the end of 2021, but it is currently unclear as to what extent the United Kingdom will seek to align its regulations with the European Union. Failure of the United Kingdom to closely align its regulations with the EU may have an effect on the cost of conducting clinical trials in the United Kingdom as opposed to other countries and/or make it harder to seek a marketing authorization for our product candidates on the basis of clinical trials conducted in the United Kingdom.

In the short term there will be few changes to clinical trials that only have sites in the United Kingdom. The MHRA have confirmed that the sponsor of a clinical trial can be based in the EEA for an initial period following Brexit. Further investigational medicinal products can be supplied directly from the EU/EEA to a trial site in the United

Kingdom without further oversight until January 1, 2022, and to Northern Ireland beyond such date. The United Kingdom is now a "third country" for the purpose of clinical trials that have sites in the EEA. For such trials the sponsor/legal representative must be based in the EEA, and the trial must be registered on the EU Clinical Trials Register (including data on sites outside of the EEA).

The data exclusivity periods in the United Kingdom are currently in line with those in the European Union, but the Trade and Cooperation Agreement provides that the periods for both data and market exclusivity are to be determined by domestic law, and so there could be divergence in the future. It is currently unclear whether the MHRA in the United Kingdom is sufficiently prepared to handle the increased volume of marketing authorization applications that it is likely to receive.

Orphan designation in the United Kingdom following Brexit is based on the prevalence of the condition in the United Kingdom as opposed to the current position where prevalence in the European Union is the determinant. It is therefore possible that conditions that are currently designated as orphan conditions in the United Kingdom will no longer be and that conditions that are not currently designated as orphan conditions in the European Union will be designated as such in the United Kingdom.

EU Orphan Drug Designation

The European Medicines Agency (EMA) and FDA play a central role in facilitating the development and authorization of medicines for rare diseases, which are termed 'orphan medicines' in the medical world. In the EU, sponsors who obtain orphan designation benefit from protocol assistance, a type of scientific advice specific for designated orphan medicines, and market exclusivity once the medicine is on the market. Fee reductions are also available depending on the status of the sponsor and the type of service required. When planning the development of their medicinal product, sponsors should consult the relevant scientific guidelines.

The general therapeutic strategy for the treatment of AML has not changed substantially over the past 30 years. Excluding APL (which should be treated with all trans-retinoic acid), AML management is based primarily on induction, incorporating an anthracycline and cytarabine, and consolidation therapy, and/or allogeneic Hematopoietic Stem Cell Transplantation (alloHSCT). Induction/consolidation therapy leads to high CRs rates in those who are eligible for treatment and present a favourable risk profile.

Several novel agents are in various stages of development for the treatment of AML. Novel approaches include antibody-based immunotherapy and adoptive cell therapy that aim to improve anti-leukaemia T cell function, such as the therapies developed by TCB (OmnImmune®). OmnImmune® (TCB002) was initially studied in patients with active relapsed or refractory AML who are not eligible or do not consent to high dose salvage chemotherapy and/or alloHSCT. In July 2019, OmnImmune® (TCB002) was granted 'orphan medicine' status from the FDA for Acute Myeloid Leukaemia (AML). As a follow on to OmnImmune® (TCB002), TCB intends to conduct phase 2b/3 studies to treat earlier stage AML and expects to commence treating patients in these trials (as OmnImmune® (TCB008-001)) in H1 2022.

Employees

As of the date of this prospectus, we had approximately 74 full-time equivalent employees. Of these employees, 60 were in research and development (including in manufacturing and operations, and quality control and quality assurance), 10 in other key functions (including clinical, business development, finance, intellectual property, information technology and general administration) and 4 members of the executive team. We have never had a work stoppage and none of our employees are covered by collective bargaining agreements or represented by a labor union. We believe our employee relations are good.

At each date shown, we had the following number of employees engaged in either administrative or research and development functions, as indicated below.

	At December 31,		
	2018	2019	2020
Function:			
Administrative	12	11	13
Research and development	48	83	66
Total	60	94	79
Geography:			
United Kingdom	60	94	79

Our human capital resources objectives include, as applicable, identifying, recruiting, retaining, incentivizing and integrating our existing and additional employees. The principal purposes of our equity incentive plans are to attract, retain and motivate selected employees, consultants and directors through the granting of equity-based compensation awards.

Facilities

Our corporate headquarters and most of our operations, including our research and manufacturing facilities, are located at Maxim 1, 2 Parklands Way, Holytown, Motherwell, ML1 4WR, United Kingdom. The lease for this space expires February 28, 2029 and covers a total leasable area of approximately 26,300 square feet. We believe that our office facilities and the production and research facilities in the United Kingdom are sufficient to meet our current needs.

Legal Proceedings

From time to time, we may be party to litigation that arises in the ordinary course of our business. We do not have any pending litigation that, separately or in the aggregate, would, in the opinion of management, have a material adverse effect on our results of operations, financial condition or cash flows.

MANAGEMENT

Directors and Senior Management

The following table sets forth certain information regarding those persons who will be our directors and executive officers of the Company upon the closing of this offering.

Name	Age	Position
Senior Management and Directors		
Dr Michael Leek	61	Executive Chairman of the Board (Founder)
Bryan Kobel	41	Chief Executive Officer and Board director
Martin Thorp	69	Chief Financial Officer and Board director
Angela Scott	57	Chief Operating Officer (Founder)

Non-Executive Director Nominees*

Dr Mark Bonyhadi	67
James Culverwell	65
Arlene Morris	69
Edward Niemczyk	41

* The non-executive director nominees will be appointed to the board of directors immediately after the effective date of the registration statement of which this prospectus forms a part.

Senior Management Persons

Dr Michael Leek (Executive Chairman and member of the Board of directors)

Michael Leek, Ph.D., MBA has served as our Chief Executive, co-founder and executive board member since July 2013. Prior to this, Dr. Leek served in senior management and board roles with, Intercytex plc, a cell therapy company he co-founded. While at Intercytex, Dr. Leek was involved in clinical development of cell therapies to treat chromic dermal wounds. Early in his career, he held roles of increasing responsibility at Smith and Nephew from 1989 to 1999 as leader of the Tissue Repair Enabling Technology team. Dr. Leek holds a Ph.D. (Forensic Medicine) from the University of Leeds. He has acted as an honorary lecturer at the School of Medical Sciences, University of Aberdeen since January 2014.

Bryan Kobel (Chief Executive Officer and member of the Board of directors.)

Bryan Kobel serves as our Chief Executive Officer, having joined TC BioPharm, with a view to assuming that role, in June 2021. Prior to joining TC BioPharm he served as Managing Director at EF Hutton from October 2020 as the head of healthcare investment banking. From June 2018 to October 2020, Mr Kobel was Managing Director and head of healthcare/capital markets at the Alberleen Group where he led deal origination and structuring, as well as leading the sales efforts for transactions across the Healthcare and Technology sectors. From April 2017 to June 2018, he was Head of Capital Markets at R.F. Lafferty & Co. From March 2012 to April 2017, Mr Kobel was Managing Director, Capital Markets at Laidlaw & Company. Mr. Kobel holds a BA degree from Franklin & Marshall College and held the FINRA licenses Series 7, 63, 82, 79 and 24.

Martin Thorp (Chief Financial Officer and member of the Board of directors)

Martin Thorp has been a member of the Board of directors since March 2016 and has served, in an executive capacity, as the Chief Financial Officer since March 2019. From December 2014, Martin was founder (and from 2018 chairman) of a life science financial advisory firm, Copernican Capital Partners Limited (formally NCL Corporate Finance Limited), where he acted as corporate finance adviser to and investor in, several disruptive life science companies. Martin was also a co-founding director of a life science advisory and investment firm NCL Technology Ventures from 2014 to 2018. He was a director of Discovery Park Technology Investments (GP) Limited (and associated investment companies) from September 2016 until July 2018. Martin holds a B.A. in business finance from the University of Kent and qualified as a Chartered Accountant with Arthur Andersen & Co in London in 1977 and became a Fellow of the Institute of Chartered Accountants in England and Wales (ICAEW) in 1986. He was a partner in Arthur Andersen & Co from August 1985, and served in several roles including founder and global managing partner of Arthur Andersen's international corporate finance business, based latterly in New York. He retired from professional practice in 2002 and consequently ceased to be a member of ICAEW in 2004.

Angela Scott (Chief Operating Officer)

Angela Scott is a co-founder of the Company and served as an executive director of the Company from December 2018 until her resignation from the Board on October 22, 2021. She has served as our Chief Operating Officer since January 2014. Prior to this Ms. Scott was Director of Operations at Angel Biotechnology plc from 2005 to 2012 where she transitioned several cell therapies into clinical trials which included first in man stem cell product for the treatment of stroke. From 2003 to 2004, she served as Development Manager for Cell Culture and Diagnostics at Excell Biotechnology. Prior to this, she served as Senior Research Associate, from 1992 to 2003, at PPL Therapeutics, where she was part of the team that cloned 'Dolly the sheep'. Ms Scott held roles with increasing responsibility with Imperial Cancer Research Fund from 1981 to 1992. She has acted as an advisory board member of both the ATMP Manufacturing Community and Scottish Stemcell Network. Ms. Scott has a BSc in Biological Sciences from Napier University, Edinburgh.

Non-Executive Director Nominees

The following persons will join the Board of the Company as non-executive directors immediately after the effective date of the registration statement of which this prospectus forms a part.

Dr Mark Bonyhadi

Mark Bonyhadi, PhD is a Senior Advisor at Qiming Venture Partners USA. Prior to joining Qiming in December 2018, Mark held positions of Vice President of Research, Head of Academic Affairs, and Vice President of Process Research Sciences from 2013-2018 at Juno Therapeutics. From 2006-2013, Mark was Director of Global Business Development for Cell Therapy at Invitrogen, which was merged with Applied BioSystems, to create Life Technologies, which subsequently was acquired by Thermo-Fisher. Mark was responsible for identifying and implementing business opportunities aligned with the Lifetech/Invitrogen/Thermo cellular medicine portfolio, participating, and leading in the launch of the Cell Therapy Systems (CTS™) product line optimized for cell therapy applications, as well as working with academia and industry to accelerate the development of novel cell and/or gene-based therapies. From 1997-2005, Mark served as Director and later Vice President of Research at Xycte Therapies, a T cell therapy company treating cancer, infectious disease, and autoimmunity. Prior to that, Mark was a senior scientist at SyStemix, a biotech company developing hematopoietic stem cell-based therapies for treating cancer, where he did his postdoctoral training. Mark is a former Chair and current member of the Industry Liaison Committee for the American Society for Gene and Cell Therapy (ASGCT). Mark received a B.A. from Reed College, Portland, OR (1982) and a PhD from University of California at Berkeley (1990), where he studied T cell immunology, and identified the first delta chain protein product of the recently discovered gamma/delta T cell. Since graduating from UC Berkeley, Mark has been focused on the development of commercially viable approaches and business strategies for bringing cell therapies, gene-modified cell therapies, and regenerative medicine from the bench to the clinic, and into commercial use over the past three decades.

James Culverwell

James Culverwell served as a non-executive director and chairman of the audit committee of Innocoll Holdings plc (a collagen-based drug delivery company) from 2013 until 2017 during which period it relocated from Dublin to Germany and ultimately listed on Nasdaq (INNL). Between 2016 and 2019 he was a non-executive director and chairman of the audit committee of Amryt Pharmaceuticals plc, a commercial and research-based company specializing in rare diseases, which during his tenure listed on the Dublin STX and the London AIM markets and acquired Aegerion, a Nasdaq listed company. Since its foundation in 2006, Mr Culverwell has been a non-executive director and chairman of the audit committee of Safeguard Biosystems, a private company providing high throughput, multiplexed, molecular diagnostic tests and now generating commercial revenues. Since 2013 Mr Culverwell has been Chief Executive and is currently Chairman of HOX Therapeutics, a UK based private company researching early-stage treatments for prostate cancer. Since 2021 he has been a director and the chairman of the audit committee of Quoin Pharmaceuticals Inc., which is initiating clinical trials in a treatment for rare skin diseases. Since 2010 he has served as a healthcare investment consultant to a large secondary fund, where he performs due diligence on life science investment candidates. In 2005 Mr Culverwell established a corporate advisory firm, advising small life science companies on fund raising and larger companies on strategy and investor relations. From 1994-2004 Mr Culverwell was VP and Global Administrator Healthcare Equity Research Merrill Lynch/Bank of America and from 1982-94 he was Director and Head of European Healthcare and Pharmaceutical Equity Research at Hoare Govett/ABN Amro. He holds an MSc (Hons) in biology from the University of Aberdeen.

Arlene Morris

Arlene Morris currently serves (since July 2019) as a non-executive director of the following companies: Cogent Biosciences, Inc. (NASDAQ: COGT) (since July 2019), where she is the chair the compensation committee and is a member of the audit committee and the nominating and corporate governance ('N&G') committee; Viridian Therapeutics, Inc. (NASDAQ: VRDN) (since January 2018), where she is a member of the audit, pricing and N&G Committees; and Palatin Technologies, Inc. (NYSE: PTN) (since 2015), where she is a member of the compensation and N&G committees. Ms Morris has also served as a non-executive director at the following companies: Neovacs SA (2011 to 2021), Dimension Therapeutics, Inc. (2015-018), Biodel, Inc. (2012-2015), MediciNova, Inc. (2006-2013). Ms Morris is an emeritus member of the board of directors at the Medical University of South Carolina ('MUSC') (since 2012) and is also (since 2016) a member of the board of trustees of Carlow University (PA). She has also served as a member (including of the executive committee) of the Biotechnology Innovation Origanisation ('BIO'), which is a biotechnology industry advocacy organization; and of the charitable organization, the Humane Society of Silicon Valley (including chair of the audit committee). She has held senior executive management roles in the pharmaceutical group Johnson & Johnson including business development, product development, strategic marketing, product management and sales management.

Edward Niemczyk

Edward Niemczyk is a Partner at Bridges Fund Management, Ltd ('Bridges'), a private equity firm focused on sustainable and impact investing. He has been with Bridges' U.S. Sustainable Growth Fund since 2016 and leads its healthcare efforts in the U.S. Whilst at Bridges he served on the board of directors of the following private companies, which are, or have been, investees of Bridges: Impact Fitness North America, LP (2016 to 2019); Medwood Services, LLC (chairman of the board) (2018 to present); Sunrise Treatment Center, LLC (chairman of the board) (2019 to present); Jump City Holdings, Inc (2019 to present); James River Home Health and Hospice, LLC (2020 to present) and Altius Healthcare Management, LLC (chairman of the board) (2021 to present). Prior to Bridges, Mr. Niemczyk was an investor at The Beekman Group, LLC and Cordova, Smart and Williams, LLC and started his career at GE Capital Corporation. Mr Niemczyk holds a BA from Franklin & Marshall College and an MBA from Columbia Business School.

Family Relationships

Other than Dr. Michael Leek and Ms. Angela Scott who are married, there are no family relationships among any of the members of our senior management or board of directors.

Corporate Governance Practices

We are a "foreign private issuer" under applicable federal securities laws and regulations. As a result, in accordance with Nasdaq listing requirements, we will comply with home country governance requirements and certain exemptions thereunder rather than complying with Nasdaq corporate governance standards. While we voluntarily follow many Nasdaq corporate governance rules, we will take advantage of the following limited exemptions:

- Scottish law does not require that a majority of our board of directors consist of independent directors or that our board committees consist of entirely independent directors. Our board of directors and board committees, therefore, may include fewer independent directors than would be required if we were subject to Nasdaq Listing Rule 5605(b)(1). In addition, we will not be subject to Nasdaq Listing Rule 5605(b)(2), which requires that independent directors must regularly have scheduled meetings at which only independent directors are present.

- Exemption from the requirement to have a nominations committee of the board of directors.

- Exemption from quorum requirements applicable to meetings of shareholders. Such quorum requirements as established by Nasdaq are generally not required under Scottish law. In accordance with generally accepted business practice, our Articles of Association will provide alternative quorum requirements that are generally applicable to meetings of shareholders.

- Exemption from the Nasdaq rules applicable to domestic issuers requiring disclosure within four business days of any determination to grant a waiver of the code of business conduct and ethics to directors and officers. Although we will require board approval of any such waiver, we may choose to disclose waivers by any of the following means: providing website disclosure that satisfies the requirements of Item 5.05I of Form 8-K; including disclosure in a Form 6-K or in the next Form 20-F; or by distributing a press release.

- Exemption from the requirement to obtain shareholder approval for certain issuances of securities, including (i) the acquisition of the stock or assets of another company; (ii) equity-based compensation of officers, directors, employees or consultants; (iii) a change of control of the Company; and (iv) certain transactions such as private placements of the Company's securities.

We will follow the practices of our home country, Scotland, in lieu of the foregoing requirements. Although we may rely on home country corporate governance practices in lieu of certain of the rules in the Nasdaq Rule 5600 Series and Rule 5250(d), we must comply with Nasdaq's Notification of Noncompliance requirement (Rule 5625) and the Voting Rights requirement (Rule 5640). Further, we must have an audit committee that satisfies Nasdaq Rule 5605(c)(3), which addresses audit committee responsibilities and authority and requires that the audit committee consist of members who meet the independence requirements of Nasdaq Rule 5605(c)(2)(A)(ii).

Although we currently intend to comply with the Nasdaq corporate governance rules applicable other than as noted above, we may in the future decide to use the foreign private issuer exemption with respect to some or all the other Nasdaq corporate governance rules.

In addition, as a foreign private issuer, we will not be subject to certain SEC reporting obligations:

- Filing quarterly reports on Form 10-Q or provide current reports on Form 8-K disclosing significant events within four days of their occurrence;

- The rules and regulations governing proxy solicitations of the SEC;

- Regulation FD, which governs certain disclosure obligations of a reporting company which may be selective; and

- Our stockholders will be exempt from Section 16 rules regarding sales of our securities by insiders, which will provide less data in this regard than shareholders of U.S. companies that are subject to the Exchange Act.

Accordingly, our shareholders will not have the same protections afforded to shareholders of companies that are subject to all of the corporate governance requirements of Nasdaq and the domestic reporting requirements of the SEC. We may utilize these exemptions for as long as we continue to qualify as a foreign private issuer.

Composition of Our Board of Directors

Our board of directors will be composed of seven members upon the closing of this offering. As a foreign private issuer, under the listing requirements and rules of Nasdaq, we are not required to have independent directors on our board of directors, except that our audit committee is required to consist fully of independent directors, subject to certain phase-in schedules. However, our board of directors has determined that Dr Mark Bonyhadi, James Culverwell, Arlene Morris and Edward Niemczyk, representing a majority (four) of the seven directors who will be serving immediately after the closing of this offering, do not have a relationship that would interfere with the exercise of independent judgment in carrying out the responsibilities of director and that each of these directors is "independent" as that term is defined under Nasdaq rules.

Committees of Our Board of Directors

Our board of directors, as of the closing of this offering will have two standing committees: an audit committee and a remuneration committee.

Audit Committee

The audit committee, which immediately after the closing of this offering will consist of James Culverwell (chair), Arlene Morris and Edward Niemczyk, assists the board of directors in overseeing our accounting and financial reporting processes. The audit committee consists exclusively of members of our board who are financially literate, and our board of directors has determined that James Culverwell is an "audit committee financial expert" as defined by applicable SEC rules and has the requisite financial sophistication as defined under the applicable Nasdaq rules and regulations. Our board of directors has determined that each member of the audit committee is an independent director under Nasdaq listing rules and under Rule 10A-3 under the Exchange Act. Our audit committee will meet regularly each year and oversee and review our internal controls, accounting policies and financial reporting, and provide a forum through which our independent registered public accounting firm reports. Our audit committee also will meet regularly with our independent registered public accounting firm without management present. The audit committee will be governed by a charter that complies with Nasdaq rules.

The audit committee's responsibilities will include:

- recommending the appointment of the independent auditor to shareholders for approval at the general meeting of shareholders;
- the appointment, compensation, retention and oversight of any accounting firm engaged for the purpose of preparing or issuing an audit report or performing other audit services;
- pre-approving the audit services and non-audit services to be provided by our independent auditor before the auditor is engaged to render such services;
- evaluating the independent auditor's qualifications, performance, and independence, and presenting its conclusions to the full board of directors on at least an annual basis;
- reviewing and discussing with management and our independent registered public accounting firm our financial statements and our financial reporting process; and
- reviewing, approving, or ratifying any related party transactions.

Remuneration Committee

Immediately after the closing of this offering, the remuneration committee will consist of Arlene Morris (chair), James Culverwell and Edward Niemczyk. Under SEC and Nasdaq rules, there are heightened independence standards for members of the remuneration committee, including a prohibition against the receipt of any compensation from us other than standard board member fees. The remuneration committee will be governed by a charter that complies with Nasdaq rules. Although foreign private issuers are not required to meet this heightened standard, all of our remuneration committee members are expected to meet this heightened standard.

The remuneration committee's responsibilities will include:

- identifying, reviewing and proposing policies relevant to the compensation and benefits of our directors and senior management;
- evaluating the performance of senior management in light of such policies and reporting to the board; and
- overseeing and administering our employee share option scheme or equity incentive plans in operation from time to time.

Code of Business Conduct and Ethics

In connection with this offering, we will adopt a Code of Business Conduct and Ethics, or Code of Ethics, applicable to our employees, senior management, and directors, including our principal executive officer, principal financial officer, principal accounting officer or controller, or persons performing similar functions. Following the effectiveness of the registration statement of which this prospectus is a part, a current copy of the Code of Ethics will be posted on our website, which is located at www.tcbiopharm.com. Information contained on, or that can be accessed through, our website does not constitute a part of this prospectus and is not incorporated by reference herein.

Compensation of Senior Management and Directors

For the year ended December 31, 2020, the aggregate compensation accrued or paid to the members of our board of directors and our senior management for services in all capacities, including defined contribution pensions and share-based compensation, was £1.8 million. As at December 31, 2020, the board of directors and our senior management held share options over 2,529,560 ordinary shares.

Senior Management Employment Arrangements and Service Agreements

Prior to the completion of this offering, we intend to enter into employment agreements in replacement of their current employment agreements with certain of our senior management persons and to adopt a new equity awards program under which appropriate new awards may be granted.

Non-Executive Director Appointment Letters

The compensation of our non-executive directors is determined by our board of directors as a whole, based, in part, on a review of current practices in other companies. We will be entering into appointment letters with our non-executive directors at or prior to the completion of this offering.

Equity Compensation Plans

As part of the corporate re-organization we have continued certain employee options granted by TC BioPharm Limited as replacement grants by TC BioPharm (Holdings) plc, and, in addition on a going forward basis, the Board of Directors and our shareholders have approved, two new share option schemes for future grants to directors, employees and consultants. Details of the share option schemes are summarized in this section.

2014 Share Option Scheme (as amended)

On December 16, 2014, we adopted a share option scheme, or the 2014 Share Option Scheme, for the purpose of enabling the grant of share options to incentivize our employees and employees of our subsidiary companies.

The 2014 Share Option Scheme permits grants of (i) enterprise management incentive ("EMI") options which are potentially tax-advantaged in the United Kingdom under the terms of Schedule 5 to the United Kingdom Income Tax (Earnings and Pensions) Act 2003 (subject to the relevant conditions being met by the company and the grantee) and (ii) "unapproved" options (which do not attract tax advantages as they have not been "approved" by the U.K. tax authority, HMRC).

As of September 30, 2021, we had granted options to purchase 5,329,230 O ordinary shares under the 2014 Share Option Scheme and no further awards are expected to be granted. All of these options have vested. The scheme will be closed for new awards following the effective date of this offering.

Class of Share: An option granted under the 2014 Share Option Scheme entitles the option holder, subject to the satisfaction, waiver or acceleration of specific exercise conditions, to subscribe for O ordinary shares. Prior to the offering all options granted under the 2014 Share Option Scheme over O ordinary shares shall be exchanged for equivalent options over ordinary shares. Subject to minor amendments, all material terms of the Options will remain the same as prior to the exchange.

Exercise Condition: Options granted under our 2014 Share Option Scheme may be granted subject to vesting schedules, performance targets or other conditions which must be satisfied or waived before exercise. Exercise conditions may be removed or varied by our board of directors, provided that any variation shall be (in the reasonable opinion of our board of directors) no more difficult to satisfy than the original exercise condition (unless otherwise approved by grantees).

Option Agreements: Each option grant is documented through an option agreement. Most of the option agreements entered into under the 2014 Share Option Scheme provide that all unexercised options are exercisable upon one or more of the following events: (i) the admission of any of the Company's ordinary shares (a) to the Official List of the UK Listing Authority and to trading on the London Stock Exchange's market for listed securities, or (b) to trading on the Alternative Investment Market of the London Stock Exchange or (c) to listing on a "recognized stock exchange" within the meaning of sections 1005(3) and 1005(4) of the Income Tax Act 2007 (ITA 2007) (which includes Nasdaq); (ii) a sale of 90% of the business or undertakings of the Company; and (iii) the acquisition by a third party of 90% or more of the issued share capital of the Company.

Leaver Provision:. If an option holder is subject to a formal disciplinary procedure, their option will lapse. In other instances of cessation of employment, the board will determine, within 90 days, whether to permit exercise or lapse of the Options belonging to that leaver.

Lapse of Option:. If not otherwise lapsed in accordance with the provisions of the 2014 Share Option Scheme, an option granted under the 2014 Share Option Scheme shall lapse on the day before the 10th anniversary of the grant of the option.

If an option holder dies, his or her personal representatives may exercise his or her options within a period ending on the earlier of (i) the expiry of 12 months after the date of death, and (ii) the day before the 10th anniversary of the grant of the option, only to the extent that any exercise conditions have been met (unless waived by the board). Failing such exercise, the deceased option holder's options shall lapse.

Adjustment of Award:. In the event that there is any variation in our share capital that affects the value of the options, our board of directors will make such adjustments to the number and exercise price of shares subject to each option or the option price as our board of directors considers appropriate in accordance with the rules of the 2014 Share Option Scheme.

Transferability: No options under the 2014 Share Option Scheme may be transferred, assigned or have any created over them and will lapse immediately upon an attempt to do so (other than an assignment to personal representatives upon death).

Amendment: Our board of directors may, amend the 2014 Share Option Scheme, provided that any amendment shall not, without the consent of an option holder, materially increase his or her liabilities or materially decrease the value of his or her subsisting rights under an outstanding option.

With effect from closing of this offering, the rules of the 2014 Share Option Scheme shall be amended such that any amendment to the scheme shall take effect at the discretion of the board of directors, except as otherwise required by applicable laws or the rules of any securities exchange on which our securities are listed.

2021 Share Option Scheme

Conditional on and effective prior to completion of this offering, we will have adopted a new share option scheme, or the 2021 Share Option Scheme, for the purpose granting share options to incentivize our directors, employees and consultants and the directors, employees and consultants of our subsidiary companies. The 2021 Share Option Scheme incorporates a sub-plan for option holders subject to taxation in the United States, or the 2021 U.S. Sub-Plan, to provide for the grant of U.S. qualified incentive options.

The 2021 Share Option Scheme permits grants of (i) enterprise management incentive options which are potentially tax-advantaged in the United Kingdom under the terms of Schedule 5 to ITEPA 2003 (subject to the relevant conditions being met by the company and the grantee); (ii) "unapproved" options (which do not attract tax advantages as they have not been "approved" by the U.K. tax authority, HMRC); and (iii) incentive stock options ("ISO") and non-qualified stock options under the 2021 U.S. Sub-Plan for US resident grantees.

The board of directors may grant such awards under the 2021 Share Option Scheme as it may determine at its discretion, provided always that adequate share capital is available to enable the exercise of all options so granted.

At the consummation of offering, we expect that options will have been granted to purchase 4,166,411 ordinary shares at an exercise price equal to the IPO issue price, under the 2021 Share Option Scheme of which 1,493,544 shall have vested.

Class of Share:. An option granted under the 2021 Share Option Scheme entitles the option holder, subject to the satisfaction, waiver or acceleration of specific exercise conditions, to subscribe for ordinary shares.

Exercise Conditions: Options granted under our 2021 Share Option Scheme may be granted subject to vesting schedules, performance targets or other conditions which must be satisfied or waived before exercise. Exercise conditions may be removed or varied by our board of directors, provided that any variation shall be (in the reasonable opinion of our board of directors) no more difficult to satisfy than the original exercise condition. The board may also at its discretion impose a further "lock-in period", following vesting, during which options cannot be exercised.

Each option grant is documented through an option certificate. Upon the occurrence of a takeover or certain similar corporate events, the option will be exercisable to the extent vested, though the board will have authority to permit an immediate vesting immediately prior to the relevant event.

Leaver Provisions: If an option holder ceases to be an employee or director of the company or a subsidiary and is a good leaver (broadly an option holder who leaves other than for cause, as defined in the plan rules), the option holder may exercise his options during the three years after the date of such cessation of employment/directorship (unless the board varies this period) only to the extent vested and that any exercise conditions have been met at the time of such cessation of employment/directorship, although the board may exercise its discretion to accelerate vesting and/or waive any exercise conditions. Any part of an option which is not exercisable shall lapse. If EMI Options or ISO options are retained for more than 90 days following a cessation of employment, they will cease to qualify for relevant tax benefits. Any option holder who leaves and is not a good leaver will lose their options entirely, regardless of vesting.

Lapse of Options: If not otherwise lapsed in accordance with the provisions of the 2021 Share Option Scheme, an option granted under the 2021 Share Option Scheme shall lapse on the 10th anniversary of the grant of the option. Option shares subject to lapsed option grants will be available to be re-granted under new option grants. If an option holder dies, his or her personal representatives may exercise his or her options within a period ending on the earlier of (i) the expiry of 12 months after the date of death, and (ii) the 10th anniversary of the grant of the option, only to the extent vested at the time of death (unless the board agrees to waive any exercise conditions or accelerate vesting). Failing such exercise, the deceased option holder's options shall lapse.

Adjustment of Award: In the event that there is any variation in our share capital that affects the value of the options, our board of directors will make such adjustments to the number and exercise price of shares subject to each option or the option price as our board of directors considers appropriate in accordance with the rules of the 2021 Share Option Scheme.

Takeovers and Corporate Events: If (a) any person or group of persons acting in concert obtains control (meaning more than 50% of the voting rights) of the company, (b) there is a disposal of all or substantially all of the assets of the group to a third party; or (c) the Company is wound up, an option holder may at any time exercise his or her vested options or any part thereof which has not lapsed within a specified period and the board may exercise its discretion to accelerate vesting or waive exercise conditions. To the extent they are not exercised, such options will lapse at the end of the specified period for exercise.

Transferability: No options under the 2021 Share Option Scheme may be transferred, assigned or have any created over them (other than in the case of an assignment to personal representatives upon death) and will lapse immediately upon an attempt to do so.

Amendment: Our board of directors may amend the 2021 Share Option Scheme in non-material ways, provided that any amendment shall not, without the consent of an option holder, materially increase his or her liabilities or materially decrease the value of his or her subsisting rights under an outstanding option. Material changes to the 2021 Share Option Scheme will require shareholder approval.

2021 U.S. Sub-Plan

The 2021 U.S. Sub-Plan applies to grantees that are subject to U.S. federal income tax and governs only those grants that are intended to be incentive stock options ("ISO") pursuant to Section 422 of the Internal Revenue Code. All options granted to U.S persons will be granted at not less than 100% of the fair market value of an underlying shares on the date of grant, and certain incentive stock options will have to be granted at 110% of fair market value of an underlying share on the date of grant. All stock options issued to U.S persons that are not exercised within 10 years from the grant date expire, provided that incentive stock options granted to a person holding more than 10% of our voting power will expire within five years from the date of grant. With respect to grantees that are subject to U.S. federal income tax, the 2021 Share Option Scheme, the 2021 U.S. Sub-Plan and all options issued thereunder are intended to comply with, or be exempt from, Section 409A of the Internal Revenue Code, and they are to be interpreted accordingly. In the event that any option is subject to Section 409A of the Internal Revenue Code, our board of directors, in their sole discretion, may amend the 2021 Share Option Scheme, the 2021 U.S. Sub-Plan and any option issued thereunder, adopt policies and procedures or take such other actions as our board of directors deems appropriate, to exempt the 2021 Share Option Scheme, the 2021 U.S. Sub-Plan or any option from Section 409A of the Internal Revenue Code, to preserve the intended tax treatment of such option or comply with the requirements of Section 409A of the Internal Revenue Code.

2021 Company Share Option Plan (2021 CSOP)

The Board of Directors expect to approve, conditional on and effective immediately prior to completion of this offering, a share option scheme, or the 2021 CSOP, for the purpose of enabling the grant of share options to incentivize our employees and employees of our subsidiary companies.

The 2021 CSOP is an option scheme that provides for the grant of options which affords some tax advantages to the option holder who are UK taxpayers, where the tax benefits afforded under the EMI option scheme rules no longer qualify. While the CSOP scheme is broadly similar in terms of its tax advantages it is more limited in terms of the quantum of the award (EMI options may be granted over shares worth up to £250,000 at the date of grant and for CSOP that number is £30,000). Grants under the CSOP would only be applicable to UK taxpayers.

Key points:

- CSOP options must only be granted to full-time directors or employees;
- each recipient can receive options to buy company shares worth up to £30,000 (as valued (ignoring any restrictions) at the date of grant or such earlier agreed time);
- on grant of the CSOP option, there is generally no liability to income tax or NICs (employee's and employer's) unless the exercise price (together with any grant price) is less than the market value of the shares at the date of grant;
- no income tax or NICs will be payable on the exercise of a tax advantaged CSOP option if the CSOP option is exercised whilst the scheme is still a tax advantaged scheme and the option is exercised;
  - on or before the tenth anniversary of the date of grant of the option, and either;
  - on or after the third anniversary of the date of grant; or
  - pursuant to the terms of the CSOP, prior to the third anniversary of the date of grant and, broadly, within six months of certain takeover events and/or certain "good leaver" events;

- there is no capital gains tax (CGT) payable on the grant or exercise of a qualifying CSOP option. On sale of the option shares, CGT may be payable on any gain;
- the CSOP scheme rules include the concept of a vesting requirement before they can be exercised and CSOP option awards are generally structured so that they do not become exercisable/vest earlier than three years from grant so that they provide the preferential tax treatment to the option holder (the board could provide for a longer vesting period if it wished, but not shorter);
- option awards which have not vested on an option holder's cessation of employment lapse;

  a restricted class of "good leavers" (those who leave for involuntary reasons) may exercise their vested options if they leave within the first three years after grant. Non-good leavers will not be permitted to exercise options in the first three years after grant and their options shall lapse. After the first three years, the same rules for leavers apply as for the 2021 Share Option Scheme; and
- the option holder indemnifies the Company in relation to Tax Liabilities (as defined in the CSOP rules) should they arise to any group company.

To qualify for beneficial tax treatment under the EMI and CSOP codes, the exercise price of options must not be less than the market value of the underlying shares. The Company is seeking approval from HMRC that, when granting EMI and/or CSOP options, the closing price on the immediately preceding business day can be relied on as market value for these purposes.

Insurance and Indemnification

To the extent permitted by the Companies Act 2006 (the Companies Act), we are empowered to indemnify our directors against any liability they incur by reason of their directorship. We maintain directors' and officers' insurance to insure such persons against certain liabilities. We expect to enter into a deed of indemnity with each of our directors and members of our senior management prior to the completion of this offering.

Insofar as indemnification of liabilities arising under the Securities Act may be permitted to our board of directors, senior management, or persons controlling us pursuant to the foregoing provisions, we have been informed that, in the opinion of the SEC, such indemnification is against public policy as expressed in the Securities Act and is therefore unenforceable.

RELATED PARTY TRANSACTIONS

The following is a description of related party transactions we have entered into since January 1, 2019, with any members of our board of directors, executive officers or the holders of more than 5% of our share capital.

During the nine-month period ended September 30, 2021 and 2020, the Group made purchases of cell culture media from Cell Science & Technology Institute, Inc., a company in which significant shareholder NIPRO Corporation (Osaka, Japan), has a significant interest, in the amount of £41,482 and £30,722 respectively.

During the nine-month period ended September 30, 2021 and 2020, the Group used consultancy services from Theraldia Consulting Limited a company in which Dr Alan Clark, a former director, has a significant interest in the amount of £0 and £22,621 respectively.

During the years ended December 31, 2019 and 2020, the Group made purchases of cell culture media from Cell Science & Technology Institute, Inc., a company in which significant shareholder of the Company, NIPRO Corporation (Osaka, Japan), has a significant interest in the amount of £79,826 and £30,775, respectively.

During the years ended December 31, 2019 and 2020, the Group used consultancy services from Theraldia Consulting Limited a company in which Dr Alan Clark has a significant interest in the amount of £13,068 and £22,621 respectively.

During the years ended December 31, 2019 and 2020, the Group used consultancy services from Dr Alan Clark to the amount of £31,784 and £0, respectively.

During the year ended December 31, 2020, the executive directors agreed to defer a proportion of their compensation. Repayment of deferred compensation will be made on receipt of a certain minimum level of funding (which will be exceeded upon the completion of this offering), and payment will be made as soon as working capital adequacy considerations reasonably permit. equally in monthly amounts over twelve months. As at December 31, 2020 the balance outstanding to executive directors totaled £253,338. As at September 30, 2021 the balance outstanding to executive directors totaled £590,532.

Bryan Kobel represents 105,060 shares of the Company owned by TCB-AFOS I LLC over which Mr. Kobel has voting and dispositive authority as the manager, but as to which Mr. Kobel disclaims any other beneficial ownership interest as he is not a member of the LLC.

Subscriptions in our A Ordinary shares

On August 25, 2020, we issued and sold 348,830 A ordinary shares to Scottish Enterprise, an agency of the Scottish government and a shareholder with more than 5% of our share capital.

On April 30, 2021, we issued and sold 23,260 A ordinary shares to Renaissance Capital Partners Limited, a shareholder with more than 5% of our share capital.

Immediately prior to the IPO, under the terms of our Articles of Association to certain shareholders who, prior to the IPO, owned certain ordinary share which carried the right, are eligible to subscribe at nominal value for a certain number of additional shares, calculated by reference to the pre-money valuation of the IPO. As part of this issue Scottish Enterprise are eligible to acquire an additional 248,290 ordinary shares and Renaissance Capital Partners Limited are eligible to acquire an additional 16,560 ordinary shares.

Issuance of Convertible Loan Notes

On April 30, 2021, we issued Convertible Loan Notes with a face value of $2,768,000 for a cash subscription value of $1,384,000 to Renaissance Capital Partners Limited, a shareholder with more than 5% of our share capital. On June 24, 2021, we issued Convertible Loan Notes with a face value of $1,395,700 for a cash subscription value of $697,850 to Renaissance Capital Partners Limited, a shareholder with more than 5% of our share capital. On July 28, 2021, we issued Convertible Loan Notes with a face value of $2,754,928 for a cash subscription value of $1,377,464 to Renaissance Capital Partners Limited, a shareholder with more than 5% of our share capital. On December 24, 2021, we issued Convertible Loan Notes with a face value of $1,620,000 for a cash subscription value of $750,000 to Renaissance Capital Partners Limited, a shareholder with more than 5% of our share capital.

Agreements with Our Senior Management and Directors

We have entered into service agreements with the members of our senior management. See "Compensation of Senior Management and Directors". These agreements contain customary provisions and representations, including confidentiality, non-competition, non-solicitation and inventions assignment undertakings by the members of our senior management. However, the enforceability of the non-competition provisions may be limited under applicable law.

Agreements with Our Senior Management and Directors

We have entered into service agreements with the members of our senior management. These agreements contain customary provisions and representations, including confidentiality, notice period (typically 6-12 months), non-competition, non-solicitation and inventions assignment undertakings by the members of our senior management. However, the enforceability of the non-competition provisions may be limited under applicable law. Effective upon the completion of this offering, we intend to replace these agreements with new employment arrangements and equity related awards, which will include the aforementioned provisions amended, as appropriate to be more appropriate to those of senior management and directors of a listed public company.

Indemnification Agreements

We will enter into a deed of indemnity with each of our directors and members of our senior management prior to the completion of this offering. Our Articles of Association to be adopted in connection with this offering will also provide that we will indemnify our directors and members of our senior management to the fullest extent permitted by law.

Related Party Transactions Policy

Prior to the completion of this offering, we intend to adopt a related party transaction policy, which will be administered by the audit committee of the board of directors.

BENEFICIAL OWNERSHIP OF PRINCIPAL SHAREHOLDERS AND MANAGEMENT

The following table sets forth information regarding beneficial ownership of our ordinary shares, including those represented by the ADSs and treating all classes as if they were one class for this purpose as they all carry equal voting rights, as of the date of this prospectus by:

- each person, or group of affiliated persons, known to us to be the beneficial owner of more than 5% of our issued and outstanding ordinary shares;
- each of our directors (and nominee directors) and executive officers; and
- all of the foregoing as a group.

Beneficial ownership is determined in accordance with the rules of the SEC, and includes voting or investment power with respect to ordinary shares, including those represented by ADSs. Ordinary shares issuable under share options or warrants that are exercisable within 60 days after January 31, 2022, the anticipated effective date of the registration statement of which this prospectus is a part, are deemed issued and outstanding for the purpose of computing the percentage ownership of the person holding the options or warrants but are not deemed issued and outstanding for the purpose of computing the percentage ownership of any other person. Percentage of shares beneficially owned before this offering is based on 19,547,600 ordinary shares issued and outstanding as of January 28, 2022 by reference to our share register and excluding up to 1,234,646 ordinary shares issuable, immediately prior to the IPO, under the terms of our Articles of Association to certain shareholders who, prior to the IPO, owned certain ordinary share which carried the right, to subscribe at nominal value for a certain number of additional shares, calculated by reference to the pre-money valuation of the IPO, which provides us with information regarding the registered holders of our ordinary shares but generally provides limited, or no, information regarding the ultimate beneficial owners of such ordinary shares. Based on our share register and other information made available to us by certain of our shareholders, as of January 28, 2022, 105,060 ordinary shares, representing 0.54% of our issued and outstanding ordinary shares, were held by one U.S. record holder. The number of ordinary shares deemed issued and outstanding after this offering is based on ordinary shares issued and outstanding after the company reorganization, which includes the ADSs representing ordinary shares that are offered hereby and those ordinary shares issued concurrently in respect of the conversion of Convertible Loan Notes, but it assumes no exercise of the underwriter's over-allotment option for ADSs and Warrants.

We are not controlled by another corporation, by any foreign government or by any natural or legal persons except as set forth herein, and here are no arrangements known to us which would result in a change in control of our company at a subsequent date. Except as indicated in footnotes to this table, we believe that the shareholders named in this table have sole voting and investment power with respect to all shares shown to be beneficially owned by them, based on information provided to us by such shareholders.

Unless otherwise noted below, each beneficial owner's address is: c/o Maxim 1, 2 Parklands Way, Holytown, Motherwell, ML1 4WR, Scotland, United Kingdom.

	No. of Ordinary Shares Beneficially Owned Prior to this Offering	Percentage Owned Before this Offering	Percentage Owned After this Offering
Holders of more than 5% of our voting securities:			
Scottish Enterprise (1)	4,184,390	21.4%	15.0%
MEDINET Co., Ltd (2)	3,675,000	18.8%	13.2%
NIPRO Corporation (3)	1,930,500	9.9%	6.9%
Dr. Michael Leek (4) (*)	2,246,463	10.6%	7.6%
Angela Scott (5)	2,055,333	9.9%	7.0%
Neil Fell (6)	1,226,460	6.3%	4.4%
Athol Haas (7)	1,225,000	6.3%	4.4%
Entities affiliated with Renaissance Capital Partners Limited (8)	1,009,140	5.2%	18.6%
Directors and executive officers who are not 5% holders:			
Bryan Kobel (9) (*)	873,488	3.5%	3.0%
Martin Thorp (10) (*)	506,723	2.5%	1.8%
Dr. Mark Bonyhadi (11) (*)	-	-	0.0%
James Culverwell (12) (*)	-	-	0.0%
Arlene Morris (13) (*)	-	-	0.0%
Edward Niemczyk (14) (*)	-	-	0.0%
All directors and officers as a group (15)	5,682,007	22.0%	19.5%
Total			

(*) Indicates a director or future director of TC BioPharm (Holdings) plc.

(1) The address of Scottish Enterprise, an agency of the Scottish government, is Atrium Court, 50 Waterloo Street, Glasgow, G2 6HQ. The board of directors of the stockholder exercises the voting and dispositive authority over the shares held by this stockholder.

(2) The address of Medinet Co., Ltd. is TRC Center Bldg. 9F, 6-1-1 Heiwajima, Ota-ku, Tokyo, 143-0006 JAPAN. The board of directors of the stockholder exercises the voting and dispositive authority over the shares held by this stockholder.

(3) The address of NIPRO Corporation is 3-9-3, Honjo-Nishi, Kita-ku, Osaka 531-8510, Japan. The board of directors of the stockholder exercises the voting and dispositive authority over the shares held by this stockholder.

(4) Consists of (a) 664,220 ordinary shares and (b) to be granted upon consummation of this offering options to purchase 1,582,243 ordinary shares that are or will be immediately exercisable within 60 days of the consummation of the offering, but does not include 582,374 ordinary shares that may be acquired under outstanding options and/or warrants after 60 days from the consummation of the offering. Ms Scott is the spouse of Dr. Michael Leek, however, her financial affairs historically have been handled separately from those of Dr. Leek, and therefore her shareholding is not combined for purposes of this table.

(5) Consists of (a) 741,310 ordinary shares and (b) to be granted upon consummation of this offering options to purchase 1,314,023 ordinary shares that are or will be immediately exercisable within 60 days of the consummation of the offering, but does not include 582,374 ordinary shares that may be acquired under outstanding options and/or warrants after 60 days from the consummation of the offering. Dr. Leek, is the spouse of Ms. Angela Scott, however, his financial affairs historically have been handled separately from those of Ms. Scott, and therefore his shareholding is not combined for purposes of this table.

(6) The address of Neil Fell is c/o Maxim 1, 2 Parklands Way, Holytown, Motherwell, ML1 4WR, Scotland, United Kingdom

(7) The address of Athol Haas is c/o Maxim 1, 2 Parklands Way, Holytown, Motherwell, ML1 4WR, Scotland, United Kingdom.

(8) Two directors of Renaissance Capital Partners Limited (Mark Randall and Kenneth Randall) are also shareholders in TC BioPharm (Holdings) plc and as a result for the purposes of this table Renaissance Capital Partners Limited is deemed to be the beneficial owner of those securities. The beneficial interest of the affiliated entities consists of (a) 1,009,140 ordinary shares, and (b) 2,060,206 ordinary shares issued on conversion of Convertible Loan Notes following completion of this offering.

(9) Consists of (a) Nil ordinary shares and (b) to be granted upon consummation of this offering options to purchase 873,488 ordinary shares that are or will be immediately exercisable within 60 days of the consummation of the offering, but does not include 582,374 ordinary shares that may be acquired under outstanding options and/or warrants after 60 days from the consummation of the offering. Bryan Kobel represents 105,060 shares of the Company owned by TCB-AFOS I LLC over which Mr. Kobel has voting and dispositive authority as the manager, but as to which Mr. Kobel disclaims any other beneficial ownership interest as he is not a member of the LLC.

(10) Consists of (a) Nil ordinary shares and (b) to be granted upon consummation of this offering options to purchase 506,723 ordinary shares that are or will be immediately exercisable within 60 days of the consummation of the offering. Does not include 582,374 ordinary shares that may be acquired under outstanding options and warrants after 60 days from the consummation of the offering.

(11) Consists of (a) Nil ordinary shares and (b) to be granted upon consummation of this offering options to purchase Nil ordinary shares that are or will be immediately exercisable within 60 days of the consummation of the offering. Does not include 22,500 ordinary shares that may be acquired under outstanding options and warrants after 60 days from the consummation of the offering.

(12) Consists of (a) Nil ordinary shares and (b) to be granted upon consummation of this offering options to purchase Nil ordinary shares that are or will be immediately exercisable within 60 days of the consummation of the offering. Does not include 22,500 ordinary shares that may be acquired under outstanding options and warrants after 60 days from the consummation of the offering.

(13) Consists of (a) Nil ordinary shares and (b) to be granted upon consummation of this offering options to purchase Nil ordinary shares that are or will be immediately exercisable within 60 days of the consummation of the offering. Does not include 22,500 ordinary shares that may be acquired under outstanding options and warrants after 60 days from the consummation of the offering.

(14) Consists of (a) Nil ordinary shares and (b) to be granted upon consummation of this offering options to purchase Nil ordinary shares that are or will be immediately exercisable within 60 days of the consummation of the offering. Does not include 22,500 ordinary shares that may be acquired under outstanding options and warrants after 60 days from the consummation of the offering.

(15) Consists of (a) 1,405,530 ordinary shares and (b) to be granted upon consummation of this offering options to purchase 4,276,924 ordinary shares that are or will be immediately exercisable within 60 days of the consummation of the offering, but does not include 2,420,090 ordinary shares that may be acquired under outstanding options and warrants after 60 days from the consummation of the offering.

Record Holders

Based upon a review of the corporate information available to us, as of January 28, 2022, there were a total of 94 holders of record of our shares.

Transfer Agent and Registrar

Our share and warrant register will be maintained by Computershare Investor Services plc upon the consummation of this offering. The share and warrant register reflects only the recorded holders of our ordinary shares and warrants. Holders of the ADSs will not be treated as our shareholders and their names will therefore not be entered in our share register. The depositary, the custodian or their nominees will be the holder of the ordinary shares underlying the ADSs. Holders of the ADSs have a right to receive the ordinary shares underlying their ADSs. For discussion on the ADSs and ADS holder rights, see “Description of American Depositary Shares and Warrants” in this prospectus.

Nasdaq Global Market Listing

We have applied to list our ADSs and Warrants on The Nasdaq Global Market under the trading symbols “TCBP” and “TCBPW” No assurance can be given that our application will be accepted.

DESCRIPTION OF SHARE CAPITAL AND ARTICLES OF ASSOCIATION

The following describes our issued share capital, summarizes the material provisions of our articles of association and highlights certain differences in corporate law in Scotland and the United States of TC BioPharm (Holdings) plc as of the date of this prospectus. Please note that this summary is not intended to be exhaustive. For further information, please refer to the full version of our articles of association, which are included as an exhibit to the registration statement of which this prospectus is a part.

TC BioPharm (Holdings) plc will be a holding company that has not conducted any operations prior to this offering other than activities incidental to its formation, the corporate reorganization and this offering. However, it will be the parent company of our primary operating subsidiary, TC BioPharm Limited.

Pursuant to the terms of our corporate reorganization, TC BioPharm (Holdings) Limited acquired the entire issued share capital of TC BioPharm Limited and re-registered as a public limited company with the name TC BioPharm (Holdings) plc. See “Corporate Reorganization” for more information.

We are registered with the Registrar of Companies in Scotland under number SC713098, and our registered office is at Maxim 1, 2 Parklands Way, Holytown, Motherwell, ML1 4WR, Scotland, United Kingdom.

In the corporate reorganization, certain ordinary and special resolutions will be required to be passed by our shareholders prior to the completion of this offering. These will include resolutions for the:

- adoption of new articles of association of TC BioPharm (Holdings) plc that will become effective upon the completion of this offering. See “—Post-IPO Articles of Association” and;
- general authorization of our directors for purposes of Section 551 of the Companies Act to allot shares in the company and grant rights to subscribe for or convert any securities into shares in the company up to a maximum aggregate nominal amount of £2,000,000 for a period of five years; and
- empowering of our directors pursuant to Section 570 of Companies Act to issue equity securities for cash pursuant to the Section 551 authority referred to above as if the statutory preemption rights under Section 561(1) of the Companies Act did not apply to such allotments.

Share Capital

As of September 30, 2021 and December 16, 2021, TC BioPharm Limited had, prior to the 10 for 1 forward share split, authorized share capital of 1,781,301 Ordinary shares of £1 each and 173,458 A Ordinary shares of £0.001 each all of which were issued fully paid and outstanding.

On December 17, 2021, all shareholders in TC BioPharm Limited and holders of convertible loan notes in TC BioPharm Limited exchanged their shares and convertible loan notes for the same number and classes of newly issued shares and/or convertible loan notes in TC BioPharm (Holdings) Limited and, as a result, TC BioPharm Limited became a wholly owned subsidiary of TC BioPharm (Holdings) Limited. The issued share capital of TC BioPharm (Holdings) Limited is identical to the issued share capital of TC BioPharm Limited, other than for an extra one ordinary share in TC BioPharm (Holdings) Limited, which was issued, as required, upon incorporation.

On December 17, 2021, TC BioPharm (Holdings) Limited carried out a 10 for 1 split of each of the classes of its share capital. The nominal value of all shares in TC BioPharm (Holdings) Limited was reduced from £0.10 per share to £0.01 per share.

On December 30, 2021 the holders of options to subscribe for shares in TC BioPharm Limited exchanged their options for equivalent options to subscribe for shares in TC BioPharm (Holdings) Limited.

Following the corporate reorganization steps outlined above, on January 10, 2022, TC BioPharm (Holdings) Limited re-registered as a public limited company and was renamed TC BioPharm (Holdings) plc and, at or prior to the completion of the offering, the holders of the A Ordinary shares will then convert their shares on a one-for-one basis for ordinary shares, resulting in only one class of ordinary share in issue at the closing of the offering. Additionally, outstanding the existing share options and rights and convertible securities will be amended such that they are exercisable or convertible into the ordinary shares of TC BioPharm (Holdings) plc.

Immediately prior to completion the Company will issue, in line with the Articles of Association, up to 1,234,646 ordinary shares issuable, immediately prior to the IPO, under the terms of our Articles of Association to certain shareholders who, prior to the IPO, owned certain ordinary share which carried the right, to subscribe at nominal value for a certain number of additional shares, calculated by reference to the pre-money valuation of the IPO.

At the effective date of the offering, after giving effect to the issuance of 1,234,646 ordinary shares noted above and following the completion of the corporate reorganization described above, the Company will have 20,782,246 ordinary shares of £0.01 each all of which will be issued, fully paid and outstanding. In addition, the Company will have 5,329,230 ordinary shares issuable upon the exercise of options outstanding under our 2014 Share Option Scheme and, effective at the date of this offering, 4,166,411 issuable upon the exercise of options outstanding under our 2021 Share Option Scheme, as more fully described in the section titled “Management—Equity Incentive Plans”. The Company also have issued Convertible Loan Notes with a face value of $17.7 million, further details on the conversion of this instrument are included in “The Offering” section of the prospectus.

Ordinary Shares

In accordance with our Articles of Association to be in effect upon the completion of this offering, the following summarizes the rights of holders of our ordinary shares:

- each holder of our ordinary shares is entitled to one vote per ordinary share on all matters to be voted on by shareholders at our general meetings;
- the holders of the ordinary shares shall be entitled to receive notice of, attend, speak and vote at our general meetings; and
- holders of our ordinary shares are entitled to receive such dividends as are recommended by our directors and declared by our shareholders.

Holders of the ADSs will not have the above-described rights unless they withdraw their ordinary shares from being represented by the ADSs.

Current Registered Shares

Companies are required by the Companies Act to keep a register of shareholders. Under Scottish law, the ordinary shares are deemed to be issued when the name of the shareholder is entered in our register of members. The register of members therefore is prima facie evidence of the identity of our shareholders, and the shares that they hold. The register of members generally provides limited, or no, information regarding the ultimate beneficial owners of our ordinary shares. Our register of members is maintained by our registrar, Computershare Investor Services plc.

Holders of the ADSs will not be treated as our shareholders and their names will therefore not be entered in our share register. The depositary, the custodian or their nominees will be the holder of the ordinary shares underlying the ADSs. Holders of the ADSs have a right to receive the ordinary shares underlying their ADSs.

Under the Companies Act, a company must enter an allotment of shares in the register of members as soon as practicable and in any event within two months of the allotment. Companies also are required by the Companies Act to register a transfer of shares (or give the transferee notice of and reasons for refusal as the transferee may reasonably request) as soon as practicable and in any event within two months of receiving notice of the transfer.

We, any of our shareholders or any other affected person may apply to the court for rectification of the register of members if:

- the name of any person, without sufficient cause, is wrongly entered in or omitted from our register of members; or
- there is a default or unnecessary delay in entering on the register the fact of any person having ceased to be a member or on which we have a lien, provided that such delay does not prevent dealings in the shares taking place on an open and proper basis.

Current Preemptive Rights

Scottish law generally provides shareholders with statutory preemptive rights when new shares are issued for cash; however, it is possible for the articles of association, or shareholders by way of a special resolution at a general meeting, to disapply preemptive rights. Such a disapplication of preemptive rights may be for a maximum period of up to five years from the date of adoption of the articles of association, if the disapplication is contained in the articles of association, or from the date of the shareholder special resolution, if the disapplication is by shareholder special resolution. In either case, this disapplication would need to be renewed by our shareholders upon its expiration (i.e., at least every five years). On [January, 2022], our shareholders approved the disapplication of preemptive rights for a period of five years from the date of approval, which disapplication will need to be renewed upon expiration (i.e., at least every five years) to remain effective, but may be sought more frequently for additional five-year terms (or any shorter period). On [January,] 2022, our shareholders approved the disapplication of preemptive rights for the allotment of ordinary shares in connection with this offering. The above disapplication applies to the ordinary shares underlying the ADSs.

Current Right to Purchase of Own Shares

Scottish law permits a public limited company to purchase its own shares out of the distributable profits of the company or the proceeds of a fresh issue of shares made for the purpose of financing the purchase, subject to complying with procedural requirements under the Companies Act and provided that its articles of association do not prohibit it from doing so. Our Articles of Association, a summary of which is provided below, do not prohibit us from purchasing our own shares. A public limited company must not purchase its own shares if, as a result of the purchase, there would no longer be any issued shares of the company other than redeemable shares or shares held as treasury shares.

Any such purchase will be either a "market purchase" or "off market purchase," each as defined in the Companies Act. A "market purchase" is a purchase made on a "recognized investment exchange" (other than an overseas exchange) as defined in the UK Financial Services and Markets Act 2000, or FSMA. A purchase is "off-market" if the shares either: (a) are purchased otherwise than on a recognized investment exchange, or (b) are purchased on a recognized investment exchange but are not subject to a marketing arrangement on the exchange. Both "market purchases" and "off market purchases" require prior shareholder approval by way of a special resolution. In the case of an "off market purchase," a company's shareholders, other than the shareholders from whom the company is purchasing shares, must approve the terms of the contract to purchase shares and in the case of a "market purchase," the shareholders must approve the maximum number of shares that can be purchased and the maximum and minimum prices to be paid by the company.

The Nasdaq Global Market is an "overseas exchange" for the purposes of the Companies Act and does not fall within the definition of a "recognized investment exchange" for the purposes of FSMA and any purchase made by us would need to comply with the procedural requirements under the Companies Act that regulate "off market purchases."

Current Rules for Distributions and Dividends

Under the Companies Act, before a company can lawfully make a distribution or dividend, it must ensure that it has sufficient distributable reserves, as determined on a non-consolidated basis. The basic rule is that a company's profits available for the purpose of making a distribution are its accumulated, realized profits, so far as not previously utilized by distribution or capitalization, less its accumulated, realized losses, so far as not previously written off in a reduction or reorganization of capital duly made. The requirement to have sufficient distributable reserves before a distribution or dividend can be paid applies to us and to each of our subsidiaries that has been incorporated under Scottish law.

Once we are a public company, it will not be sufficient that we have made a distributable profit for the purpose of making a distribution. An additional capital maintenance requirement will be imposed on us to ensure that the net worth of the company is at least equal to the amount of its capital. A public company can only make a distribution:

- if, at the time that the distribution is made, the amount of its net assets (that is, the total excess of assets over liabilities) is not less than the total of its called-up share capital and undistributable reserves; and
- if, and to the extent that, the distribution itself, at the time that it is made, does not reduce the amount of its net assets to less than that total.

Current Disclosure of Interest in Shares

Pursuant to Part 22 of the Companies Act, we are empowered, subject to the exemptions set out below or in the Act or our Articles of Association, by notice in writing to any person whom we know is, or have reasonable cause to believe may have been, interested in our shares, at the date that the notice is issued, or at any time during the three years immediately preceding that date, to disclose to us, within a reasonable time, particulars of that person's interest and, so far as is within his or her knowledge, particulars of any other interest that subsists or subsisted in those shares. The aforementioned exemptions apply to shares, including those represented by ADSs, acquired through a sale on Nasdaq, or to a transfer made pursuant to acceptance of a takeover offer for the Company or a transfer which is shown to the satisfaction of the Board to be made in consequence of a sale of the whole of the beneficial interest in the shares to a person who is unconnected with the shareholder and with any other person appearing to be interested in the shares.

Under our Articles of Association, subject to aforementioned exemptions, if a person defaults in supplying us with the required particulars in relation to the shares in question ('default shares'), within the prescribed period, our board of directors may by notice direct that:

- in respect of the default shares, the relevant shareholder shall not be entitled to attend or vote, either in person or by proxy, at any general meeting or of a general meeting of the holders of a class of shares or upon any poll or to exercise any right conferred by the default shares;
- where the default shares represent at least 0.25% of their class, (a) any dividend or other money payable in respect of the default shares shall be retained by us without liability to pay interest, and/or (b) no transfers by the relevant shareholder of any default shares may be registered, unless the shareholder himself or herself is not in default and the shareholder proves to the satisfaction of the board of directors that no person in default as regards to supplying such information is interested in any of the default shares; and/or
- any shares held by the relevant shareholder in uncertificated form shall be converted into certificated form.

Shareholders who hold in excess of 5% of our ordinary shares on a beneficial basis, in accordance with the rules and regulations of Section 13(d) of the Securities and Exchange Act of 1934, will be required to file Schedule 13D reports with the SEC and provide copies of the report to the company. These reports will not satisfy the provisions of the Companies Act.

Post-IPO Articles of Association

The Articles of Association to be in effect after this offering will be adopted by a special shareholder resolution prior to the date of this prospectus. A summary of the terms of the Articles of Association is set out below. The summary below is not a complete description of the terms of the Articles of Association, which will be filed as an exhibit to the registration statement of which this prospectus is a part.

The Articles of Association contain no specific restrictions on our purpose and therefore, by virtue of section 31(1) of the Companies Act, our purpose is unrestricted.

The Articles contain, among other things, provisions to the following effect:

Share Capital

Our share capital currently consists of ordinary shares. We may issue shares with such rights or restrictions as may be determined by ordinary resolution, including shares which are to be redeemed, or are liable to be redeemed at our option or the option of the holder of such shares.

Voting

The shareholders have the right to receive notice, in accordance with the Companies Act (generally 21 days), of, and to vote at, our general meetings. Each shareholder who is present in person (or, being a corporation, by representative) at a general meeting on a show of hands has one vote and, on a poll, every such holder who is present in person (or, being a corporation, by representative) or by proxy has one vote in respect of every share held by him. Generally, any resolution put to the vote of a general meeting shall be decided on a show of hands, although a poll may be demanded at the meeting on any resolution by the chairman, or by not less than five shareholders (present in person or by proxy) who are entitled to vote on the resolution, or by a shareholder or shareholders (present in person or by proxy) representing in aggregate not less than one-tenth of the total voting rights or sums paid up of all the shareholders having the right to vote on the resolution.

Variation of Rights

Whenever our share capital is divided into different classes of shares, the special rights attached to any class may be varied or abrogated either with the consent in writing of the holders of three-fourths in nominal value of the issued shares of that class or with the sanction of a special resolution (which requires a 75% vote) passed at a general meeting of the holders of the shares of that class, and may be so varied and abrogated while the company is a going concern.

Dividends

We may, subject to the provisions of the Companies Act and the Articles of Association, by ordinary resolution declare dividends to be paid to shareholders not exceeding the amount recommended by our board of directors. Subject to the provisions of the Companies Act, if, at the discretion of board of directors, our profits available for distribution justify such payments, the board of directors may pay interim dividends on any class of our share.

Any dividend unclaimed after a period of 12 years from the date such dividend was declared or became payable shall, if the board of directors' resolve, be forfeited and shall revert to us. No dividend or other moneys payable on or in respect of a share shall bear interest as against us.

Transfer of Ordinary Shares

Each member may transfer all or any of his shares which are in certificated form by means of an instrument of transfer in any usual form or in any other form which the board of directors may approve.

The board of directors may, in its absolute discretion, refuse to register a transfer of certificated shares unless:

(i) it is for a share which is fully paid up;

(ii) it is for a share upon which the company has no lien;

(iii) it is only for one class of share;

(iv) it is in favor of a single transferee or no more than four joint transferees;

(v) it is duly stamped or is duly certificated or otherwise shown to the satisfaction of the board of directors to be exempt from stamp duty; and

(vi) it is delivered for registration to the registered office of the company (or such other place as the board of directors may determine), accompanied (except in the case of a transfer by a person to whom the company is not required by law to issue a certificate and to whom a certificate has not been issued or in the case of a renunciation) by the certificate for the shares to which it relates and such other evidence as the board of directors may reasonably require to prove the title of the transferor (or person renouncing) and the due execution of the transfer or renunciation by him or, if the transfer or renunciation is executed by some other person on his behalf, the authority of that person to do so.

Our board of directors shall not refuse to register any transfer of partly paid shares in respect of which ADSs are admitted to Nasdaq on the grounds that they are partly paid shares in circumstances where such refusal would prevent dealings in such shares from taking place on an open and proper basis.

Each shareholder may transfer all or any of his shares which are in uncertificated form by means of a relevant system in such manner provided for, and subject as provided in, the uncertificated securities rules and the Nasdaq rules. No provision of the Articles applies in respect of an uncertificated share to the extent that it requires or contemplates the effecting of a transfer by an instrument in writing or the production of a certificate for the share to be transferred.

Allotment of Shares and Preemption Rights

Subject to the Companies Act and to any rights attached to existing shares, any share may be issued with or have attached to it such rights and restrictions as the company may by ordinary resolution determine, or if no ordinary resolution has been passed or so far as the resolution does not make specific provision, as the board of directors may determine (including shares which are to be redeemed, or are liable to be redeemed at the option of the company or the holder of such shares).

In accordance with section 551 of the Companies Act, the board of directors may be generally and unconditionally authorized to exercise all the powers of the company to allot shares up to an aggregate nominal amount equal to the amount stated in the relevant ordinary resolution authorizing such allotment. The authorities referred to above were included in the ordinary resolutions passed on [January], 2022 and remain in force at the date of this prospectus.

The provisions of section 561 of the Companies Act (which confer on shareholders rights of preemption in respect of the allotment of equity securities which are paid up in cash) apply to the company except to the extent disapplied by special resolution of the shareholders of the company. Such preemption rights have been disapplied by a special resolution passed on [January], 2022.

Alteration of Share Capital

The company may by ordinary resolution consolidate its share capital into shares of larger nominal value than its existing shares, or cancel any shares which, at the date of the ordinary resolution, have not been taken or agreed to be taken by any person and diminish the amount of its share capital by the nominal amount of shares so canceled or sub-divide its shares, or any of them, into shares of smaller nominal value.

The company may, in accordance with the Companies Act, reduce or cancel its share capital or any capital redemption reserve or share premium account in any manner and with and subject to any conditions, authorities and consents required by law.

Board of Directors

Unless otherwise determined by the company by ordinary resolution, the number of directors (other than any alternate directors) shall not be less than two and no more than 11.

Subject to the Articles of Association and the Companies Act, the company may by ordinary resolution appoint a person who is willing to act as a director and the board of directors shall have power at any time to appoint any person who is willing to act as a director, in both cases either to fill a vacancy or as an addition to the existing board of directors. In addition to any power of removal conferred by the Companies Acts, the Company may by special resolution, or by ordinary resolution of which special notice has been given in accordance with section 312 of the Act, remove a Director at any time (without prejudice to a claim for damages for breach of contract or otherwise) and a director shall be removed from office if all other directors so direct.

Subject to the provisions of the Articles of Association, the board of directors may regulate their proceedings as they deem appropriate. A director may, and the secretary at the request of a director shall, call a meeting of the directors. The minimum notice required to call a meeting of the board of directors shall be 7 days, unless such notice is waived by all directors.

The quorum for a meeting of the board of directors is three (including at least one non-executive director and one executive director),

The first chairman of the board shall be the person that holds the office of executive chairman of the Company on the date that the Articles were adopted, who is Dr Michael Leek, and in the event that he is unable to attend a meeting of the Board he shall be entitled to appoint another Director to act as chairman and if he does not the directors shall appoint a chairman for the meeting.

Questions and matters requiring resolution arising at a meeting shall be decided by a majority of votes of the participating directors, with each director having one vote. In the case of an equality of votes, the chairman will have a casting vote or second vote.

The directors may establish committees of the board and appoint chairpersons and members to such committees, all as it considers appropriate and at its discretion.

Directors shall be entitled to receive such compensation as the board shall determine for their services to the company as directors, and for any other service which they undertake for the company. The directors shall also be entitled to be paid all reasonable expenses properly incurred by them in connection with their attendance at meetings of shareholders or class meetings, board of director or committee meetings or otherwise in connection with the exercise of their powers and the discharge of their responsibilities in relation to the company.

The board of directors may, in accordance with the requirements in the Articles of Association, authorize any matter proposed to them by any director which would, if not authorized, involve a director breaching his duty under the Companies Act, to avoid conflicts of interests.

A director seeking authorization in respect of such conflict shall declare to the board of directors the nature and extent of his interest in a conflict as soon as is reasonably practicable. The director shall provide the board with such details of the matter as are necessary for the board to decide how to address the conflict together with such additional information as may be requested by the board.

Any authorization by the board of directors will be effective only if:

(i) to the extent permitted by the Companies Act, the matter in question shall have been proposed by any director for consideration in the same way that any other matter may be proposed to the directors under the provisions of the Articles;

(ii) any requirement as to the quorum for consideration of the relevant matter is met without counting the conflicted director and any other conflicted director; and

(iii) the matter is agreed to without the conflicted director, or any other interested director, voting; or would be agreed to if the conflicted director's and any other interested director's vote is not counted.

Subject to the provisions of the Companies Act, every director, secretary, or other officer of the company (other than an auditor) is entitled to be indemnified against all costs, charges, losses, damages, and liabilities incurred by him in the actual purported exercise or discharge of his duties or exercise of his powers or otherwise in relation to them.

General Meetings

The company must convene and hold an annual general meeting every year and within 6 months of the Companies accounting reference date (which is currently set at December 31), in accordance with the Companies Act. Under the Companies Act, an annual general meeting must be called by notice of at least 21 clear days.

No business shall be transacted at any general meeting unless a quorum is present when the meeting proceeds to business, but the absence of a quorum shall not preclude the choice or appointment of a chairman of the meeting which shall not be treated as part of the business of the meeting. Two shareholders present in person or by proxy and entitled to vote shall be a quorum for all purposes.

Borrowing Powers

Subject to the Articles of Association and the Companies Act, the board of directors may exercise all of the powers of the company to:

(a) borrow money;

(b) indemnify and guarantee;

(c) mortgage or charge;

(d) create and issue debentures and other securities; and

(e) give security either outright or as collateral security for any debt, liability or obligation of the company or of any third party.

Capitalization of profits

The directors may, if they are so authorized by an ordinary resolution of the shareholders, decide to capitalize any undivided profits of the company (whether or not they are available for distribution), or any sum standing to the credit of the company's share premium account or capital redemption reserve. The directors may also, subject to the aforementioned ordinary resolution, appropriate any sum which they so decide to capitalize to the persons who would have been entitled to it if it were distributed by way of dividend and in the same proportions.

Uncertificated Shares

Subject to the uncertificated securities rules, the board of directors may permit title to shares of any class to be issued or held otherwise than by a certificate and to be transferred by means of a "relevant system" (*e.g.* the depositary or custodian of the ADSs) without a certificate.

The board of directors may take such steps as it sees fit in relation to the evidencing of and transfer of title to uncertificated shares, any records relating to the holding of uncertificated shares and the conversion of uncertificated shares to certificated shares, or *vice versa.*

The company may by notice to the holder of an uncertificated share, require that share to be converted into certificated form.

The board of directors may take such other action that the board considers appropriate to achieve the sale, transfer, disposal, forfeiture, re-allotment or surrender of an uncertified share or otherwise to enforce a lien in respect of it.

Other Relevant United Kingdom Laws and Regulations

Shareholder protections found in provisions under the UK City Code on Takeovers and Mergers, or the Takeover Code, will not apply if the Company's place of central management and control is considered to be outside of the UK (or the Channel Islands or the Isle of Man).

The Takeover Code applies to all offers for companies which have their registered offices in the United Kingdom, the Channel Islands, or the Isle of Man if any of their equity share capital or other transferable securities carrying voting rights are admitted to trading on a UK regulated market or a UK multilateral trading facility or on any stock exchange in the Channel Islands or the Isle of Man.

The Takeover Code also applies to all offers for public companies and (in certain circumstances) private companies which have their registered offices in the United Kingdom, the Channel Islands or the Isle of Man which are considered by the Takeover Panel to have their place of central management and control in the United Kingdom, the Channel Islands or the Isle of Man (the "**residency test**"). The Company became subject to the Takeover Code as a UK resident, UK incorporated, public limited company on 10 January 2022 when the Company re-registered as a public limited company.

Upon closing of the offering the residency test for the purposes of the Takeover Code will no longer be satisfied as a majority of the Company's directors will be resident overseas. Therefore, shareholders of the Company will cease to be entitled to the benefit of the Takeover Code, including the rules regarding mandatory takeover bids (summarised below).

In the event that the residency test is satisfied at a point in the future the Takeover Code may apply to the Company in the future.

Mandatory Bid

Under the Takeover Code, where:

a. any person, together with persons acting in concert with such person, acquires, whether bya series of transactions over a period of time or not, an interest in shares which (taken together with shares in which such person is already interested, and in which persons acting in concert with such person are interested) carry 30% or more of the voting rights of a company; or

b. any person who, together with persons acting in concert with such person, is interested in shares which in the aggregate carry not less than 30% of the voting rights of a company but does not hold shares carrying more than 50% of such voting rights and such person, or any person acting in concert with such person, acquires an interest in any other shares which increases the percentage of shares carrying voting rights in which such person is interested;

such person shall, except in limited circumstances, be obliged to extend offers, on the basis set out in Rules 9.3, 9.4 and 9.5 of the Takeover Code, to the holders of any class of equity share capital, whether voting or non-voting, and also to the holders of any other class of transferable securities carrying voting rights. Offers for different classes of equity share capital must be comparable. the Takeover Panel should be consulted in advance in such cases.

(ii) an offer made under Rule 9 must, in respect of each class of share capital involved, be in cash or be accompanied by a cash alternative at not less than the highest price paid by the offeror or any person acting in concert with it for any interest in shares of that class during the 12 months prior to the announcement of that offer. The Panel should be consulted where there is more than one class of share capital involved.

(iii) under the Takeover Code, a "concert party" arises where persons acting together pursuant to an agreement or understanding (whether formal or informal and whether or not in writing) actively cooperate, through the acquisition by them of an interest in shares in a company, to obtain or consolidate control of the company. "Control" means holding, or aggregate holdings, of an interest in shares carrying 30% or more of the voting rights of the company, irrespective of whether the holding or holdings give de facto control.

Shareholders should note that the rules regarding mandatory takeover bids (summarised above) only apply to the Company when the Takeover Code applies.

Squeeze-out

(i) Under sections 979 to 982 of the Companies Act, if an offeror were to acquire, or unconditionally contract to acquire, not less than 90% in value of the ordinary shares of the company and 90% of the voting rights carried by the ordinary shares of the company, it could then compulsorily acquire the remaining 10%. It would do so by sending a notice to outstanding shareholders telling them that it will compulsorily acquire their shares, provided

that no such notice may be served after the end of: (a) the period of three months beginning with the day after the last day on which the offer can be accepted; or (b) if earlier, and the offer is not one to which section 943(1) of the Companies Act applies, the period of six months beginning with the date of the offer.

(ii) Six weeks following service of the notice, the offeror must send a copy of it to the company together with the consideration for the ordinary shares to which the notice relates, and an instrument of transfer executed on behalf of the outstanding shareholder(s) by a person appointed by the offeror.

(iii) The company will hold the consideration on trust for the outstanding shareholders.

Sell-out

(i) Sections 983 to 985 of the Companies Act also give minority shareholders in the company a right to be bought out in certain circumstances by an offeror who has made a takeover offer. If a takeover offer relating to all the ordinary shares of the company is made at any time before the end of the period within which the offer could be accepted and the offeror held or had agreed to acquire not less than 90% of the ordinary shares, any holder of shares to which the offer related who had not accepted the offer could by a written communication to the offeror require it to acquire those shares. The offeror is required to give any shareholder notice of his right to be bought out within one month of that right arising. The offeror may impose a time limit on the rights of minority shareholders to be bought out, but that period cannot end less than three months after the end of the acceptance period, or, if longer a period of three months from the date of the notice.

(ii) If a shareholder exercises his rights, the offeror is bound to acquire those shares on the terms of the offer or on such other terms as may be agreed.

Shareholder rights

Certain of the rights described above are only available to the holders of the ordinary shares, not to the holders of ADSs. For legal purposes, our shareholders are the persons who are registered as the owners of the legal title to the ordinary shares and whose names are recorded in our share register. If a person who holds ADSs wishes to exercise their rights a shareholders, they may be required to first take steps to withdraw their ADSs from the settlement system operated by the Depository Transfer Corporation, or DTC, and exchange their ADS for our ordinary shares thereby becoming the registered holder of the ordinary shares in our share register.

Differences in Corporate Law

The applicable provisions of the Companies Act differ from laws applicable to U.S. corporations and their shareholders. Set forth below is a summary of certain differences between the provisions of the Companies Act applicable to us and, for sake of comparison, the General Corporation Law of the State of Delaware relating to shareholders' rights and protections. This summary is not intended to be a complete discussion of the respective rights and it is qualified in its entirety by reference to Delaware law and the laws of Scotland.

	SCOTLAND	DELAWARE
Number of Directors	A public limited company must have at least two directors and the number of directors may be fixed by or in the manner provided in a company's articles of association.	A corporation must have at least one director and the number of directors shall be fixed by or in the manner provided in the bylaws.
Removal of Directors	Shareholders may remove a director without cause by an ordinary resolution (which is passed by a simple majority of those voting in person or by proxy at a general meeting) irrespective of any provisions of any service contract the director has with the company, provided 28 clear days' notice of the resolution has been given to the company and its shareholders. On receipt of notice of an intended resolution to remove a director, the company must forthwith send a copy of the notice to the director concerned. Certain other procedural requirements under the Companies Act must also be followed, such as allowing the director to make representations against his or her removal either at the meeting or in writing.	Any director or the entire board of directors may be removed, with or without cause, by the holders of a majority of the shares then entitled to vote at an election of directors, except (i) unless the certificate of incorporation provides otherwise, in the case of a corporation whose board of directors is classified, stockholders may effect such removal only for cause, or (ii) in the case of a corporation having cumulative voting, if less than the entire board of directors is to be removed, no director may be removed without cause if the votes cast against his removal would be sufficient to elect him if then cumulatively voted at an election of the entire board of directors, or, if there are classes of directors, at an election of the class of directors of which he is a part.
Vacancies on the Board of Directors	The procedure by which directors, other than a company's initial directors, are appointed is generally set out in a company's articles of association, provided that where two or more persons are appointed as directors of a public limited company by resolution of the shareholders, resolutions appointing each director must be voted on individually.	Vacancies and newly created directorships may be filled by a majority of the directors then in office (even though less than a quorum) or by a sole remaining director unless (i) otherwise provided in the certificate of incorporation or bylaws of the corporation or (ii) the certificate of incorporation directs that a particular class of stock is to elect such director, in which case a majority of the other directors elected by such class, or a sole remaining director elected by such class, will fill such vacancy.

Annual General Meeting	A public limited company must hold an annual general meeting, once a year, in the six-month period following the company's annual accounting reference date.	The annual meeting of stockholders shall be held at such place, on such date and at such time as may be designated from time to time by the board of directors or as provided in the certificate of incorporation or by the bylaws.

General Meeting	A general meeting of the shareholders of a public limited company may be called by the directors. Shareholders holding at least 5% of the paid-up capital of the company carrying voting rights at general meetings (excluding any paid up capital held as treasury shares) can require the directors to call a general meeting and, if the directors fail to do so within a certain period, may themselves convene a general meeting.	Special meetings of the stockholders may be called by the board of directors or by such person or persons as may be authorized by the certificate of incorporation or by the bylaws.
Notice of General Meetings	At least 21 clear days' notice must be given for an annual general meeting and state the general purpose of the meeting and present any resolutions to be proposed at the meeting. Subject to a company's articles of association providing for a longer period, at least 14 clear days' notice is required for any other general meeting of a public limited company. In addition, certain matters, such as the removal of directors or auditors, require special notice, which is 28 clear days' notice. The shareholders of a company may in all cases consent to a shorter notice period, the proportion of shareholders' consent required being 100% of those entitled to attend and vote in the case of an annual general meeting and, in the case of any other general meeting, a majority in number of the members having a right to attend and vote at the meeting, being a majority who together hold not less than 95% in nominal value of the shares giving a right to attend and vote at the meeting.	Unless otherwise provided in the certificate of incorporation or bylaws, written notice of any meeting of the stockholders must be given to each stockholder entitled to vote at the meeting not less than ten nor more than 60 days before the date of the meeting and shall specify the place, date, hour and purpose or purposes of the meeting.
Proxy	At any meeting of shareholders, a shareholder may designate another person to attend, speak and vote at the meeting on their behalf by proxy.	At any meeting of stockholders, a stockholder may designate another person to act for such stockholder by proxy, but no such proxy shall be voted or acted upon after three years from its date, unless the proxy provides for a longer period. A director of may not issue a proxy representing the director's voting rights as a director.
Preemptive Rights	"Equity securities," being (i) shares in the company other than shares that, with respect to dividends and capital, carry a right to participate only up to a specified amount in a distribution, referred to as "ordinary shares," or (ii) rights to subscribe for, or to convert securities into, ordinary shares, proposed to be allotted for cash must be offered first to the existing equity shareholders in the company in proportion to the respective nominal value of their holdings, unless an exception applies or a special resolution to the contrary has been passed by shareholders in a general meeting or the articles of association provide otherwise in each case in accordance with the provisions of the Companies Act.	Stockholders have no preemptive rights to subscribe to additional issues of stock or to any security convertible into such stock unless, and except to the extent that, such rights are expressly provided for in the certificate of incorporation.
Authority to Allot	The directors of a company must not allot shares or grant rights to subscribe for or convert any security into shares unless an exception applies or an ordinary resolution to the contrary has been passed by shareholders in a general meeting or the articles of association provide otherwise, in each case in accordance with the provisions of the Companies Act.	If the corporation's charter or certificate of incorporation so provides, the board of directors has the power to authorize the issuance of shares of capital stock. The board of directors may authorize capital stock to be issued for consideration consisting of cash, any tangible or intangible property or any benefit to the corporation or any combination thereof. It may determine the amount of such consideration by approving a formula. In the absence of actual fraud in the transaction, the judgment of the directors as to the value of such consideration is conclusive.

Liability of Directors and Officers	Any provision, whether contained in a company's articles of association or any contract or otherwise, that purports to exempt a director of a company, to any extent, from any liability that would otherwise attach to him in connection with any negligence, default, breach of duty or breach of trust in relation to the company, is void. Any provision by which a company directly or indirectly provides an indemnity, to any extent, for a director of the company or of an associated company against any liability attaching to him in connection with any negligence, default, breach of duty or breach of trust in relation to the company of which he is a director is also void except as permitted by the Companies Act, which provides exceptions for the company to (i) purchase and maintain insurance against such liability; (ii) provide a "qualifying third party indemnity," or an indemnity against liability incurred by the director to a person other than the company or an associated company or criminal proceedings in which he is convicted; and (iii) provide a "qualifying pension scheme indemnity," or an indemnity against liability incurred in connection with the company's activities as trustee of an occupational pension plan.	A corporation's certificate of incorporation may include a provision eliminating or limiting the personal liability of a director to the corporation and its stockholders for damages arising from a breach of fiduciary duty as a director. However, no provision can limit the liability of a director for: ● any breach of the director's duty of loyalty to the corporation or its stockholders; ● acts or omissions not in good faith or that involve intentional misconduct or a knowing violation of law; ● intentional or negligent payment of unlawful dividends or stock purchases or redemptions; or ● any transaction from which the director derives an improper personal benefit.

Voting Rights	Unless a poll is demanded by the shareholders of a company or is required by the chairman of the meeting or the company's articles of association, shareholders shall vote on all resolutions on a show of hands. Under the Companies Act, a poll may be demanded by (i) not fewer than five shareholders having the right to vote on the resolution; (ii) any shareholder(s) representing not less than 10% of the total voting rights of all the shareholders having the right to vote on the resolution (excluding any voting rights attaching to treasury shares); or (iii) any shareholder(s) holding shares in the company conferring a right to vote on the resolution (excluding any voting rights attaching to treasury shares) being shares on which an aggregate sum has been paid up equal to not less than 10% of the total sum paid up on all the shares conferring that right. A company's articles of association may provide more extensive rights for shareholders to call a poll. Under the Companies Act, an ordinary resolution is passed on a show of hands if it is approved by a simple majority (more than 50%) of the votes cast by shareholders present (in person or by proxy) and entitled to vote. If a poll is demanded, an ordinary resolution is passed if it is approved by holders representing a simple majority of the total voting rights of shareholders present, in person or by proxy, who, being entitled to vote, vote on the resolution. Special resolutions require the affirmative vote of not less than 75% of the votes cast by shareholders present, in person or by proxy, at the meeting.	Unless otherwise provided in the certificate of incorporation, each stockholder is entitled to one vote for each share of capital stock held by such stockholder.
Stockholder Vote on Certain Transactions	The Companies Act provides for schemes of arrangement, which are arrangements or compromises between a company and any class of shareholders or creditors and used in certain types of reconstructions, amalgamations, capital reorganizations or takeovers. These arrangements require: ● the approval at a shareholders' or creditors' meeting convened by order of the court, of a majority in number of shareholders or creditors representing 75% in value of the capital held by, or debt owed to, the class of shareholders or creditors, or class thereof present and voting, either in person or by proxy; and ● the approval of the court.	Generally, unless the certificate of incorporation provides for the vote of a larger portion of the stock, completion of a merger, consolidation, sale, lease or exchange of all or substantially all of a corporation's assets or dissolution requires: ● the approval of the board of directors; and ● the approval by the vote of the holders of a majority of the outstanding stock or, if the certificate of incorporation provides for more or less than one vote per share, a majority of the votes of the outstanding stock of the corporation entitled to vote on the matter.

Standard of Conduct for Directors	A director owes various statutory and fiduciary duties to the company, including: ● to act in the way he considers, in good faith, would be most likely to promote the success of the company for the benefit of its members as a whole; ● to avoid a situation in which he has, or can have, a direct or indirect interest that conflicts, or possibly conflicts, with the interests of the company; ● to act in accordance with the company's constitution and only exercise his powers for the purposes for which they are conferred; ● to exercise independent judgment; ● to exercise reasonable care, skill and diligence; ● not to accept benefits from a third party conferred by reason of his being a director or doing, or not doing, anything as a director; and ● to declare any interest that he has, whether directly or indirectly, in a proposed or existing transaction or arrangement with the company.	Delaware law does not contain specific provisions setting forth the standard of conduct of a director. The scope of the fiduciary duties of directors is generally determined by the courts of the State of Delaware. In general, directors have a duty to act without self-interest, on a well-informed basis and in a manner they reasonably believe to be in the best interest of the stockholders. Directors owe fiduciary duties of care and loyalty to the corporation and to its stockholders. The duty of care generally requires that a director acts in good faith, with the care that an ordinarily prudent person would exercise under similar circumstances. Under this duty, a director must inform himself of all material information reasonably available regarding a significant transaction. The duty of loyalty requires that a director act in a manner that the director reasonably believes to be in the best interests of the corporation. Directors must not use their corporate position for personal gain or advantage. In general, but subject to certain exceptions, actions of a director are presumed to have been made on an informed basis, in good faith and in the honest belief that the action taken was in the best interests of the corporation. However, this presumption may be rebutted by evidence of a breach of one of the fiduciary duties. Delaware courts have also imposed a heightened standard of conduct upon directors who take any action designed to defeat a threatened change in control of the corporation. In addition, when the board of directors approves the sale or break-up of a corporation, the board of directors may, in certain circumstances, have a duty to obtain the highest value reasonably available to the stockholders.

Stockholder Litigation	Under Scottish law, generally, the company, rather than its shareholders, is the proper claimant in an action in respect of a wrong done to the company or where there is an irregularity in the company's internal management. Notwithstanding this general position, the Companies Act provides that (i) a court may allow a shareholder to bring a derivative claim (that is, an action in respect of and on behalf of the company) in respect of a cause of action arising from a director's negligence, default, breach of duty or breach of trust and (ii) a shareholder may bring a claim for a court order where the company's affairs have been or are being conducted in a manner that is unfairly prejudicial to some of its shareholders.	A stockholder may initiate a derivative action to enforce a right of a corporation if the corporation fails to enforce the right itself. The complaint must: ● state that the plaintiff was a stockholder at the time of the transaction of which the plaintiff complains or that the plaintiff's shares thereafter devolved on the plaintiff by operation of law; and ● allege with particularity the efforts made by the plaintiff to obtain the action the plaintiff desires from the directors and the reasons for the plaintiff's failure to obtain the action; or ● state the reasons for not making the effort. Additionally, the plaintiff must remain a stockholder through the duration of the derivative suit. The action will not be dismissed or compromised without the approval of the Delaware Court of Chancery.

DESCRIPTION OF AMERICAN DEPOSITORY SHARES AND WARRANTS

American depositary shares

The Bank of New York Mellon has agreed to act as the depositary for the ADSs. As depositary, The Bank of New York Mellon will register and deliver the ADSs. Each ADS represents one ordinary share (or a right to receive and to exercise the beneficial ownership interests in one ordinary share) deposited with The Bank of New York Mellon, or any successor, as custodian, acting through an office located in the United Kingdom. Each ADS will also represent any other securities, cash or other property that may be held by the depositary in respect of the ordinary shares deposited with it. The deposited shares together with any other securities, cash or other property held by the depositary are referred to as the deposited securities. The depositary's office at which the ADSs will be administered and its principal executive office are located at 240 Greenwich Street, New York, NY 10286.

You may hold ADSs either: (A) directly (i) by having an American Depositary Receipt, also referred to as an ADR, which is a certificate evidencing a specific number of ADSs, registered in your name; or (ii) by having uncertificated ADSs registered in your name; or (B) indirectly by holding a security entitlement in ADSs through your broker or other financial institution that is a direct or indirect participant in The Depository Trust Company, also called DTC. If you hold ADSs directly, you are a registered ADS holder, also referred to as an ADS holder. This description assumes you are an ADS holder. If you hold the ADSs indirectly, you must rely on the procedures of your broker or other financial institution to assert the rights of ADS holders described in this section. You should consult with your broker or financial institution to find out what those procedures are.

Registered holders of uncertificated ADSs will receive statements from the depositary confirming their holdings.

As an ADS holder, we will not treat you as one of our shareholders, and you will not have shareholder rights. Scottish law governs the shareholder rights of our company. The depositary will be the holder of the shares underlying your ADSs. As a registered holder of ADSs, you will have ADS holder rights. A deposit agreement among the company, the depositary, ADS holders and all other persons indirectly or beneficially holding ADSs sets out ADS holder rights as well as the rights and obligations of the depositary. New York law governs the deposit agreement and the ADSs.

The following is a summary of the material provisions of the deposit agreement. For more complete information, you should read the entire deposit agreement and the form of ADR. Directions on how to obtain copies of those documents are provided in "Where you can find additional information." Portions of this summary description describe matters that may be relevant to the ownership of ADSs but that may not be contained in the deposit agreement.

Dividends and other distributions

The depositary has agreed to pay or distribute to ADS holders the cash dividends or other distributions it or the custodian receives on shares or other deposited securities, upon payment or deduction of its fees, taxes and expenses. You will receive these distributions in proportion to the number of shares your ADSs represent.

Cash. The depositary will convert any cash dividend or other cash distribution we pay on the shares into U.S. dollars, if it can do so on a reasonable basis and can transfer the U.S. dollars to the United States. If that is not possible or if any government approval is needed and cannot be obtained, the deposit agreement allows the depositary to distribute the foreign currency only to those ADS holders to whom it is possible to do so. It will hold the foreign currency it cannot convert for the account of the ADS holders who have not been paid. It will not invest the foreign currency and it will not be liable for any interest.

Before making a distribution, any withholding taxes, or other governmental charges that must be paid will be deducted. The depositary will distribute only whole U.S. dollars and cents and will round fractional cents to the nearest whole cent. *If the exchange rates fluctuate during a time when the depositary cannot convert the foreign currency, you may lose some of the value of the distribution.*

Shares. The depositary may distribute additional ADSs representing any shares we distribute as a dividend or free distribution. The depositary will only distribute whole ADSs. It will sell shares which would require it to deliver a fraction of an ADS (or ADSs representing those shares) and distribute the net proceeds in the same way as it does with cash. If the depositary does not distribute additional ADSs, the outstanding ADSs will also represent the new shares. The depositary may sell a portion of the distributed shares (or ADSs representing those shares) sufficient to pay its fees and expenses in connection with that distribution.

Rights to purchase additional shares. If we offer holders of our securities any rights to subscribe for additional shares or any other rights, the depositary may: (i) exercise those rights on behalf of ADS holders; (ii) distribute those rights to ADS holders; or (iii) sell those rights and distribute the net proceeds to ADS holders, in each case after deduction or upon payment of its fees and expenses. To the extent the depositary does not do any of those things, it will allow the rights to lapse. *In that case, you will receive no value for them.* The depositary will exercise or distribute rights only if we ask it to and provide satisfactory assurances to the depositary that it is legal to do so. If the depositary will exercise rights, it will purchase the securities to which the rights relate and distribute those securities or, in the case of shares, new ADSs representing the new shares, to subscribing ADS holders, but only if ADS holders have paid the exercise price to the depositary. U.S. securities laws may restrict the ability of the depositary to distribute rights or ADSs or other securities issued on exercise of rights to all or certain ADS holders, and the securities distributed may be subject to restrictions on transfer.

Other Distributions. The depositary will send to ADS holders anything else we distribute on deposited securities by any means it thinks is legal, fair and practical. If it cannot make the distribution in that way, the depositary has a choice. It may decide to sell what we distributed and distribute the net proceeds, in the same way as it does with cash. Or, it may decide to hold what we distributed, in which case ADSs will also represent the newly distributed property. However, the depositary is not required to distribute any securities (other than ADSs) to ADS holders unless it receives satisfactory evidence from us that it is legal to make that distribution. The depositary may sell a portion of the distributed securities or property sufficient to pay its fees and expenses in connection with that distribution. U.S. securities laws may restrict the ability of the depositary to distribute securities to all or certain ADS holders, and the securities distributed may be subject to restrictions on transfer. The depositary is not responsible if it decides that it is unlawful or impractical to make a distribution available to any ADS holders. We have no obligation to register ADSs, shares, rights or other securities under the Securities Act. We also have no obligation to take any other action to permit the distribution of ADSs, shares, rights or anything else to ADS holders. *This means that you may not receive the distributions we make on our shares or any value for them if it is illegal or impractical for us to make them available to you*.

Deposit, withdrawal and cancellation

How are the ADSs issued?

The depositary will deliver ADSs if you or your broker deposits shares or evidence of rights to receive shares with the custodian. Upon payment of its fees and expenses and of any taxes or charges, such as stamp taxes or stock transfer taxes or fees, the depositary will register the appropriate number of ADSs in the names you request and will deliver the ADSs to or upon the order of the person or persons that made the deposit.

How can ADS holders withdraw the deposited securities?

You may surrender your ADSs for the purpose of withdrawal at the depositary's office. Upon payment of its fees and expenses and of any taxes or charges, such as stamp taxes or stock transfer taxes or fees, the depositary will deliver the shares and any other deposited securities underlying the ADSs to the ADS holder or a person the ADS holder designates at the office of the custodian. Or, at your request, risk and expense, the depositary will deliver the deposited securities at its office, if feasible. However, the depositary is not required to accept surrender of ADSs to the extent it would require delivery of a fraction of a deposited share or other security. The depositary may charge you a fee and its expenses for instructing the custodian regarding delivery of deposited securities.

How do ADS holders interchange between certificated ADSs and uncertificated ADSs?

You may surrender your ADR to the depositary for the purpose of exchanging your ADR for uncertificated ADSs. The depositary will cancel that ADR and will send to the ADS holder a statement confirming that the ADS holder is the registered holder of uncertificated ADSs. Upon receipt by the depositary of a proper instruction from a registered holder of uncertificated ADSs requesting the exchange of uncertificated ADSs for certificated ADSs, the depositary will execute and deliver to the ADS holder an ADR evidencing those ADSs.

Voting rights

ADS holders may instruct the depositary how to vote the number of deposited shares their ADSs represent. The voting rights of holders of ordinary shares are described in "Description of share capital and articles of association—Articles of association."

If we request the depositary to solicit your voting instructions (and we are not required to do so), the depositary will notify you of an annual general meeting and send or make voting materials available to you. Those materials will describe the matters to be voted on and explain how the ADS holders may instruct the depositary how to vote. For instructions to be valid, they must reach the depositary by a date set by the depositary. The depositary will try, as far as practical, subject to the laws of Scotland and the provisions of our Articles or similar documents, to vote or to have its agents vote the shares or other deposited securities as instructed by ADS holders. If we do not request the depositary to solicit your voting instructions, you can still send voting instructions, and, in that case, the depositary may try to vote as you instruct, but it is not required to do so.

Except by instructing the depositary as described above, you will not be able to exercise voting rights unless you surrender your ADSs and withdraw the shares. However, you may not know about the annual general meeting enough in advance to withdraw the shares. In any event, the depositary will not exercise any discretion in voting deposited securities and it will only vote or attempt to vote as instructed or as described in the following sentence. If we asked the depositary to solicit your instructions at least 45 days before the meeting date but the depositary does not receive voting instructions from you by the specified date, it will consider you to have authorized and directed it to give a discretionary proxy to a person designated by us to attend the meeting solely for quorum purposes, but not to vote your shares on any matter presented to the shareholders.

We cannot assure you that you will receive the voting materials in time to ensure that you can instruct the depositary to vote your shares. In addition, the depositary and its agents are not responsible for failing to carry out voting instructions or for the manner of carrying out voting instructions. This means that you may not be able to exercise voting rights and there may be nothing you can do if your shares are not voted as you requested.

In order to give you a reasonable opportunity to instruct the depositary as to the exercise of voting rights relating to deposited securities, if we request the depositary to act, we agree to give the depositary notice of any such meeting and details concerning the matters to be voted upon at least 45 days in advance of the meeting date.

Fees and expenses

Persons depositing or withdrawing shares or ADS holders must pay:	*For*:
\$5.00 (or less) per 100 ADSs (or portion of 100 ADSs)	Issuance of ADSs, including issuances resulting from a distribution of shares or rights or other property Cancellation of ADSs for the purpose of withdrawal, including if the deposit agreement terminates
\$0.05 (or less) per ADS	Any cash distribution to ADS holders
A fee equivalent to the fee that would be payable if securities distributed to you had been shares and the shares had been deposited for issuance of ADSs	Distribution of securities distributed to holders of deposited securities (including rights) that are distributed by the depositary to ADS holders
\$0.05 (or less) per ADS per calendar year	Depositary services
Registration or transfer fees	Transfer and registration of shares on our share register to or from the name of the depositary or its agent when you deposit or withdraw shares
Expenses of the depositary	Cable (including SWIFT), telex and facsimile transmissions (when expressly provided in the deposit agreement) Converting foreign currency to U.S. dollars
Taxes and other governmental charges the depositary or the custodian has to pay on any ADSs or shares underlying ADSs, such as stock transfer taxes, stamp duty or withholding taxes	As necessary

Any charges incurred by the depositary or its agents for servicing the deposited securities	As necessary

The depositary collects its fees for delivery and surrender of ADSs directly from investors depositing shares or surrendering ADSs for the purpose of withdrawal or from intermediaries acting for them. The depositary collects fees for making distributions to investors by deducting those fees from the amounts distributed or by selling a portion of distributable property to pay the fees. The depositary may collect its annual fee for depositary services by deduction from cash distributions or by directly billing investors or by charging the book-entry system accounts of participants acting for them. The depositary may collect any of its fees by deduction from any cash distribution payable (or by selling a portion of securities or other property distributable) to ADS holders that are obligated to pay those fees. The depositary may generally refuse to provide fee-attracting services until its fees for those services are paid.

From time to time, the depositary may make payments to us to reimburse us for costs and expenses generally arising out of establishment and maintenance of the ADS program, waive fees and expenses for services provided to us by the depositary or share revenue from the fees collected from ADS holders. In performing its duties under the deposit agreement, the depositary may use brokers, dealers, foreign currency dealers or other service providers that are owned by or affiliated with the depositary and that may earn or share fees, spreads or commissions.

The depositary may convert currency itself or through any of its affiliates and, in those cases, acts as principal for its own account and not as agent, advisor, broker or fiduciary on behalf of any other person and earns revenue, including, without limitation, transaction spreads, that it will retain for its own account. The revenue is based on, among other things, the difference between the exchange rate assigned to the currency conversion made under the deposit agreement and the rate that the depositary or its affiliate receives when buying or selling foreign currency for its own account. The depositary makes no representation that the exchange rate used or obtained in any currency conversion under the deposit agreement will be the most favorable rate that could be obtained at the time or that the method by which that rate will be determined will be the most favorable to ADS holders, subject to the depositary's obligations under the deposit agreement. The methodology used to determine exchange rates used in currency conversions is available upon request.

Payment of taxes

You will be responsible for any taxes or other governmental charges payable on your ADSs or on the deposited securities represented by any of your ADSs. The depositary may refuse to register any transfer of your ADSs or allow you to withdraw the deposited securities represented by your ADSs until those taxes or other charges are paid. It may apply payments owed to you or sell deposited securities represented by your ADSs to pay any taxes owed and you will remain liable for any deficiency. If the depositary sells deposited securities, it will, if appropriate, reduce the number of ADSs to reflect the sale and pay to ADS holders any proceeds, or send to ADS holders any property, remaining after it has paid the taxes.

Tender and exchange offers; redemption, replacement or cancellation of deposited securities

The depositary will not tender deposited securities in any voluntary tender or exchange offer unless instructed to do so by an ADS holder surrendering ADSs and subject to any conditions or procedures the depositary may establish.

If deposited securities are redeemed for cash in a transaction that is mandatory for the depositary as a holder of deposited securities, the depositary will call for surrender of a corresponding number of ADSs and distribute the net redemption money to the holders of called ADSs upon surrender of those ADSs.

If there is any change in the deposited securities such as a sub-division, combination or other reclassification, or any merger, consolidation, recapitalization or reorganization affecting the issuer of deposited securities in which the depositary receives new securities in exchange for or in lieu of the old deposited securities, the depositary will hold those replacement securities as deposited securities under the deposit agreement. However, if the depositary decides it would not be lawful and practical to hold the replacement securities because those securities could not be distributed to ADS holders or for any other reason, the depositary may instead sell the replacement securities and distribute the net proceeds upon surrender of the ADSs.

If there is a replacement of the deposited securities and the depositary will continue to hold the replacement securities, the depositary may distribute new ADSs representing the new deposited securities or ask you to surrender your outstanding ADRs in exchange for new ADRs identifying the new deposited securities.

If there are no deposited securities underlying ADSs, including if the deposited securities are cancelled, or if the deposited securities underlying ADSs have become apparently worthless, the depositary may call for surrender of those ADSs or cancel those ADSs upon notice to the ADS holders.

Further comment on taxation is included within the Material Income Tax Considerations section of this prospectus.

Amendment and termination

How may the deposit agreement be amended?

We may agree with the depositary to amend the deposit agreement and the ADRs without your consent for any reason. If an amendment adds or increases fees or charges, except for taxes and other governmental charges or expenses of the depositary for registration fees, facsimile costs, delivery charges or similar items, or prejudices a substantial right of ADS holders, it will not become effective for outstanding ADSs until 30 days after the depositary notifies ADS holders of the amendment. At the time an amendment becomes effective, you are considered, by continuing to hold your ADSs, to agree to the amendment and to be bound by the ADRs and the deposit agreement as amended.

How may the deposit agreement be terminated?

The depositary will initiate termination of the deposit agreement if we instruct it to do so. The depositary may initiate termination of the deposit agreement if:

- 60 days have passed since the depositary told us it wants to resign but a successor depositary has not been appointed and accepted its appointment;
- we delist the ADSs from an exchange in the United States on which they were listed and do not list the ADSs on another exchange in the United States or make arrangements for trading of ADSs on the U.S. over-the-counter market;
- we delist our shares from an exchange outside the United States on which they were listed and do not list the shares on another exchange outside the United States;
- the depositary has reason to believe the ADSs have become, or will become, ineligible for registration on Form F-6 under the Securities Act of 1933, as amended;
- we appear to be insolvent or enter insolvency proceedings;
- all or substantially all the value of the deposited securities has been distributed either in cash or in the form of securities;
- there are no deposited securities underlying the ADSs or the underlying deposited securities have become apparently worthless; or

- there has been a replacement of deposited securities.

If the deposit agreement will terminate, the depositary will notify ADS holders at least 90 days before the termination date. At any time after the termination date, the depositary may sell the deposited securities. After that, the depositary will hold the money it received on the sale, as well as any other cash it is holding under the deposit agreement, unsegregated and without liability for interest, for the pro rata benefit of the ADS holders that have not surrendered their ADSs. Normally, the depositary will sell as soon as practicable after the termination date.

After the termination date and before the depositary sells, ADS holders can still surrender their ADSs and receive delivery of deposited securities, except that the depositary may refuse to accept a surrender for the purpose of withdrawing deposited securities or reverse previously accepted surrenders of that kind that have not settled if it would interfere with the selling process. The depositary may refuse to accept a surrender for the purpose of withdrawing sale proceeds until all the deposited securities have been sold. The depositary will continue to collect distributions on deposited securities, but, after the termination date, the depositary is not required to register any transfer of ADSs or distribute any dividends or other distributions on deposited securities to the ADSs holder (until they surrender their ADSs) or give any notices or perform any other duties under the deposit agreement except as described in this paragraph.

Limitations on obligations and liability

The deposit agreement expressly limits our obligations and the obligations of the depositary. It also limits our liability and the liability of the depositary. We and the depositary:

- are only obligated to take the actions specifically set forth in the deposit agreement without negligence or bad faith, and the depositary will not be a fiduciary or have any fiduciary duty to holders of ADSs;

- are not liable if we are or it is prevented or delayed by law or by events or circumstances beyond our or its ability to prevent or counteract with reasonable care or effort from performing our or its obligations under the deposit agreement;

- are not liable if we or it exercises discretion permitted under the deposit agreement;

- are not liable for any action or inaction in reliance on the advice or information received from legal counsel, accountants, any person presenting ordinary shares for deposit, any holder of ADSs or authorized representatives thereof, or any other person believed by either of us in good faith to be competent to give such advice or information;

- are not liable for the inability of any holder of ADSs to benefit from any distribution on deposited securities that is not made available to holders of ADSs under the terms of the deposit agreement, or for any special, consequential or punitive damages for any breach of the terms of the deposit agreement;

- have no obligation to become involved in a lawsuit or other proceeding related to the ADSs or the deposit agreement on your behalf or on behalf of any other person;

- may rely upon any documents we believe or it believes in good faith to be genuine and to have been signed or presented by the proper person;

- are not liable for the acts or omissions of any securities depository, clearing agency or settlement system; and

- the depositary has no duty to make any determination or provide any information as to our tax status, or any liability for any tax consequences that may be incurred by ADS holders as a result of owning or holding ADSs or be liable for the inability or failure of an ADS holder to obtain the benefit of a foreign tax credit, reduced rate of withholding or refund of amounts withheld in respect of tax or any other tax benefit.

In the deposit agreement, we and the depositary agree to indemnify each other under certain circumstances.

Requirements for depositary actions

Before the depositary will deliver or register a transfer of ADSs, make a distribution on ADSs, or permit withdrawal of shares, the depositary may require:

- payment of stock transfer or other taxes or other governmental charges and transfer or registration fees charged by third parties for the transfer of any shares or other deposited securities;

- satisfactory proof of the identity and genuineness of any signature or other information it deems necessary; and

- compliance with regulations it may establish, from time to time, consistent with the deposit agreement, including presentation of transfer documents.

The depositary may refuse to deliver ADSs or register transfers of ADSs when the transfer books of the depositary or our transfer books are closed or at any time if the depositary or we think it advisable to do so.

Your right to receive the shares underlying your ADSs

ADS holders have the right to cancel their ADSs and withdraw the underlying shares at any time except:

- when temporary delays arise because: (i) the depositary has closed its transfer books or we have closed our transfer books; (ii) the transfer of shares is blocked to permit voting at an annual general meeting; or (iii) we are paying a dividend on our shares;

- when you owe money to pay fees, taxes and similar charges; or

- when it is necessary to prohibit withdrawals in order to comply with any laws or governmental regulations that apply to ADSs or to the withdrawal of shares or other deposited securities.

This right of withdrawal may not be limited by any other provision of the deposit agreement.

Direct registration system

In the deposit agreement, all parties to the deposit agreement acknowledge that the Direct Registration System, also referred to as DRS, and Profile Modification System, also referred to as Profile, will apply to the ADSs. DRS is a system administered by DTC that facilitates interchange between registered holding of uncertificated ADSs and holding of security entitlements in ADSs through DTC and a DTC participant. Profile is a feature of DRS that allows a DTC participant, claiming to act on behalf of a registered holder of uncertificated ADSs, to direct the depositary to register a transfer of those ADSs to DTC or its nominee and to deliver those ADSs to the DTC account of that DTC participant without receipt by the depositary of prior authorization from the ADS holder to register that transfer.

In connection with and in accordance with the arrangements and procedures relating to DRS/Profile, the parties to the deposit agreement understand that the depositary will not determine whether the DTC participant that is claiming to be acting on behalf of an ADS holder in requesting registration of transfer and delivery as described in the paragraph above has the actual authority to act on behalf of the ADS holder (notwithstanding any requirements under the Uniform Commercial Code). In the deposit agreement, the parties agree that the depositary's reliance on and compliance with instructions received by the depositary through the DRS/Profile system and in accordance with the deposit agreement will not constitute negligence or bad faith on the part of the depositary.

Books of depositary; shareholder communications; inspection of register of holders of ADSs

The depositary will maintain ADS holder records at its depositary office. The depositary will make available for your inspection at its office all communications that it receives from us as a holder of deposited securities that we make generally available to holders of deposited securities. The depositary will send you copies of those communications or otherwise make those communications available to you if we ask it to. You have a right to inspect the register of holders of ADSs, but not for the purpose of contacting those holders about a matter unrelated to our business or the ADSs.

Jury trial waiver

The deposit agreement provides that, to the extent permitted by law, ADS holders waive the right to a jury trial of any claim they may have against us or the depositary arising out of or relating to our shares, the ADSs or the deposit agreement, including any claim under the U.S. federal securities laws. If we or the depositary opposed a jury trial demand based on the waiver, the court would determine whether the waiver was enforceable in the facts and circumstances of that case in accordance with applicable case law.

You will not, by agreeing to the terms of the deposit agreement, be deemed to have waived our or the depositary's compliance with U.S. federal securities laws or the rules and regulations promulgated thereunder.

Warrants to be issued as part of this offering

The following is a brief summary of certain terms and conditions of the Warrants and is subject in all respects to the provisions contained in the Warrants accompanying the ADSs offered hereby and the Warrant Agent Agreement. You should review a copy of the form of Warrant and Warrant Agent Agreement for a complete description of the terms and conditions applicable to the Warrants.

Form. The Warrants will be issued in electronic certificated form. Warrant holders, however, may request a certificated form of Warrant.

Term. The Warrants will be exercisable on the date of issuance and will expire on the fifth anniversary of the date of issuance.

Exercisability. The Warrants will be exercisable, at the option of each holder, by delivering to us a duly executed exercise notice and cash payment in full for the number of ADSs purchased upon such exercise. The exercise of the Warrants is subject to limits as described below under the caption "—Exercise Limitations." We are required to maintain a registration statement to be effective at the time a Warrant may be exercised, and if we do not do so, then the Warrants cannot be exercised under the US securities laws. In such a case, the Warrants would have no value, and your sole recourse would be a claim for damages against the company. If the Warrants are not exercised before they expire, in five years, the Warrants will expire and be of no further value and all the rights under the Warrants will terminate. We do not intend to offer any "broker protect period" or other exceptions for not timely exercising a Warrant after they expire; therefore you should monitor, with your broker, the expiration date and take steps to exercise your Warrant on a timely basis.

Exercise Price. The exercise price of the Warrants is $5.30 per ADS. The exercise price is subject to appropriate adjustment in the event of certain stock splits, stock combinations, stock dividends, recapitalizations or otherwise. The exercise price will also be downward adjusted if we, or through a subsidiary, sell or enter into an agreement to sell, grant an option to sell, reprice an outstanding security to acquire ordinary shares at a price less than $5.30. The downward adjustment will to the price of the newly issued security or adjusted price of the outstanding security, but not less than a floor price set forth in the terms of the Warrants, which is subject to adjustment for stock splits, combinations and recapitalizations, as above. The downward adjustment will not be made if the Company entered into certain delineated types of transactions, including employment related option and similar security grants, exercise of such options and security grants, exercises of currently outstanding securities so long as not repriced, and issuances for acquisitions, strategic transactions, vendors, equipment leasing, licensing, collaborations, and the like so long as they are non-capital raising transactions.

Delivery of ADSs. We shall cause our Depositary to deliver the ADSs for the ordinary shares underlying the Warrants to the holders exercising Warrants by no later than 5:00 P.M. New York City time on the fifth trading day following the Warrants exercise date, provided the funds in payment of the exercise price for such Warrants have cleared on the trading day following the exercise date.

No Fractional Shares. No fractional shares or scrip representing fractional shares shall be issued upon the exercise of the Warrants, and the number of Warrants will be rounded to the nearest whole number.

Transferability. Subject to applicable laws and the restriction on transfer set forth in the Warrant, the Warrant may be transferred at the option of the holder in accordance with the procedures set forth in the Warrant.

Authorized Shares. During the period the Warrants are outstanding, we will reserve from our authorized and unissued ordinary shares a sufficient number of shares to provide for the issuance of the ADSs underlying the Warrants upon the exercise of the Warrants.

Subsequent Rights Offerings. Warrant holders will be entitled to be distributed any purchase rights that the Company distributes generally to its holders of ordinary shares or other securities, which rights will be on the same terms.

Pro Rata Distributions. Warrant holders will be entitled to distributions by the Company, in the manner of dividends and other forms of property or assets distributed to the holders of ordinary shares in proportion to the ADS acquirable upon complete exercise of the Warrants.

Fundamental Transactions. In the event of any corporate transaction, as described in the Warrant Agent Agreement and generally including, a reclassification of our capital, any merger, combination or consolidation with or into another entity, sale of all or substantially all of our assets, tender offer or exchange offer, then the holder shall have the right to receive for each ordinary share that would have been issuable upon exercise of the Warrants immediately prior to the occurrence of the corporate transaction, the number of ordinary shares of the successor or acquiring corporation and any additional consideration receivable upon or as a result of such transaction by a holder of the number of ordinary shares for which the Warrant is exercisable immediately prior to such event. At the Warrant holder's option, exercisable at any time concurrently with, or within 30 days after, the consummation of a fundamental transaction, the company or successor entity shall purchase the Warrant from the holder by paying an amount of cash equal to the Black Scholes Value (as defined in and calculated under the terms of the Warrant) of the remaining unexercised portion of the Warrant on the date of the consummation of the fundamental transaction; provided, if the fundamental transaction is not within the company's control, including not approved by the company's board of directors, the holder shall only be entitled to receive from the Company or any successor entity the same type or form of consideration (and in the same proportion), at the Black Scholes Value of the unexercised portion of the Warrant, that is being offered and paid to the holders of ordinary shares of the Company in connection with the fundamental transaction, whether that consideration be in the form of cash, stock or any combination thereof, or whether the holders of ordinary shares are given the choice to receive from among alternative forms of consideration in connection with the fundamental transaction; provided, further, that if holders of ordinary shares are not offered or paid any consideration in such fundamental transaction, the holders will be deemed to have received common stock of the successor entity.

Right as a Shareholder. Except as otherwise provided in the Warrants or by virtue of such holder's ownership of our ordinary shares, the holders of the Warrants do not have the rights or privileges of holders of our ADSs until they receive the ADSs underlying the Warrants.

Waivers and Amendments. Any term of the Warrants issued in the offering may be amended or waived with the written consent of holders of the Warrants.

Warrant Agent. The warrant agent for the Warrants is Computershare Inc., a Delaware corporation, and its wholly owned subsidiary, Computershare Trust Company, N.A., a federally chartered trust company

ADS AND ORDINARY SHARES ELIGIBLE FOR FUTURE SALE

Sales of substantial amounts of the ADSs or our ordinary shares that are deposited for ADSs in the public market, or the perception that such sales could occur, could adversely affect prevailing market prices of the ADSs. Upon completion of this offering, we will have 29,117,222 ordinary shares issued and outstanding, including those represented by ADSs, assuming the underwriter does not exercise its over-allotment option. All of the ADS sold in this offering will be freely transferable without restriction or further registration under the Securities Act by persons other than by our affiliates.

All of the Warrants sold in this offering and the underlying ADSs will be freely transferable.

Lock-Up Agreements

We have agreed not to offer, issue, sell, contract to sell, encumber, grant any option for the sale of or otherwise dispose of any shares of our ordinary shares or other securities convertible into or exercisable or exchangeable for ordinary shares for a period of one year after the effective date of the registration statement of which this prospectus is a part without the prior written consent of the underwriter.

Subject to various lock up agreements that our shareholders and loan note holders have agreed to, which have various leak out provisions, early termination provisions and exceptions, many of our shareholders will be eligible to sell all or some of their ordinary shares by means of depositing them for ADSs and then trading through ordinary brokerage transactions, in the open market pursuant to Rule 144, promulgated under the Securities Act. Additionally, we have registered for resale up to 10,429,596 ADS (assuming exercise of 5,794,220 Warrants) ordinary shares and/or up to 5,794,220 Warrants (if not exercised for ADSs) held by shareholders who convert outstanding notes into equity in connection with prior to this offering or thereafter upon interest payment dates, which are subject to lock up agreements with leak out and early termination provisions.

Of the 29,117,222 ordinary shares, including those represented by ADSs, expected to be outstanding following completion of the offering, (i) the 5,176,468 ordinary shares represented by ADSs and the 6,470,585 ordinary shares issuable on exercise of the Warrants will be freely tradable as registered shares in this offering, and (ii) subject to the lock up agreements, there will be an additional [21,423,767] shares that will be freely tradable without restriction 90 days after the date of this offering pursuant to and subject to Rule 144.

Rule 144

In general, under Rule 144 as currently in effect, once we have been subject to public company reporting requirements for at least 90 days, a person who is not deemed to have been one of our affiliates for purposes of the Securities Act at any time during the 90 days preceding a sale and who has beneficially owned the shares to be sold for at least six months, including the holding period of any prior owner other than our affiliates, is entitled to sell those shares without complying with the manner of sale, volume limitation or notice provisions of Rule 144, subject to compliance with the public information requirements of Rule 144. If such a person has beneficially owned the shares proposed to be sold for at least one year, including the holding period of any prior owner other than our affiliates, then that person is entitled to sell those shares without complying with any of the requirements of Rule 144.

In general, under Rule 144 as currently in effect, beginning 90 days after the date of this prospectus, and subject to the restrictions contained in the lock-up agreements described above, our affiliates or persons selling shares on behalf of our affiliates would be entitled to sell within any three-month period a number of shares that does not exceed the greater of:

- 1% of the number of ordinary shares, including those represented by ADSs, then issued and outstanding; or
- the average weekly trading volume of our ordinary shares represented by the ADSs on the Nasdaq Global Market during the four calendar weeks preceding the filing of a notice on Form 144 with respect to the sale; provided that current public information about us is available and the affiliate complies with the manner of sale requirements imposed by Rule 144.

Affiliates are also subject to additional restrictions on the manner of sales under Rule 144 and notice filing requirements. We cannot estimate the number of our ordinary shares that our existing affiliated or non-affiliated shareholders will elect to sell on the Nasdaq Global Market following this offering.

Regulation S

Regulation S under the Securities Act provides that securities owned by any person may be sold without registration in the United States, provided that the sale is effected in an offshore transaction and no directed selling efforts are made in the United States (as these terms are defined in Regulation S), subject to certain other conditions. In general, this means that our ordinary shares may be sold in some manner outside the United States without requiring registration in the United States.

Rule 701

In general, under Rule 701 of the Securities Act as currently in effect, each of our employees, consultants or advisors who purchases our ordinary shares from us in connection with a compensatory share plan or other written agreement executed prior to the completion of this offering is eligible to resell such ordinary shares in reliance on Rule 144, but without compliance with some of the restrictions, including the holding period, contained in Rule 144.

THE DISCUSSION ABOVE IS A GENERAL SUMMARY. IT DOES NOT COVER ALL SHARE TRANSFER RESTRICTION MATTERS THAT MAY BE OF IMPORTANCE TO A PROSPECTIVE INVESTOR. EACH PROSPECTIVE INVESTOR SHOULD CONSULT ITS OWN LEGAL ADVISOR REGARDING THE PARTICULAR SECURITIES LAWS AND TRANSFER RESTRICTION CONSEQUENCES OF PURCHASING, HOLDING, AND DISPOSING OF THE ORDINARY SHARES INCLUDING THE CONSEQUENCES OF ANY PROPOSED CHANGE IN APPLICABLE LAWS.

MATERIAL INCOME TAX CONSIDERATIONS

The following summary contains a description of material U.K. and U.S. federal income tax consequences of the acquisition, ownership and disposition of our ordinary shares. This summary should not be considered a comprehensive description of all the tax considerations that may be relevant to the decision to acquire our ordinary shares.

U.S. Federal Income Taxes

The following is a summary of the material U.S. federal income tax consequences to U.S. Holders (as defined below) of purchasing, owing and disposing of the ordinary shares, ADSs or Warrants. This discussion is included for general informational purposes only, does not purport to consider all aspects of U.S. federal income taxation that might be relevant to a U.S. Holder, and does not constitute, and is not, a tax opinion for or tax advice to any particular U.S. Holder of ordinary shares, the ADSs or Warrants. The summary does not address any U.S. tax matters other than those specifically discussed. The summary is based on the provisions of the U.S. Internal Revenue Code of 1986, as amended (the "**Code**"), existing, temporary and proposed Treasury Regulations issued thereunder, judicial decisions and administrative rulings and pronouncements and other legal authorities, all as of the date hereof and all of which are subject to change, possibly with retroactive effect. Any such change could alter the tax consequences described herein.

The discussion below applies only to U.S Holders as capital assets within the meaning of Section 1221 of the Code (generally, property held for investment), and does not address the tax consequences that may be relevant to U.S. Holders who, in light of their particular circumstances, may be subject to special tax rules, including without limitation:

- insurance companies, tax-exempt organizations, regulated investment companies, real estate investment trusts, brokers or dealers in securities or foreign currencies, banks and other financial institutions, mutual funds, retirement plans, traders in securities that elect to mark to market, certain former U.S. citizens or long-term residents;
- U.S. Holders that are classified for U.S. federal income tax purposes as partnerships and other pass-through entities and investors therein;
- U.S. Holders who hold ordinary shares, ADSs or Warrants as part of a hedge, straddle, constructive sale, conversion, or other integrated or risk-reduction transaction, as "qualified small business stock," within the meaning of Section 1202 of the Code or as Section 1244 stock for purposes of the Code;
- U.S. Holders who hold ordinary shares, ADSs or Warrants through individual retirement or other tax-deferred accounts;
- U.S. Holders that have a functional currency other than the U.S. dollar;
- U.S. Holders who are subject to the alternative minimum tax provisions of the Code or the tax on net investment income imposed by Section 1411 of the Code;
- U.S. Holders who acquire their ordinary shares, ADSs or Warrants pursuant to any employee share option or otherwise as compensation;
- U.S. Holders required to accelerate the recognition of any item of gross income with respect to their ordinary shares, ADSs or Warrants as a result of such income being recognized on an applicable financial statement; or
- U.S. Holders who hold or held, directly or indirectly, or are treated as holding or having held under applicable constructive attribution rules, 10% or more of the ordinary shares, ADSs Warrants of the company, measured by voting power or value.

Any such U.S. Holders should consult their own tax advisors.

For purposes of this discussion, a "U.S. Holder" means a holder of our ordinary shares, ADSs or Warrants that is or is treated as, for U.S. federal income tax purposes, (i) an individual citizen or resident of the United States, (ii) a corporation (or other entity taxable as a corporation for U.S. federal income tax purposes) created or organized in or under the laws of the United States, any State thereof or the District of Columbia or any entity treated as such for U.S. federal income tax purposes, (iii) an estate the income of which is subject to U.S. federal income taxation regardless of its source, or (iv) a trust (A) the administration over which a U.S. court exercises primary supervision and all of the substantial decisions of which one or more U.S. persons have the authority to control, or (B) that has a valid election in effect under the applicable Treasury Regulations to be treated as a U.S. person under the Code.

If a partnership or other pass-through entity (including any entity or arrangement treated as such for purposes of U.S. federal income tax law) holds our ordinary shares, ADSs or Warrants, the tax treatment of a partner of such partnership or member of such entity will generally depend upon the status of the partner and the activities of the partnership. Partnerships and other pass-through entities holding our ordinary shares, ADSs or Warrants, and any person who is a partner or member of such entities should consult their own tax advisors regarding the tax consequences of purchasing, owning and disposing of the ordinary shares, ADSs or Warrants.

Passive Foreign Investment Company Considerations

A non-U.S. corporation, such as TCB, will be classified as a passive foreign investment company, or PFIC, for U.S. federal income tax purposes, if, in the case of any particular taxable year, either (i) 75% or more of its gross income for such taxable year consists of certain types of "passive" income or (ii) 50% or more of the value of its assets (based on an average of the quarterly values of the assets) during such taxable year is attributable to assets that produce or are held for the production of passive income. For this purpose, cash is categorized as a passive asset and the company's un-booked intangibles associated with active business activities may generally be classified as active assets. Passive income generally includes, among other things, dividends, interest, rents, royalties, and gains from the disposition of passive assets. For this purpose, a foreign corporation will be treated as owning its proportionate share of the assets and earning its proportionate share of the income of any other non-U.S. corporation in which it owns, directly or indirectly, more than 25% (by value) of the stock.

Based upon its current income and assets and projections as to the value of the ordinary shares or ADSs, it is not presently expected that we will be classified as a PFIC for the 2021 taxable year or the foreseeable future.

The determination of whether we will be or become a PFIC will depend upon the composition of its income (which may differ from our historical results and current projections) and assets and the value of its assets from time to time, including, in particular the value of its goodwill and other un-booked intangibles (which may depend upon the market value of the ordinary shares or ADSs from time to time and may be volatile). Among other matters, if our market capitalization is less than anticipated or subsequently declines, we may be classified as a PFIC for the taxable year in the 2021 taxable year or future taxable years. It is also possible that the IRS may challenge the classification or valuation of our assets, including its goodwill and other unbooked intangibles, or the classification of certain amounts received by us, including interest earnings, which may result in our being, or becoming classified as, a PFIC for the taxable year in 2021 or future taxable years.

The determination of whether we will be or become a PFIC may also depend, in part, on how, and how quickly, it uses liquid assets and the cash proceeds of this offering or otherwise. If we were to retain significant amounts of liquid assets, including cash, the risk of our being classified as a PFIC may substantially increase. Because there are uncertainties in the application of the relevant rules and PFIC status is a factual determination made annually after the close of each taxable year, there can be no assurance that we will not be a PFIC for the 2021 taxable year or any future taxable year, and no opinion of counsel has or will be provided regarding the classification of us as a PFIC. If we were classified as a PFIC for any year during which a holder held our ordinary shares or ADSs, it generally would continue to be treated as a PFIC for all succeeding years during which such holder held the ordinary shares or ADSs. The discussion below under "—Dividends Paid on Ordinary Shares or ADSs" and "—Sale or

Other Disposition of Ordinary Shares or ADS" is written on the basis that we will not be classified as a PFIC for U.S. federal income tax purposes.

Dividends Paid on Ordinary Shares or ADSs

Subject to the PFIC rules described below, any cash distributions (including constructive distributions) paid on the ordinary shares or ADSs out of our current or accumulated earnings and profits, as determined under U.S. federal income tax principles, will generally be includible in the gross income of a U.S. Holder as dividend income on the day actually or constructively received by the U.S. Holder, in the case of ordinary shares or ADSs. Because we does not intend to determine its earnings and profits on the basis of U.S. federal income tax principles, any distribution will generally be treated as a "dividend" for U.S. federal income tax purposes. Under current law, a non-corporate recipient of a dividend from a "qualified foreign corporation" will generally be subject to tax on the dividend income at the lower applicable net capital gains rate rather than the marginal tax rates generally applicable to ordinary income provided that certain holding period and other requirements are met.

A non-U.S. corporation (other than a corporation that is classified as a PFIC for the taxable year in which the dividend is paid or the preceding taxable year) will generally be considered to be a qualified foreign corporation (i) if it is eligible for the benefits of a comprehensive tax treaty with the United States which the Secretary of Treasury of the United States determines is satisfactory for purposes of this provision and which includes an exchange of information program, or (ii) with respect to any dividend it pays on stock, which is readily tradable on an established securities market in the United States. We believe we are eligible for the benefits of the Convention Between the Government of the United States of America and the Government of the United Kingdom of Great Britain and Northern Ireland for the Avoidance of Double Taxation and the Prevention of Fiscal Evasion with Respect to Taxes on Income and On Capital Gains, or the United States-United Kingdom income tax treaty (which the Secretary of the Treasury of the United States has determined is satisfactory for this purpose and includes an exchange of information program), in which case it would be treated as a qualified foreign corporation with respect to dividends paid on the ordinary shares or ADSs. U.S. Holders are urged to consult their tax advisors regarding the availability of the reduced tax rate on dividends in their particular circumstances. Dividends received on the ordinary shares will not be eligible for the dividends received deduction allowed to corporations.

Sale or Other Disposition of Ordinary Shares, ADSs or Warrants

Subject to the PFIC rules discussed below, a U.S. Holder of our ordinary shares, ADRs or Warrants will generally recognize capital gain or loss, if any, upon the sale or other disposition of ordinary shares, ADSs or Warrants, respectively, in an amount equal to the difference between the amount realized upon the disposition and the U.S. Holder's adjusted tax basis in such ordinary shares, ADSs or Warrants. Any capital gain or loss will be long-term capital gain or loss if the ordinary shares, ADSs or Warrants have been held for more than one year and will generally be United States source capital gain or loss for United States foreign tax credit purposes. Long-term capital gains of non-corporate taxpayers are currently eligible for reduced rates of taxation.

Exercise and Expiration of Warrants

In general, a U.S. Holder will not recognize gain or loss for U.S. federal income tax purposes upon exercise of a Warrant. The U.S. Holder will take a tax basis in the ADSs acquired on the exercise of a Warrant equal to the exercise price of the Warrant, increased by the U.S. Holder's adjusted tax basis in the Warrant exercised (as determined pursuant to the rules discussed below on allocation of purchase price). The U.S. Holder's holding period in the ADSs acquired on exercise of the Warrant will begin on the date of exercise of the Warrant and will not include any period for which the U.S. Holder held the Warrant.

The lapse or expiration of a Warrant will be treated as if the U.S. Holder sold or exchanged the Warrant and recognized a capital loss equal to the U.S. Holder's tax basis in the Warrant.

Allocation of Purchase Price

For U.S. federal income tax purposes, the ADSs and Warrants acquired in this offering will be treated as separate securities. The purchase price will be allocated between these two components in proportion to their purchase price at the time they are purchased by the U.S. Holder. This allocation of the purchase price for each unit will establish the U.S. Holder's initial tax basis for U.S. federal income tax purposes in the ADS and the Warrant. You should consult your tax advisors regarding the allocation of the purchase price.

Disposition of Foreign Currency

U.S. Holders are urged to consult their tax advisors regarding the tax consequences of receiving, converting or disposing of any non-U.S. currency received as dividends on our ordinary shares or ADSs.

Tax on Net Investment Income

Additional 3.8% Medicare tax on some or all of such U.S. Holder's "net investment income." Net investment income generally includes income from the ordinary shares, ADSs or Warrants unless such income is derived in the ordinary course of the conduct of a trade or business (other than a trade or business that consists of certain passive or trading activities). You should consult your tax advisors regarding the effect this Medicare tax may have, if any, on your acquisition, ownership or disposition of ordinary shares, ADSs or Warrants.

Passive Foreign Investment Company Rules

If we are is classified as a PFIC for any taxable year during which a U.S. Holder holds our ordinary shares or ADSs, unless the holder makes a mark-to-market election (as described below), the holder will, except as discussed below, be subject to special tax rules that have a penalizing effect, regardless of whether we remain a PFIC, on (i) any excess distribution that we make to the holder (which generally means any distribution paid during a taxable year to a holder that is greater than 125% of the average annual distributions paid in the three preceding taxable years or, if shorter, the holder's holding period for the ordinary shares or ADSs), and (ii) any gain realized on the sale or other disposition, including, under certain circumstances, a pledge, of our ordinary shares or ADSs. Under the PFIC rules:

- The excess distribution and/or gain will be allocated ratably over the U.S. Holder's holding period for the ordinary shares or ADSs;
- The amount of the excess distribution or gain allocated to the taxable year of the distribution or disposition and any taxable years in the U.S. Holder's holding period prior to the first taxable year in which we are classified as a PFIC, or a pre-PFIC year, will be taxable as ordinary income; and
- The amount of the excess distribution or gain allocated to each taxable year other than the taxable year of the distribution or disposition or a pre-PFIC year, will be subject to tax at the highest tax rate in effect applicable to the individuals or corporations, and the interest charge generally applicable to underpayments of tax will be imposed on the resulting tax attributable to each such year.

If we are a PFIC for any taxable year during which a U.S. Holder holds our ordinary shares or ADSs and any of its non-U.S. subsidiaries is also a PFIC, such holder would be treated as owning a proportionate amount (by value) of the shares of the lower-tier PFIC for purposes of the application of these rules. Each U.S. Holder is advised to consult its tax advisors regarding the application of the PFIC rules to any of our subsidiaries.

A U.S. holder of the Warrants is taxed in a manner similar to a U.S. holder of common shares if the holder realizes gain on the sale of the Warrants. If the holder of the warrants exercises the warrants to purchase common shares, the holding period over which any income realized is allocated includes the holding period of the warrants. The U.S. warrant holder is treated as a holder of PFIC stock taxable under the ordinary income allocation and interest charge regime described herein.

As an alternative to the foregoing rules, a U.S. Holder of “marketable stock” in a PFIC may make a mark-to-market election with respect to such ordinary shares or ADSs, provided that they are “regularly traded” (as specially defined under the Code) on The NASDAQ Stock Market. No assurances may be given regarding whether the ordinary shares or ADSs will qualify, or will continue to be qualified, as being regularly traded in this regard. If a mark-to-market election is made, the U.S. Holder will generally (i) include as ordinary income for each taxable year that we are a PFIC the excess, if any, of the fair market value of ordinary shares or ADSs held at the end of the taxable year over the adjusted tax basis of such securities and (ii) deduct as an ordinary loss the excess, if any, of the adjusted tax basis of such securities over the fair market value of such securities held at the end of the taxable year, but only to the extent of the net amount previously included in income as a result of the mark-to-market election. The U.S. Holder’s adjusted tax basis in the ordinary shares or ADSs would be adjusted to reflect any income or loss resulting from the mark-to-market election. If a U.S. Holder makes an effective mark-to-market election, in each year that we are a PFIC any gain recognized upon the sale or other disposition of the ordinary shares or ADSs will be treated as ordinary income and loss will be treated as ordinary loss, but only to the extent of the net amount previously included in income as a result of the mark-to-market election. U.S. Holders of our ordinary shares or ADSs should consult their tax advisors regarding the availability of a mark-to-market election with respect to such ordinary shares or ADSs.

If a U.S. Holder makes a mark-to-market election in respect of a corporation classified as a PFIC and such corporation ceases to be classified as a PFIC, the holder will not be required to take into account the mark-to-market gain or loss described above during any period that such corporation is not classified as a PFIC.

Because a mark-to-market election cannot be made for any lower-tier PFICs that a PFIC may own, a U.S. Holder who makes a mark-to-market election with respect to the ordinary shares or ADSs may continue to be subject to the general PFIC rules with respect to such holder’s indirect interest in any of our non-U.S. subsidiaries that is classified as a PFIC.

We do not intend to provide information necessary for U.S. Holder’s to make qualified electing fund elections, which, if available, would result in tax treatment different from the general tax treatment for PFICs described above. However, as described above under “Passive Foreign Investment Company Considerations-PFIC Classification of TCB,” it is not presently expected that we will be classified as a PFIC for the 2021 taxable year or the foreseeable future.

As discussed above under “Dividends Paid on Ordinary Shares or ADSs”, dividends that we pay on the ordinary shares or ADSs will not be eligible for the reduced tax rate that applies to qualified dividend income if we are is classified as a PFIC for the taxable year in which the dividend is paid or the preceding taxable year. In addition, if a U.S. Holder owns the ordinary shares or ADSs during any taxable year that we are a PFIC, the holder must file an annual information return with the IRS. Each holder is urged to consult its tax advisor concerning the U.S. federal income tax consequences of purchasing, holding, and disposing ordinary shares or ADSs if we are or become a PFIC, including the possibility of making a mark-to-market election and the unavailability of the qualified electing fund election.

Information reporting and backup withholding

Certain U.S. Holders are required to report information to the IRS relating to an interest in “specified foreign financial assets,” including shares issued by a non-U.S. corporation, for any year in which the aggregate value of all specified foreign financial assets exceeds $50 thousand (or a higher U.S. dollar amount prescribed by the IRS), subject to certain exceptions (including an exception for shares held in custodial accounts maintained with a United States financial institution). These rules also impose penalties if a holder is required to submit such information to the IRS and fails to do so.

In addition, U.S. Holders may be subject to information reporting to the IRS and backup withholding with respect to dividends on and proceeds from the sale or other disposition of the our ordinary shares, ADSs or Warrants. Information reporting will apply to payments of dividends on, and to proceeds from the sale or other disposition of, our ordinary shares, ADSs or Warrants by a paying agent within the United States to a holder, other than holders that are exempt from information reporting and properly certify their exemption. A paying agent within the United States will be required to withhold at the applicable statutory rate, currently 24%, in respect of any payments of dividends on, and the proceeds from the disposition of, our ordinary shares, ADRs or Warrants within the U.S. to a U.S. Holder (other than holders that are exempt from backup withholding and properly certify their exemption) if the holder fails to furnish its correct taxpayer identification number or otherwise fails to comply with applicable backup withholding requirements. U.S. Holders who are required to establish their exempt status generally must provide a properly completed IRS Form W-9.

Backup withholding is not an additional tax. Amounts withheld as backup withholding may be credited against a holder’s U.S. federal income tax liability. A U.S. Holder generally may obtain a refund of any amounts withheld under the backup withholding rules by filing the appropriate claim for refund with the IRS in a timely manner and furnishing any required information. Each U.S. Holder is advised to consult with its tax advisor regarding the application of the United States information reporting rules to their particular circumstances.

Material United Kingdom Tax Considerations

The following is a description of the material U.K. tax considerations relating primarily to the ownership and disposal of our ordinary shares, ADSs or Warrants by the U.S. Holders described above. The U.K. tax comments set out below are based on current U.K. tax law as applied in Scotland, and HMRC practice (which may not be binding on HMRC) as at the date of this summary, both of which are subject to change, possibly with retrospective effect. They are intended as a general guide and, save where otherwise stated, only apply to you if you are not resident in the U.K. for U.K. tax purposes and do not hold our ordinary shares, ADSs or Warrants for the purposes of a trade, profession or vocation that you carry on in the U.K. through a branch, agency or permanent establishment in the U.K. and if you hold our ordinary shares as an investment for U.K. tax purposes and are not subject to special rules.

This summary does not address all possible tax consequences relating to an investment in our ordinary shares, ADSs or Warrants. In particular it does not cover the U.K. inheritance tax consequences of holding our ordinary shares, ADSs or Warrants. It assumes that the depositary or DTC has not made an election under section 97A(1) of the Finance Act 1986. It assumes that we do not (and will not at any time) derive 75% or more of our qualifying asset value, directly or indirectly, from U.K. land, and that we are and remain solely resident in the U.K. for tax purposes. It assumes that the holder is not our officer or our employee (or of any related company of ours) and has not (and is not deemed to have) acquired the ordinary shares, ADSs or Warrants by virtue of an office or employment. It assumes that a holder of ordinary shares or ADSs is the beneficial owner of the underlying ordinary shares for U.K. tax purposes. This summary is for general information only and is not intended to be, nor should it be considered to be, legal or tax advice to any particular holder. Holders of our ordinary shares, ADSs or Warrants are strongly urged to consult their tax advisers in connection with the U.K. tax consequences of their investment in our securities.

U.K. Taxation of Dividends and Distributions

We will not be required to withhold amounts for or on account of U.K. tax at source when paying a dividend or distribution in respect of our ordinary shares.

Individual holders who hold our ordinary shares as an investment, who are not resident in the U.K. for U.K. tax purposes should not be subject to U.K. income tax in respect of any dividends on our ordinary shares, unless they hold their ordinary shares in connection with any trade, profession or vocation carried on (whether solely or in partnership) by them in the U.K. through a branch, agency or permanent establishment in the U.K.. In these circumstances, such holder may, depending on his or her individual circumstances, be chargeable to U.K. income tax in respect of our dividends.

Corporate holders which are not resident in the U.K. for U.K. tax purposes should not be subject to U.K. corporation tax in respect of any dividends on our ordinary shares, unless they carry on a trade in the U.K. through a permanent establishment to which the ordinary shares are attributable. In these circumstances, such holders may, depending on their individual circumstances and if an exemption from U.K. corporation tax in respect of dividend payments does not apply, be chargeable to U.K. corporation tax in respect of our dividends.

U.K. Taxation of Capital Gains

An individual holder who is not resident in the U.K. for U.K. tax purposes should not be liable to U.K. capital gains tax on capital gains realized on the disposal of their ordinary shares unless such holder carries on (whether solely or in partnership) a trade, profession or vocation in the U.K. through a branch or agency in the U.K. to which our ordinary shares are attributable. In these circumstances, such holder may, depending on his or her individual circumstances, be chargeable to U.K. capital gains tax on chargeable gains arising from a disposal of his or her ordinary shares.

Any such individual holder of our ordinary shares who is temporarily non-resident for U.K. tax purposes will, in certain circumstances, become liable to U.K. tax on capital gains in respect of gains realized while they were not resident in the U.K.

A corporate holder of our ordinary shares which is not resident in the U.K. for U.K. tax purposes should not be liable for U.K. corporation tax on chargeable gains realized on the disposal of our ordinary shares unless it carries on a trade in the U.K. through a permanent establishment in the U.K. to which our ordinary shares are attributable. In these circumstances, a disposal of ordinary shares by such holder may give rise to a chargeable gain or an allowable loss for the purposes of U.K. corporation tax.

Stamp Duty and Stamp Duty Reserve Tax

The discussion below relates to the holders of our ordinary shares or ADSs wherever resident, however it should be noted that special rules may apply to certain persons such as market makers, brokers, dealers or intermediaries.

As a general rule (and except in relation to depositary receipt systems and clearance services (as to which see below)), no UK stamp duty or stamp duty reserve tax, or SDRT, is payable on the issue of the ordinary shares underlying the ADSs.

An unconditional agreement to transfer ordinary shares will normally give rise to a charge to SDRT at the rate of 0.5% of the amount or value of the consideration payable for the transfer. The purchaser of the shares is liable for the SDRT. Transfers of ordinary shares in certificated form are generally also subject to stamp duty at the rate of 0.5% of the amount or value of the consideration given for the transfer (rounded up to the next £5.00). Stamp duty is normally paid by the purchaser. The charge to SDRT will be cancelled or, if already paid, repaid (generally with interest), where a transfer instrument has been duly stamped within six years of the charge arising, (either by paying the stamp duty or by claiming an appropriate relief) or if the instrument is otherwise exempt from stamp duty.

Under current UK legislation, an issue or transfer of ordinary shares or an unconditional agreement to transfer ordinary shares to a clearance service or a depositary receipt system (including to a nominee or agent for, a person whose business is or includes the issue of depositary receipts or the provision of clearance services) will generally be subject to SDRT (and, in the case of transfers, where the transfer is effected by a written instrument, stamp duty) at a higher rate of 1.5% of the amount or value of the consideration given for the transfer or, in certain circumstances, the value of the ordinary shares unless the clearance service has made and maintained an election under section 97A of the UK Finance Act 1986, or a section 97A election. It is understood that HMRC regards the facilities of DTC as a clearance service for these purposes and we are not aware of any section 97A election having been made by the DTC.

However, based on current published HMRC practice following European Union case law in respect of the European Council Directives 69/335/EEC and 2009/7/EC, no SDRT is generally payable in respect of such an issue of ordinary shares and no SDRT or stamp duty is generally payable in respect of such a transfer of ordinary shares where such transfer is an integral part of an issue of share capital. It is noted that on January 31, 2020 the United Kingdom ceased to be a Member State of the European Union. Accordingly, the extent to which HMRC's position will remain as set out in this paragraph following the end of the transition period on December 31, 2020 is uncertain.

Any stamp duty or SDRT payable on an issue or transfer of ordinary shares to a depositary receipt system or clearance service (although strictly accountable by the clearance service or depositary receipt system operator or their nominee) will in practice generally be paid by the transferors or participants in the clearance service or depositary receipt system. Specific professional advice should be sought before incurring or reimbursing the costs of a 1.5% stamp duty or SDRT charge in any circumstances.

No UK SDRT or stamp duty is required to be paid in respect of the issue or transfer of, or an agreement to transfer, ADSs (including by way of a paperless transfer of ADSs through the facilities of DTC).

UNDERWRITING

EF Hutton, division of Benchmark Investments, LLC (the "Representative"), is acting as representative of the underwriters of the offering. We have entered into an underwriting agreement with the Representative (the "underwriting agreement"). Subject to the terms and conditions of the underwriting agreement, we have agreed to sell to each underwriter named below, and each underwriter named below has severally agreed to purchase, at the initial public offering prices per ADS and Warrant, less the underwriting discounts set forth on the cover page of this prospectus, the number of ADSs and Warrants listed next to its name in the following table:

	Number of ADSs and Warrants
EF Hutton, division of Benchmark Investments, LLC	
Total	

The underwriters are committed to purchase all of the ADSs and Warrants offered by us, other than those covered by the over-allotment option to purchase additional ADSs and Warrants described below, if they purchase any ADSs and Warrants. The obligations of the underwriters may be terminated upon the occurrence of certain events specified in the underwriting agreement. Furthermore, pursuant to the underwriting agreement, the underwriters' obligations are subject to customary conditions, representations, and warranties contained in the underwriting agreement, such as receipt by the underwriters of officers' certificates and legal opinions.

We have agreed to indemnify the underwriters against specified liabilities, including liabilities under the Securities Act, and to contribute to payments the underwriters may be required to make in respect thereof.

The underwriters are offering the ADSs the Warrants, in combination and not separately, subject to prior sale, when, as and if issued to and accepted by them, subject to approval of legal matters by their counsel and other conditions specified in the underwriting agreement. The underwriters reserve the right to withdraw, cancel or modify offers to the public, and to reject orders in whole or in part.

Over-Allotment Option

We have granted the underwriters an over-allotment option. This option, which is exercisable for up to 45 days after the date of this prospectus, permits the underwriters to purchase up to an aggregate of 776,470 each of additional ADSs and up to 970,588 Warrants (equal to 15% of the ADSs and Warrants sold in the offering) at the initial public offering price per ADS and Warrants, less underwriting discounts and commissions, solely to cover over-allotments, if any. The purchase price to be paid per additional ADS and Warrant shall be equal to the initial public offering price of the ADSs and Warrants, less the underwriting discount. If this option is exercised in full, the total price to the public will be $25,300,000 and the total net proceeds, before expenses, to us will be $23,276,000.

Discounts, Commissions, and Reimbursement

The following table shows the per share and total underwriting discounts and commissions to be paid to the underwriters. Such amounts are shown assuming both no exercise and full exercise of the underwriters' option to purchase additional ADSs and Warrants.

	Per ADS	Per 1.25 Warrants	Total Without Option	Total With Option
Initial public offering price	$ 4.24	$ 0.01	$ 22,000,000	$ 25,300,000
Underwriting discounts and commissions (8%)	$ 0.3392	$ 0.0008	$ 1,760,000	$ 2,024,000
Proceeds, before expenses, to us	$ 3.9008	$ 0.0092	$ 20,240,000	$ 23,276,000

The underwriters propose to offer the ADSs and Warrants to the public at the initial public offering prices set forth on the cover of this prospectus. If all of the shares offered by us are not sold at the initial public offering price, the Representative may change the offering price and other selling terms by means of a supplement to this prospectus.

We have also agreed to pay all expenses relating to the offering, including: (a) all filing fees and expenses relating to the registration of the shares with the Commission; (b) all fees and expenses relating to the listing of the shares on Nasdaq; (c) all fees associated with the review of the offering by FINRA; (d) all fees, expenses and disbursements relating to the registration, qualification or exemption of shares offered under "blue sky" securities laws or the securities laws of foreign jurisdictions designated by the Representative, including the reasonable fees and expenses of the Representative's blue sky counsel all fees, expenses and disbursements relating to the registration, qualification or exemption of the shares under the securities laws of such foreign jurisdictions; (f) the costs of mailing and printing the offering materials; (g) transfer and/or stamp taxes, if any, payable upon our transfer of the shares to the Representative; and (h) the fees and expenses of our accountants; and (i) actual accountable expenses of the Representative not to exceed $150,000, which amount includes expenses for the Representative's legal counsel and road show expenses.

We have paid a $15,000 advance to the Representative, which shall be applied against actual out-of-pocket-accountable expenses, which will be returned to us to the extent such out-of-pocket accountable expenses are not actually incurred in accordance with FINRA Rule 5110I(2)I.

We estimate that the total expenses of the offering payable by us, excluding the total underwriting discount, and including the above-referenced advance to the Representative, will be approximately $1.4 million.

Representative's Warrants

We have agreed to issue warrants to EF Hutton, division of Benchmark Investments, LLC, as representative of the underwriters, upon the closing of this offering, which entitle it to purchase up to 5% of the total number of ADSs being sold in this offering (the "Representative's Warrants"). The exercise price of the Representative's Warrants is equal to 100% of the offering price of the ADSs and Warrants offered hereby for the ADSs and Warrants. The Representative's Warrants will be exercisable at any time and from time to time, in whole or in part, during the four and a half-year period commencing six months from the effective date of the registration statement for this offering (the "Initial Exercise Date"). The Representative's Warrants and the ordinary shares underlying the warrants are deemed underwriting compensation by FINRA rules and are therefore subject to a 180-day lock-up pursuant to Rule 5110(g)(1) of FINRA. The Representative's Warrants may not be sold, transferred, assigned, pledged or hypothecated or be the subject of any hedging, short sale, derivative, put, or call transaction that would result in the effective economic disposition of the securities for a period of 180 days following the effective date of the registration statement for this offering, except that they may be assigned, in whole or in part, to any officer or partner of the representative, and to members of the underwriting syndicate or selling group (or to officers or partners thereof), or as otherwise permitted, in compliance with Rule 5110(g)(2) of FINRA. The Representative's Warrants will contain a provision for one demand registration of the sale of the underlying ordinary shares at our expense. The demand for registration may be made at any time. In addition, the Representative's Warrants will contain a provision for unlimited "piggyback" registration rights. The exercise price and number of shares issuable upon exercise of the Representative's Warrants may be adjusted in certain circumstances including in the event of a stock split or other corporate events and as otherwise permitted under Rule 5110(f)(2)(G) of FINRA.

Pricing of the Offering

Prior to this offering, there has been no public market for our ADSs or Warrants. The initial public offering price will be determined by negotiations between us and the representatives of the underwriters. In determining the initial public offering price, we and the representatives of the underwriters expect to consider a number of factors including:

- the information set forth in this prospectus and otherwise available to the representatives;
- our prospects and the history and prospects for the industry in which we compete;
- an assessment of our management;
- our prospects for future earnings;

- the general condition of the securities markets at the time of this offering;
- the recent market prices of, and demand for, publicly traded common equity of generally comparable companies; and
- other factors deemed relevant by the underwriters and us.

Neither we nor the underwriters can assure investors that an active trading market will develop for our ADSs or Warrants, or that the ADSs or Warrants will trade in the public market at or above the initial public offering price.

Discretionary Accounts

The underwriters do not intend to confirm sales of the ADSs and Warrants offered hereby to any accounts over which they have discretionary authority.

Lock-Up Agreements

Subject to various leak out provisions, early termination provisions and exceptions, our executive officers and directors, and certain of our stockholders and loan note holders have agreed not to, without the prior written consent of the Representative, directly or indirectly, offer to sell, sell, pledge or otherwise transfer or dispose of any shares of our ordinary shares (or enter into any transaction or device that is designed to, or could be expected to, result in the transfer or disposition by any person at any time in the future of our ordinary shares, enter into any swap or other derivatives transaction that transfers to another, in whole or in part, any of the economic benefits or risks of ownership of ordinary shares, make any demand for or exercise any right or cause to be filed a registration statement, including any amendments thereto, with respect to the registration of any of the ordinary shares or securities convertible into or exercisable or exchangeable for the ordinary shares or any other of our securities or publicly disclose the intention to do any of the foregoing, subject to customary exceptions, for periods of 180 to 365 days from the date of this prospectus.

Subject to the lock up agreement arrangements, additionally, we have registered for resale up to 10,429,596 ADSs (assuming exercise of 5,794,220 Warrants) and/or up to 5,794,220 Warrants (if not exercised for ADSs) held by shareholders who convert outstanding notes into equity in connection with this offering or thereafter upon interest payment dates, which are subject to lock up agreements with leak out and early termination provisions. The resale prospectus is included in the registration statement of which this prospectus is a part.

No Sales of Similar Securities

We have agreed not to offer, pledge, announce the intention to sell, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase or otherwise transfer or dispose of, directly or indirectly, any ordinary shares or any securities convertible into or exercisable or exchangeable for the ordinary shares or enter into any swap or other agreement that transfers, in whole or in part, any of the economic consequences of ownership of our ordinary shares, whether any such transaction is to be settled by delivery of ordinary shares or such other securities, in cash or otherwise, without the prior written consent of the Representative, for a period of 360 days from the date of this prospectus.

Electronic Offer, Sale, and Distribution of Securities

A prospectus in electronic format may be made available on the websites maintained by one or more of the underwriters or selling group members. The Representative may agree to allocate a number of shares to underwriters and selling group members for sale to their online brokerage account holders. Internet distributions will be allocated by the underwriters and selling group members that will make internet distributions on the same basis as other allocations. Other than the prospectus in electronic format, the information on these websites is not part of, nor incorporated by reference into, this prospectus or the registration statement of which this prospectus forms a part, has not been approved or endorsed by us, and should not be relied upon by investors.

Listing

We have applied to list our ADSs and warrants on the Nasdaq Global Market under the symbol “TCBP” and “TCBPW.”

Stabilization

In connection with this offering, the underwriters may engage in stabilizing transactions, over-allotment transactions, syndicate-covering transactions, penalty bids, and purchases to cover positions created by short sales.

- Stabilizing transactions permit bids to purchase securities so long as the stabilizing bids do not exceed a specified maximum and are engaged in for the purpose of preventing or retarding a decline in the market price of the securities while the offering is in progress.

- Over-allotment transactions involve sales by the underwriters of securities in excess of the number of securities the underwriters are obligated to purchase. This creates a syndicate short position which may be either a covered short position or a naked short position. In a covered short position, the number of securities over-allotted by the underwriters is not greater than the number of securities that they may purchase in the over-allotment option. In a naked short position, the number of securities involved is greater than the number of securities in the over-allotment option. The underwriters may close out any short position by exercising their over-allotment option and/or purchasing securities in the open market.

- Syndicate covering transactions involve purchases of securities in the open market after the distribution has been completed in order to cover syndicate short positions. In determining the source of securities to close out the short position, the underwriters will consider, among other things, the price of securities available for purchase in the open market as compared with the price at which they may purchase securities through exercise of the over-allotment option. If the underwriters sell more securities than could be covered by exercise of the over-allotment option and, therefore, have a naked short position, the position can be closed out only by buying securities in the open market. A naked short position is more likely to be created if the underwriters are concerned that after pricing there could be downward pressure on the price of the securities in the open market that could adversely affect investors who purchase in the offering.

- Penalty bids permit the Representative to reclaim a selling concession from a syndicate member when the securities originally sold by that syndicate member are purchased in stabilizing or syndicate covering transactions to cover syndicate short positions.

These stabilizing transactions, over-allotment transactions, syndicate covering transactions, and penalty bids may have the effect of raising or maintaining the market price of our securities or preventing or retarding a decline in the market price of our securities. As a result, the price of our securities in the open market may be higher than it would otherwise be in the absence of these transactions. Neither we nor the underwriters make any representation or prediction as to the effect that the transactions described above may have on the price of our securities. These transactions may be effected on the Nasdaq Stock Market, in the over-the-counter market or otherwise and, if commenced, may be discontinued at any time.

Passive Market Making

In connection with this offering, underwriters, and selling group members may engage in passive market making transactions in our securities on Nasdaq in accordance with Rule 103 of Regulation M under the Exchange Act, during a period before the commencement of offers or sales of the shares and extending through the completion of the distribution. A passive market maker must display its bid at a price not in excess of the highest independent bid of that security. However, if all independent bids are lowered below the passive market maker’s bid, then that bid must then be lowered when specified purchase limits are exceeded.

Offer Restrictions Outside the United States

Other than in the United States, no action has been taken by us or the underwriters that would permit a public offering of the securities offered by this prospectus in any jurisdiction where action for that purpose is required. The securities offered by this prospectus may not be offered or sold, directly or indirectly, nor may this prospectus or any other offering material or advertisements in connection with the offer and sale of any such securities be distributed or published in any jurisdiction, except under circumstances that will result in compliance with the applicable rules and regulations of that jurisdiction. Persons into whose possession this prospectus comes are advised to inform themselves about and to observe any restrictions relating to the offering and the distribution of this prospectus. This prospectus does not constitute an offer to sell or a solicitation of an offer to buy any securities offered by this prospectus in any jurisdiction in which such an offer or a solicitation is unlawful.

European Economic Area — Belgium, Germany, Luxembourg and Netherlands

The information in this document has been prepared on the basis that all offers of securities will be made pursuant to an exemption under the Directive 2003/71/EC ("Prospectus Directive"), as implemented in Member States of the European Economic Area (each, a "Relevant Member State"), from the requirement to produce a prospectus for offers of securities.

An offer to the public of securities has not been made, and may not be made, in a Relevant Member State except pursuant to one of the following exemptions under the Prospectus Directive as implemented in that Relevant Member State:

- to legal entities that are authorized or regulated to operate in the financial markets or, if not so authorized or regulated, whose corporate purpose is solely to invest in securities;
- to any legal entity that has two or more of (i) an average of at least 250 employees during its last fiscal year; (ii) a total balance sheet of more than €43,000,000 (as shown on its last annual unconsolidated or consolidated financial statements), and (iii) an annual net turnover of more than €50,000,000 (as shown on its last annual unconsolidated or consolidated financial statements);
- to fewer than 100 natural or legal persons (other than qualified investors within the meaning of Article 2(1)(e) of the Prospectus Directive) subject to obtaining the prior consent of our Company or any underwriter for any such offer; or
- in any other circumstances falling within Article 3(2) of the Prospectus Directive, provided that no such offer of securities shall result in a requirement for the publication by our Company of a prospectus pursuant to Article 3 of the Prospectus Directive.

United Kingdom

Neither the information in this document nor any other document relating to the offer has been delivered for approval to the Financial Services Authority in the United Kingdom and no prospectus (within the meaning of section 85 of the Financial Services and Markets Act 2000, as amended ("FSMA")) has been published or is intended to be published in respect of the securities. This document is issued on a confidential basis to "qualified investors" (within the meaning of section 86(7) of FSMA) in the United Kingdom, and the securities may not be offered or sold in the United Kingdom by means of this document, any accompanying letter or any other document, except in circumstances which do not require the publication of a prospectus pursuant to section 86(1) FSMA. This document should not be distributed, published or reproduced, in whole or in part, nor may its contents be disclosed by recipients to any other person in the United Kingdom.

Any invitation or inducement to engage in investment activity (within the meaning of section 21 of FSMA) received in connection with the issue or sale of the securities has only been communicated or caused to be communicated and will only be communicated or caused to be communicated in the United Kingdom in circumstances in which section 21(1) of FSMA does not apply to our company.

In the United Kingdom, this document is being distributed only to, and is directed at, persons (i) who have professional experience in matters relating to investments falling within Article 19(5) (investment professionals) of the Financial Services and Markets Act 2000 (Financial Promotions) Order 2005 ("FPO"), (ii) who fall within the categories of persons referred to in Article 49(2)(a) to (d) (high net worth companies, unincorporated associations, etc.) of the FPO or (iii) to whom it may otherwise be lawfully communicated (together "relevant persons"). The investments to which this document relates are available only to, and any invitation, offer or agreement to purchase will be engaged in only with, relevant persons. Any person who is not a relevant person should not act or rely on this document or any of its contents. If you believe you are an exempt relevant person for the purposes of the FPO (ie that you fall within one of the categories referred to above or another category of exempt relevant persons) and wish to make an investment in the Company, please contact the Company directly. Please note that no offer will be made to, and no subscription will be accepted from, any person in the UK who is not an exempt relevant person for the purposes of the FSMA and FPO.

EXPENSES OF THE OFFERING

Set forth below is an itemization of the total expenses, excluding underwriting discounts, expected to be incurred in connection with the offer and sale of the ADSs and Warrants by us. With the exception of the SEC registration fee and the FINRA filing fee, all amounts are estimates, in United States dollars:

SEC registration fee	$	12,973
Nasdaq listing fee	$	150,000
FINRA filing fee	$	9,125
Transfer agent, depositary fees and expenses	$	30,776
Printer fees and expenses	$	6,000
Legal fees and expenses	$	771,245
Accounting fees and expenses	$	390,630
Miscellaneous	$	13,514
Total	$	1,384,263

LEGAL MATTERS

We are being represented by Golenbock Eiseman Assor Bell & Peskoe LLP, New York, New York with respect to certain legal matters of United States federal securities and New York state law. We are being represented by Addleshaw Goddard LLP, Glasgow, Scotland with respect to certain legal matters of the law of Scotland and other applicable law of the United Kingdom and as to certain patent law matters by Murgitroyd & Company Limited. The validity of the ordinary shares offered in this offering and legal matters as to the law of Scotland were passed upon for us by Addleshaw Goddard LLP, Glasgow, Scotland. The underwriters are being represented by Lucosky Brookman LLP with respect to matters of federal law of the United States and of the law of the State of New York.

EXPERTS

The consolidated financial statements of TC BioPharm Limited at December 31, 2020 and 2019, and for each of the two years in the period ended December 31, 2020, appearing in this prospectus and registration statement have been audited by Ernst & Young LLP, independent registered public accounting firm, as set forth in their report thereon (which contains an explanatory paragraph describing conditions that raise substantial doubt about the Company's ability to continue as a going concern as described in Note 1 to the consolidated financial statements) appearing elsewhere herein, and are included in reliance upon such report given on the authority of such firm as experts in accounting and auditing.

The statement of financial position of TC BioPharm (Holdings) Limited at October 25, 2021, appearing in this prospectus and registration statement has been audited by Ernst & Young LLP, independent registered public accounting firm, as set forth in their report thereon appearing elsewhere herein, and is included in reliance upon such report given on the authority of such firm as experts in accounting and auditing.

The registered business address of Ernst & Young LLP is 144 Morrison Street, Edinburgh, EH3 8EX, United Kingdom.

WHERE YOU CAN FIND MORE INFORMATION

We have filed with the SEC a registration statement on Form F-1 under the Securities Act relating to this offering. This prospectus does not contain all of the information contained in the registration statement. The rules and regulations of the SEC allow us to omit certain information from this prospectus that is included in the registration statement. Statements made in this prospectus concerning the contents of any contract, agreement or other document are summaries of all material information about the documents summarized, but are not complete descriptions of all terms of these documents. If we filed any of these documents as an exhibit to the registration statement, you may read the document itself for a complete description of its terms.

You may read and copy the registration statement, including the related exhibits and schedules, and any document we file with the SEC without charge at the SEC's public reference room at 100 F Street, N.E., Room 1580, Washington, DC 20549. You may also obtain copies of the documents at prescribed rates by writing to the Public Reference Section of the SEC at 100 F Street, N.E., Room 1580, Washington, DC 20549. Please call the SEC at 1-800-SEC-0330 for further information on the public reference room. The SEC also maintains an Internet website that contains reports and other information regarding issuers that file electronically with the SEC. Our filings with the SEC are also available to the public through the SEC's website at http://www.sec.gov.

Upon completion of this offering, we will become subject to the information reporting requirements of the Exchange Act that are applicable to foreign private issuers, and under those requirements are filing reports with the SEC. Those other reports or other information may be inspected without charge at the locations described above. As a foreign private issuer, we will be exempt from the rules under the Exchange Act related to the furnishing and content of proxy statements, and our officers, directors and principal shareholders will be exempt from the reporting and short-swing profit recovery provisions contained in Section 16 of the Exchange Act. In addition, we will not be required under the Exchange Act to file annual, quarterly and current reports and financial statements with the SEC as frequently or as promptly as U.S. registrants whose securities are registered under the Exchange Act. However, we will be required to file with the SEC, within 120 days after the end of each fiscal year, or such applicable time as required by the SEC, an annual report on Form 20-F containing financial statements audited by an independent registered public accounting firm, and will submit to the SEC, on Form 6-K, unaudited quarterly financial information.

We maintain a corporate website at https://tcbiopharm.com/. Information contained on, or that can be accessed through, our website does not constitute a part of this prospectus. We have included our website address in this prospectus solely as an inactive textual reference. We will post on our website any materials required to be so posted on such website under applicable corporate or securities laws and regulations, including, posting any XBRL interactive financial data required to be filed with the SEC and any notices of general meetings of our shareholders.

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Audited Financial Statements of TC BioPharm (Holdings) Limited

Audited Consolidated Financial Statements of TC BioPharm Limited

Unaudited condensed consolidated interim financial statements of TC BioPharm Limited

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Shareholders of TC BioPharm (Holdings) Limited

Opinion on the Financial Statements

We have audited the accompanying statement of financial position of TC BioPharm (Holdings) Limited (the Company) as of October 25, 2021 and the related notes. In our opinion, the statement of financial position presents fairly, in all material respects, the financial position of the Company at October 25, 2021, in conformity with International Financial Reporting Standards (IFRS) as issued by the International Accounting Standards Board (IASB).

Basis for Opinion

The statement of financial position is the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's statement of financial position based on our audit. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the statement of financial position is free of material misstatement, whether due to error or fraud. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audit, we are required to obtain an understanding of internal control over financial reporting but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion.

Our audit included performing procedures to assess the risks of material misstatement of the statement of financial position, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the statement of financial position. Our audit also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the statement of financial position. We believe that our audit provides a reasonable basis for our opinion.

/s/ Ernst & Young LLP

We have served as the Company's auditor since 2021.

Edinburgh, United Kingdom

December 23, 2021, except for the stock split described in Note 1, as to which the date is January 14, 2022

TC BIOPHARM (HOLDINGS) LIMITED
STATEMENT OF FINANCIAL POSITION
As at October 25, 2021 (date of inception)

	October 25, 2021
	£
Assets	
Current assets	
Cash	-
Total assets	-
Equity and liabilities	
Equity	
Share capital (£0.01 par value, ten shares authorized, issued and fully paid)	-
Total equity	-
Total liabilities and equity	-

The accompanying note is an integral part of this Statement of financial position.

TC BIOPHARM (HOLDINGS) LIMITED
NOTES TO FINANCIAL STATEMENTS
As at October 25, 2021 (date of inception)

1. Significant accounting policies

General information

TCB Newco 2 Limited was incorporated in Scotland, United Kingdom on October 25, 2021. On November 1, 2021, TCB Newco 2 Limited changed its name to TC BioPharm (Holdings) Limited (the "Company").

The authorized share capital of the Company consists of ten ordinary shares, par value £0.01 per share, which has been issued. The Company was incorporated with nominal assets and liabilities for the purpose of becoming a holding company for TC BioPharm Limited and for the purposes of consummating a corporate reorganization.

Prior to the Company's proposed initial public offering in the United States, the Company will undertake a corporate reorganization pursuant to which (i) the Company will ultimately become the direct holding company of TC BioPharm Limited (ii) the Company will re-register as a public limited company and change its name to TC BioPharm (Holdings) plc. The purpose of the reorganization is to offer ordinary shares in conjunction with the Company's anticipate public offering.

Basis of preparation

The accompanying Statement of financial position has been prepared in accordance with International Financial Reporting Standards ("IFRS") as issued by the International Accounting Standards Board ("IASB"). Separate statements of income, changes in equity and cash flows have not been presented in the financial statements because there have been no operations in the Company at the Statement of financial position date.

Date of authorization

This Statement of financial position was approved by the Board on December 23, 2021 and signed on its behalf by Dr. M D Leek.

Subsequent events

On December 17, 2021, the shareholders and option holders of TC BioPharm Limited exchanged their shares or options for the same number (and classes) of shares and options in TC BioPharm (Holdings) Limited. As a result, TC BioPharm (Holdings) Limited became the sole shareholder of TC BioPharm Limited. TC BioPharm Limited and its two subsidiaries in the Netherlands and the United States will continue as the operating companies. Following the exchange, on December 17, 2021, TC BioPharm (Holdings) Limited undertook a stock split, whereby each ordinary and A ordinary (with nominal value of £0.10) were subdivided into 10 ordinary shares and 10 A ordinary shares respectively, with nominal value of £0.01. This has been reflected in the statement of financial position.

Report of Independent Registered Public Accounting Firm

The Shareholders and the Board of Directors and Shareholders of TC BioPharm Limited

Opinion on the Financial Statements

We have audited the accompanying consolidated statements of financial position of TC BioPharm Limited (the Company) as of December 31, 2020 and 2019, the related consolidated statements of comprehensive loss, changes in equity and cash flows for each of the two years in the period ended December 31, 2020, and the related notes (collectively referred to as the “consolidated financial statements”). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company at December 31, 2020 and 2019, and the results of its operations and its cash flows for each of the two years in the period ended December 31, 2020, in conformity with International Financial Reporting Standards (IFRS) as issued by the International Accounting Standards Board (IASB).

The Company’s Ability to Continue as a Going Concern

The accompanying consolidated financial statements have been prepared assuming that the Company will continue as a going concern. As discussed in Note 1 to the financial statements, the Company has suffered recurring losses from operations, has a working capital deficiency, and has stated that substantial doubt exists about the Company’s ability to continue as a going concern. Management’s evaluation of the events and conditions and management’s plans regarding these matters are also described in Note 1. The consolidated financial statements do not include any adjustments that might result from the outcome of this uncertainty.

Basis for Opinion

These financial statements are the responsibility of the Company’s management. Our responsibility is to express an opinion on the Company’s financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audits, we are required to obtain an understanding of internal control over financial reporting but not for the purpose of expressing an opinion on the effectiveness of the Company’s internal control over financial reporting. Accordingly, we express no such opinion.

Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

/s/ Ernst & Young LLP

We have served as the Company’s auditor since 2019.

Edinburgh, United Kingdom
July 26, 2021, except for the stock split described in Note 1, as to which the date is January 14, 2022

TC BIOPHARM LIMITED

CONSOLIDATED STATEMENTS OF COMPREHENSIVE LOSS

FOR THE YEARS ENDED,

	Notes	December 31, 2020 £	December 31, 2019 £
Revenue	3	**1,978,659**	**3,426,846**
Research and development expenses		(6,679,919)	(8,613,855)
Administrative expenses		(2,206,751)	(3,014,799)
Other income	4	569,200	1,561,266
Total operating expenses, net		(6,338,811)	(6,640,542)
Finance income – interest		1,029	21,903
Finance costs	6	(292,062)	(275,410)
Loss before tax	5	(6,629,844)	(6,894,049)
Income tax credit	7	1,171,928	826,065
Net loss for the year		(5,457,916)	(6,067,984)
Total other comprehensive income/(loss)		-	-
Total comprehensive loss for the year		**(5,457,916)**	**(6,067,984)**
Basic and diluted loss per share	9	(0.29)	(0.34)

The accompanying notes form an integral part of these consolidated financial statements.

TC BIOPHARM LIMITED

CONSOLIDATED STATEMENTS OF FINANCIAL POSITION

AS AT,

	Notes	December 31, 2020 £	December 31, 2019 £
Assets			
Non-current assets			
Intangible assets	10	423,837	305,628
Right of use assets	14	1,582,100	1,778,676
Property, plant and equipment	11	3,043,653	3,835,502
Total non-current assets		5,049,590	5,919,806
Current assets			
Trade and other receivables	12	290,336	1,314,596
Corporation tax receivable		1,178,700	1,948,919
Cash and cash equivalents		748,015	956,495
Total current assets		2,217,051	4,220,010
Total assets		**7,266,641**	**10,139,816**
Equity			
Share capital	17	1,781,465	1,781,375
Share premium	17	14,760,820	11,095,365
Accumulated deficit		(19,889,357)	(15,416,155)
Total equity		(3,347,072)	(2,539,415)
Non-current liabilities			
Deferred income	15	3,844,526	5,771,105
Lease liabilities and similar	14	2,582,400	3,023,891
Total non-current liabilities		6,426,926	8,794,996
Current liabilities			
Deferred income	15	1,978,665	2,030,746
Trade and other payables	13	1,765,420	1,438,859
Lease liabilities and similar	14	442,702	414,630
Total current liabilities		4,186,787	3,884,235
Total liabilities		**10,613,713**	**12,679,231**
Total equity and liabilities		**7,266,641**	**10,139,816**

The accompanying notes form an integral part of these consolidated financial statements.

TC BIOPHARM LIMITED

CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY

FOR THE YEARS ENDED,

	Notes	Share capital £	Share premium £	Accumulated deficit £	Total equity £
As at January 1, 2019		1,781,301	7,957,309	(10,183,963)	(445,353)
Net loss for the year		-	-	(6,067,984)	(6,067,984)
Recognition of share-based payment costs	18	-	-	835,792	835,792
Issue of share capital, net	17	74	3,138,056	-	3,138,130
As at December 31, 2019		1,781,375	11,095,365	(15,416,155)	(2,539,415)
As at January 1, 2020		1,781,375	11,095,365	(15,416,155)	(2,539,415)
Net loss for the year		-	-	(5,457,916)	(5,457,916)
Recognition of share-based payment costs	18	-	-	984,714	984,714
Issue of share capital, net	17	90	3,665,455	-	3,665,545
As at December 31, 2020		**1,781,465**	**14,760,820**	**(19,889,357)**	**(3,347,072)**

The accompanying notes form an integral part of these consolidated financial statements.

TC BIOPHARM LIMITED

CONSOLIDATED CASH FLOW STATEMENT

FOR THE YEARS ENDED,

	Notes	December 31, 2020 £	December 31, 2019 £
Cash flows from operating activities			

Loss before tax		(6,629,844)	(6,894,049)
Adjustments for:			
Depreciation		826,750	669,079
Amortization of intangible assets		51,889	52,847
Amortization of right of use assets		196,576	182,543
Share-based payment expense		804,714	835,792
Net foreign exchange losses		1,891	61,922
Finance income		(1,029)	(21,903)
Finance costs		292,062	275,410
Disposal of intangible assets		-	10,769
Movements in working capital:			
Decrease in deferred income		(1,978,659)	(2,030,746)
Decrease in trade and other receivables		1,728,796	258,046
Increase/(decrease) in trade and other payables		326,556	(41,615)
Cash used in operations		(4,380,298)	(6,641,905)
Interest paid		(290,208)	(87,468)
Interest received		1,029	21,903
Tax received / (paid)		1,237,609	(22,153)
Net cash flows used in operating activities		(3,431,868)	(6,729,623)
Cash flows from investing activities			
Purchase of property, plant and equipment		(34,899)	(2,026,545)
Purchase of intangible assets		(170,094)	(170,057)
Net cash flows used in investing activities		(204,993)	(2,196,602)
Cash flows from financing activities			
Repayment of lease liabilities		(415,273)	(184,401)
Receipt of sale and leaseback asset finance	14	-	319,937
Proceeds of sale of own shares		3,898,818	3,138,131
Share issue costs		(53,273)	-
Net cash flows from financing activities		3,430,272	3,273,667
Net decrease in cash and cash equivalents		(206,589)	(5,652,558)
Net foreign exchange difference		(1,891)	(61,922)
Cash and cash equivalents at the beginning of the year		956,495	6,670,975
Cash and cash equivalents at the end of the year		**748,015**	**956,495**

The accompanying notes form an integral part of these consolidated financial statements.

1. Accounting policies

General information

TC BioPharm Limited ("TC BioPharm" or the "Company") is incorporated as a private company, limited by shares, in Scotland and domiciled in the United Kingdom (registration number: SC453579) and has the following wholly owned subsidiary, TC BioPharm BV (together the "Group"). The registered office is: Maxim 1, 2 Parklands Way, Holytown, Motherwell, Lanarkshire, Scotland, ML1 4WR.

The principal activity of TC BioPharm is as a clinical stage immuno-therapy company pioneering commercialization of allogeneic, 'off-the-shelf' gamma-delta T cell ('GD-T') therapies, ranging from unmodified GD-T therapies to treat haematological cancers and viral infections, to sophisticated proprietary GD-T CAR-T products designed to reach and treat solid tumors.

Basis of preparation

The principal accounting policies applied in the preparation of these consolidated financial statements are set out below.

The consolidated financial statements have been prepared in accordance with International Financial Reporting Standards ("IFRS") as issued by the International Accounting Standards Board ("IASB").

The Company has historically prepared the financial statements in accordance with IFRS as adopted by the European Union, however the Group could have asserted it was in compliance with IFRS as adopted by the International Accounting Standards Board for the previous period. There is no material difference noted on adoption and therefore, the Group is not considered a first-time adopter.

The Company's functional and presentation currency is the pound sterling. Monetary amounts in these consolidated financial statements are rounded to the nearest pound.

Consolidation of a subsidiary begins when the Group obtains control over the subsidiary and ceases when the Group loses control of the subsidiary. Where necessary, adjustments are made to the financial statements of subsidiaries to bring the accounting policies in line with those used by the Group. All intra-group transactions, balances, equity, income and expenses are eliminated on consolidation.

On December 17, 2021, the Company undertook a group reorganization and a share split such that one issued share was exchanged for ten new shares. As a result of the forward share split, all references in these financial statements and accompanying notes to units of ordinary shares or per share amounts are reflective of the forward share split for all periods presented. In addition, the exercise prices and the numbers of shares issuable upon the exercise of any outstanding options to purchase ordinary shares were proportionally adjusted pursuant to the respective anti-dilution terms of the share-based payment plans.

These consolidated financial statements were authorized by the Board of Directors on July 21, 2021.

The Company has the following interest in a subsidiary undertaking:

Name	Country of incorporation	Holding	Proportion held	Nature of business
TC BioPharm BV	The Netherlands	Ordinary €1 shares	100%	Biotechnology research and development

1. Accounting policies (continued)

Going concern

As of December 31, 2020, the Company had an accumulated deficit of £20.0 million. The Company has incurred recurring losses and has no sales as no products have obtained the necessary regulatory approval in order to market products. The Company expects to continue to incur losses as a result of costs and expenses related to the Company's clinical development and corporate general and administrative activities.

The Company had negative cash flows from operating activities during the year ended December 31, 2020 of £3.4 million, and current projections indicate that the Company will have continued negative cash flows for the foreseeable future. Net losses incurred for the year ended December 31, 2020 and 2019, amounted to £5.5 million and £6.1 million, respectively.

At December 31, 2020, the Company's cash and cash equivalents amounted to £0.7 million, current assets amounted to £2.2 million and current liabilities amounted to £4.2 million. The Company closed on the sale of A Ordinary shares in August 2020 resulting in the issuance of 794,540 shares for £3.4 million in gross proceeds and a further 89,560 A Ordinary shares subsequent to December 31, 2020 raising an additional £0.4 million of gross proceeds. This funding is in addition to £3.7 million raised in 2019 and early 2020 and brings the total equity raised to date to over £16 million. The Company has additionally issued convertible loan notes subsequent to December 31, 2020 totaling £3.8 million. The existing cash and cash equivalents will not be sufficient to enable the Company to meet its short-term obligations or long-term plans, including commercialization of clinical pipeline products, if approved, or initiation or completion of future registration studies.

Management believes that the net proceeds from this offering and the existing cash and cash equivalents will be sufficient to fund the current operating plans through late 2022. Should the proceeds from listing its securities not materialize or occur as expected, management will need to consider alternative arrangements and such arrangements could have a potentially significant negative impact on the current net asset value of the Group. The Company will consider the following ways to fund its operations including: (1) raising additional capital through equity and/or debt financings; (2) new commercial relationships to help fund future clinical trial costs (i.e. licensing and partnerships); (3) reducing and/or deferring discretionary spending on one or more research and development programs; and/or (4) restructuring operations to change its overhead structure. The Company's future liquidity needs, and ability to address those needs, will largely be determined by the success of its product candidates and key development and regulatory events and its decisions in the future.

The accompanying financial statements have been prepared in conformity with IFRS as issued by IASB, which contemplate continuation of the Company as a going concern. The Company has not established a source of revenues sufficient to cover its operating costs, and as such, have been dependent on funding operations primarily through the sale of equity securities and collaboration revenue. The Company expects to incur further losses over the next several years as it develops its business. The Company has spent, and expects to continue to spend, a substantial amount of funds to implement its business strategy, including its planned product development efforts, preparation for its planned clinical trials, performance of clinical trials and its research and discovery efforts. Although proceeds from listing its securities have not yet been obtained by the Group, management believes it is likely that adequate funding from the anticipated proceeds from listing its securities will be received, such that the Company consequently will have sufficient liquidity to fund the Company's operating activities for at least the next 12 months. On this basis management continues to view the Company as a going concern.

Management's plans include continuing to finance operations through the issuance of additional equity instruments and continuing the development of the current pipeline or through the acquisition of a third party or license agreement. Any transactions which occur may contain covenants that restrict the ability of management to operate the business or may have rights, preferences or privileges senior to the Company's current shareholders and may dilute current shareholders of the Company.

1. Accounting policies (continued)

Going concern (continued)

Engaging in a transaction with a third party is contingent on negotiations among the parties; therefore, there is no certainty that the Company will enter into such an agreement should the Company so desire.

There can be no assurance that the Company will achieve or sustain positive cash flows from operations or profitability. If the Company is unable to maintain adequate liquidity, future operations will need to be scaled back or discontinued. These conditions raise substantial doubt about the Company's ability to continue as a going concern. The Company's consolidated financial statements do not include any adjustments that might result from the outcome of this uncertainty.

Impact of COVID-19

The Company was, like many other businesses, impacted materially by the COVID-19 pandemic.

The Company has taken a number of actions to mitigate the impact on its employees and business including:

- Limiting access to our laboratory and office facilities to only those individuals required to carry out their responsibilities, with a restricted number of staff operating at any one time in particular areas.
- Adopting and updating procedures, in line with government guidelines, to reduce exposure and transmission of COVID-19, including social distancing, disinfection, and temperature testing.
- Suspending all business travel and using online meeting technology to enable both internal and external meetings to be held virtually, while facilitating staff to work from home as much as practicably possible.
- Holding sufficient quantities of personal protective equipment (PPE) for all staff and visitors to reduce the risk of COVID-19 transmission.

The principal effects on the business have been to:

- Delay our ability to drive forward our ongoing AML clinical trial into a phase 2/3 trial.
- Delay the planned receipts of significant equity funding which was at an advanced stage of completion at the onset of the pandemic, when the process had to be placed on hold.
- Place on hold the negotiations and diligence being undertaken as part of detailed discussions with a number of pharmaceutical companies in connection with establishing collaboration agreements.
- Place on hold much of our in-house and partnered development work, with some staff on furlough in the period.
- Reduce operational costs while activities are at a restricted level.
- Limit our available working capital in the short to medium term.

The overall disruption caused by the COVID-19 pandemic on global healthcare systems and the other risks and uncertainties associated with the pandemic could cause the Company's business, financial condition, results of operations and growth prospects to be materially adversely affected.

The Company is not aware of any specific event or circumstance that has impacted on its operations in a manner which would require the Company to update its estimates, judgments or revise the carrying value of its assets or liabilities during the year ended December 31, 2020. However, these estimates may change, as new events occur and additional information is obtained, relating to the COVID-19 pandemic or otherwise.

1. Accounting policies (continued)

Revenue – collaboration agreements

Revenue is recognized on upfront collaboration payments on a straight-line basis over the estimated term over which the services promised will be provided.

The business is entitled to receive contractual milestone payments on achievement of certain performance obligations and these are recognized when the milestones are certain to occur.

Refer to Note 3 – *Critical accounting estimates and judgements* for further discussion on revenue from contracts with customers.

Segment reporting

The Company operates in one operating segment. Operating segments are reported in a manner consistent with the internal reporting provided to the Company's chief operating decision maker ("the CODM"). The Company's CODM, its Chief Executive Officer, views the Company's operations and manages its business as a single operating segment, which is the business of a clinical stage mmune-therapy company pioneering commercialization of allogeneic, 'off-the-shelf' gamma-delta T cell ('GD-T') therapies. The Company's principal operations and decision-making functions are located in the United Kingdom from where global decisions are made.

Research & Development

Research expenditure is expensed in the year in which it is incurred. Identifiable development expenditure is capitalized to the extent that the technical, commercial and financial feasibility can be demonstrated of which we have not capitalized any development expenditures since inception.

Grants

Grants are recognized when it is reasonable to expect that the grants will be received and that all related conditions will be met, usually on submission of a valid claim for payment. Revenue grants are treated as deferred income and are credited to the profit and loss account to match against the expenditure towards which they are intended to contribute. Government support received under the Coronavirus Job Retention Scheme is recognized in the month of submission of the claim.

Income tax

Any tax currently payable is based on taxable profit for the period. Taxable profit differs from net profit as reported in the profit or loss because it excludes items of income or expense that are taxable or deductible in other years and it further excludes items that are never taxable or deductible. The Company's liability for current tax is calculated using tax rates that have been enacted or substantively enacted by the reporting end date.

Deferred tax

Deferred tax is the tax expected to be payable or recoverable on differences between the carrying amounts of assets and liabilities in the financial statements and the corresponding tax bases used in the computation of taxable profit/loss, and is accounted for using the balance sheet liability method. Deferred tax liabilities are generally recognized for all taxable temporary differences and deferred tax assets are recognized to the extent that it is probable that taxable profits will be available against which deductible temporary differences can be utilized. Such assets and liabilities are not recognized if the temporary difference arises from goodwill or from the initial recognition of other assets and liabilities in a transaction that affects neither the tax profit nor the accounting profit.

1. **Accounting policies (continued)**

Deferred tax (continued)

The carrying amount of deferred tax assets is reviewed at each reporting end date and reduced to the extent that it is no longer probable that sufficient taxable profits will be available to allow all or part of the asset to be recovered. Deferred tax is calculated at the tax rates that are expected to apply in the period when the liability is settled or the asset is realized. Deferred tax is charged or credited in the profit or loss, except when it relates to items charged or credited directly to equity, in which case the deferred tax is also dealt with in equity. Deferred tax assets and liabilities are offset when the Company has a legally enforceable right to offset current tax assets and liabilities and the deferred tax assets and liabilities relate to taxes levied by the same tax authority.

Income tax credit

The Company carries out extensive research and development activities, where we benefit from the UK research and development tax relief and expenditure credit regimes. We are able to surrender some of our losses for a cash rebate of up to 33.35% of expenditures related to eligible research and development projects. Such credits are accounted for, depending on the appropriate tax relief, either within the tax provision or other income, in the year in which the expenditures were incurred.

Employee benefits

The Company operates a defined contribution scheme for the benefit of its employees. Contributions payable are charged to the profit or loss in the year they are payable.

Property, plant and equipment

Property, plant and equipment relates to computer equipment, facility and scientific equipment and office equipment which are initially recorded at cost. They are subsequently stated at historical cost less accumulated depreciation and impairment losses. Historical cost includes expenditure that is directly attributable to the acquisition of the items and bringing them into their intended use.

Property, plant and equipment is derecognized on disposal or when no future economic benefits are expected from their use or disposal. Gains or losses arising from de-recognition represent the difference between the net disposal proceeds, if any, and the carrying amount, and are included in the statement of comprehensive income in the period of de-recognition.

Depreciation is provided at rates intended to write down the cost of the assets over their expected useful lives, as follows;

Facility & scientific equipment	- 4 to 10 years
Computer equipment	- 3 years
Office equipment	- 5 years

All depreciation rates are applied on a straight-line basis.

Intangible assets

Intangible assets relate to software, patents and licences. Intangible assets are recognized where it is probable that there will be a future economic benefit and that this can be reliably measured.

Software represents the historical cost of installation of third-party software used within the Company to maintain and control the Company's quality system. The software is hosted and controlled on the Company's servers and can be used independently of the related hardware. Software is amortized, on a straight-line basis, over the life of the relevant license (3 to 4 years).

1. **Accounting policies (continued)**

Intangible assets (continued)

Patent costs represent the costs of securing patents in relation to the Company's intellectual property. Patent costs are amortized, on a straight-line basis, over the remaining legal life of the relevant patents (the average estimated patent life is 17 years).

License costs represent costs incurred for securing use of third-party technology. License costs are amortized, on a straight-line basis, over the life of the relevant license (3 years). Amortization methods and useful lives are reviewed at each reporting date and adjusted as appropriate.

Impairment of tangible and intangible assets

At each year end date, the Company reviews the carrying amounts of its tangible and intangible assets to determine whether there is any indication that those assets have suffered an impairment loss. If any such indication exists, the recoverable amount of the asset is estimated in order to determine the extent of the impairment loss (if any). The recoverable amount is determined for an individual asset, unless the asset does not generate cash inflows that are largely independent of those from other assets or groups of assets in which case the Company estimates the recoverable amount of the cash-generating unit to which the asset belongs.

Recoverable amount is the higher of fair value less costs to sell and value-in-use. In assessing value-in-use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset for which the estimates of future cash flows have not been adjusted.

If the recoverable amount of an asset (or cash-generating unit) is estimated to be less than its carrying amount, the carrying amount of the asset (or cash-generating unit) is reduced to its recoverable amount. An impairment loss is recognized immediately in profit or loss, unless the relevant asset is carried at a revalued amount, in which case the impairment loss is treated as a revaluation decrease.

Cash and cash equivalents

Cash and cash equivalents include cash on hand, deposits held on call with banks and other short-term liquid investments with maturities of three months or less.

Financial assets

Initial recognition and measurement

Financial assets are classified, at initial recognition, and subsequently measured at amortized cost, fair value through other comprehensive income (OCI), and fair value through profit or loss.

The classification of financial assets at initial recognition depends on the financial asset's contractual cash flow characteristics and the Company's business model for managing them. With the exception of trade receivables that do not contain a significant financing component or for which the Company has applied the practical expedient, the Company initially measures a financial asset at its fair value plus, in the case of a financial asset not at fair value through profit or loss, transaction costs. Trade receivables that do not contain a significant financing component or for which the Company has applied the practical expedient are measured at the transaction price determined under IFRS 15.

In order for a financial asset to be classified and measured at amortized cost or fair value through OCI, it needs to give rise to cash flows that are 'solely payments of principal and interest (SPPI)' on the principal amount outstanding. This assessment is referred to as the SPPI test and is performed at an instrument level.

1. Accounting policies (continued)

Financial assets (continued)

The Company's business model for managing financial assets refers to how it manages its financial assets in order to generate cash flows. The business model determines whether cash flows will result from collecting contractual cash flows, selling the financial assets, or both.

Financial assets at amortized cost

The Company measures financial assets at amortized cost if both of the following conditions are met:

- The financial asset is held within a business model with the objective to hold financial assets in order to collect contractual cash flows; and
- The contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

Financial assets at amortized cost are subsequently measured using the effective interest (EIR) method and are subject to impairment. Gains and losses are recognized in profit or loss when the asset is derecognized, modified or impaired.

The Company's financial assets at amortized cost includes trade receivables.

Financial assets are recognized in the Company's statement of financial position when the Company becomes party to the contractual provisions of the instrument.

Financial assets are classified into specified categories. The classification depends on the nature and purpose of the financial assets and is determined at the time of recognition.

Financial assets are initially measured at fair value plus transaction costs, other than those classified as fair value through profit and loss, which are measured at fair value.

Derecognition

A financial asset (or, where applicable, a part of a financial asset or part of a group of similar financial assets) is primarily derecognized (i.e. removed from the Company's consolidated statement of financial position) when:

- The rights to receive cash flows from the asset have expired; or
- The Company has transferred its rights to receive cash flows from the asset or has assumed an obligation to pay the received cash flows in full without material delay to a third party under a 'pass-through' arrangement; and either (a) the Company has transferred substantially all the risks and rewards of the asset, or (b) the Company has neither transferred nor retained substantially all the risks and rewards of the asset, but has transferred control of the asset.

When the Company has transferred its rights to receive cash flows from an asset or has entered into a pass-through arrangement, it evaluates if, and to what extent, it has retained the risks and rewards of ownership. When it has neither transferred nor retained substantially all of the risks and rewards of the asset, nor transferred control of the asset, the Company continues to recognize the transferred asset to the extent of its continuing involvement. In that case, the Company also recognizes an associated liability. The transferred asset and the associated liability are measured on a basis that reflects the rights and obligations that the Company has retained.

Continuing involvement that takes the form of a guarantee over the transferred asset is measured at the lower of the original carrying amount of the asset and the maximum amount of consideration that the Company could be required to repay.

1. Accounting policies (continued)

Financial assets (continued)

Impairment of financial assets

Further disclosures relating to impairment of financial assets are also provided in Note 21.

The Company recognizes an allowance for expected credit losses (ECLs) for all debt instruments not held at fair value through profit or loss. ECLs are based on the difference between the contractual cash flows due in accordance with the contract and all the cash flows that the Company expects to receive, discounted at an approximation of the original effective interest rate. The expected cash flows will include cash flows from the sale of collateral held or other credit enhancements that are integral to the contractual terms. ECLs are recognized in two stages. For credit exposures for which there has not been a significant increase in credit risk since initial recognition, ECLs are provided for credit losses that result from default events that are possible within the next 12-months (a 12-month ECL). For those credit exposures for which there has been a significant increase in credit risk since initial recognition, a loss allowance is required for credit losses expected over the remaining life of the exposure, irrespective of the timing of the default (a lifetime ECL). For trade receivables and contract assets, the Company applies a simplified approach in calculating ECLs. Therefore, the Company does not track changes in credit risk, but instead recognizes a loss allowance based on lifetime ECLs at each reporting date. The Company has established a provision matrix that is based on its historical credit loss experience, adjusted for forward-looking factors specific to the debtors and the economic environment.

Financial liabilities

Initial recognition and measurement

Financial liabilities are classified, at initial recognition, as financial liabilities at fair value through profit or loss, loans and borrowings, payables, or as derivatives designated as hedging instruments in an effective hedge, as appropriate.

All financial liabilities are recognized initially at fair value and, in the case of loans and borrowings and payables, net of directly attributable transaction costs. The Company’s financial liabilities include trade and other payables, loans and borrowings including bank overdrafts.

Derecognition

A financial liability is derecognized when the obligation under the liability is discharged or cancelled or expires. When an existing financial liability is replaced by another from the same lender on substantially different terms, or the terms of an existing liability are substantially modified, such an exchange or modification is treated as the derecognition of the original liability and the recognition of a new liability. The difference in the respective carrying amounts is recognized in the statement of profit or loss.

1. Accounting policies (continued)

Leases

The Company reviews contracts to determine if a contract meets the definition of a lease. This means that the Company has the right to control the use of an identifiable asset for a period of time in exchange for consideration.

All leases are accounted for by recognizing a right-of-use asset and a lease liability except for:

- Leases of low value assets; and
- Leases with a duration of twelve months or less.

Lease liabilities are measured at the present value of the contractual payments due to the lessor over the lease term, with the discount rate determined by reference to the rate inherent in the lease unless (as is typically the case) this is not readily determinable, in which case the Company’s incremental borrowing rate on commencement of the lease is used. Variable lease payments are only included in the measurement of the lease liability if they depend on an index or rate. In such cases, the initial measurement of the lease liability assumes the variable element will remain unchanged throughout the lease term. Other variable lease payments are expensed in the period to which they relate.

On initial recognition, the carrying value of the lease liability also includes:

- Amounts expected to be payable under any residual value guarantee;
- The exercise price of any purchase option granted in favor of the Company if it is reasonably certain to assess that option;
- Any penalties payable for terminating the lease, if the term of the lease has been estimated on the basis of the termination option being exercised.

Right-of-use assets are initially measured at the amount of the lease liability, reduced for anylease incentives received, and increased for:

- Lease payments made at or before commencement of the lease;
- Initial direct costs incurred; and
- The amount of any provision recognized where the Company is contractually required to dismantle, remove or restore the leased asset.

Subsequent to initial measurement, lease liabilities increase as a result of interest charged at a constant rate on the balance outstanding and are reduced for lease payments made. Right-of-use assets are amortized on a straight-line basis over the remaining term of the lease or over the remaining economic life of the asset if, rarely, this is judged to be shorter than the lease term.

1. Accounting policies (continued)

Leases (continued)

When the Company revises its estimate of the term of any lease (because, for example, it re-assesses the probability of a lessee extension or termination option being exercised), it adjusts the carrying amount of the lease liability to reflect the payments to make over the revised term, which are discounted at the same discount rate that applied on lease commencement. The carrying value of lease liabilities is similarly revised when the variable element of future lease payments dependent on a rate or index is revised. In both cases an equivalent adjustment is made to the carrying value of the right-of-use asset, with the revised carrying amount being amortized over the remaining (revised) lease term.

When the Company extends the scope of the lease and the extension was not part of the original terms of the contract, this is considered to be a lease modification and is treated as a separate additional lease.

Foreign currencies

Transactions in currencies other than pounds sterling are recorded at the rates of exchange prevailing at the dates of the transactions. At each reporting end date, monetary assets and liabilities that are denominated in foreign currencies are remeasured at the rates prevailing on the reporting end date. Gains and losses arising on remeasurement are included in the profit or loss for the period.

Equity instruments

Equity instruments are in the form of Ordinary and A Ordinary shares (further details are included in Note 17). Equity instruments issued by the Company are recorded at the proceeds received, net of direct issue costs. Costs that are not incremental and directly attributable to issuing new equity instruments are recorded as an expense in the consolidated statement of comprehensive loss.

1. Accounting policies (continued)

Rights to subscribe for additional equity

Some investors have the right to subscribe for a fixed number of A Ordinary shares at an agreed share price based on certain clinical and commercial milestones.

The value of the right to subscribe has been recognized as a derivative and classified within equity. The Company has adopted this accounting treatment as:

- the value of the instrument will vary in response to changes in the underlying value of the A Ordinary shares, representing a derivative financial instrument
- the right to subscribe is for a fixed number of shares at a fixed price, reflecting the definition of an equity instrument

When considering the fair value of the right to subscribe for additional equity, the most appropriate basis to allocate value to payments was determined to be a Black Scholes Model, with reference to the nature of the contract award and future liquidity events. The fair value of these rights considers the following factors:

- Exercise price
- Current price of the underlying shares
- Expected life of the award
- Risk-free interest rate
- Expected volatility
- Expected dividend rate
- Expected forfeiture rate

1. Accounting policies (continued)

Share options and other share-based payments

Some employees, directors and consultants receive remuneration in the form of share-based payments as consideration for their services rendered. The fair value of equity-settled share-based payments to employees is determined at the date of grant and is expensed on a straight-line basis over the vesting period, with a corresponding increase in equity, based on the Company's estimate of options that will eventually vest.

In respect of share-based payments to employees and directors, the estimated fair value of the options outstanding in the period was calculated by applying a Monte Carlo Simulation for those options issued in 2020 and a Black Scholes Model for those options issued in prior periods. The most appropriate approach is selected with reference to the share capital structure at the time of grant. In respect of the valuation for 2020, the Monte Carlo Simulation was deemed the most appropriate basis due to the preferential economic rights contained within equity issued in the year. When considering share-based payments to external consultants, the most appropriate basis to allocate value to payments was determined to be a Black Scholes Model, with reference to the nature of the contract award and future liquidity events. The fair value of share-based payments considers the following factors:

- Exercise price
- Current price of the underlying shares
- Expected life of the award
- Risk-free interest rate
- Expected volatility
- Expected forfeiture rate
- Expected dividend rate

1. Accounting policies (continued)

Accounting Standards

In preparing these financial statements, the Company has applied all relevant IAS, IFRS and International Financial Reporting Interpretations Committee ("IFRIC") Interpretations as of the date of approval of these financial statements and which are mandatory for the financial year ended December 31, 2020.

The following accounting standards, interpretations and amendments have been adopted as of January 1, 2020 in these financial statements and have not had a material impact on the Company's financial statements in the period of initial application, but may impact the accounting for future transactions:

- Amendments to The Conceptual Framework for Financial Reporting (effective from January 1, 2020)
- Amendments to IFRS 3 – Definition of a Business (effective from January 1, 2020)
- Amendments to IFRS 9, IAS 39, and IFRS 7 – Interest Rate Benchmark Reform (effective from January 1, 2020)
- Amendments to IAS 1 and IAS 8 – Definition of Material (effective from January 1, 2020)
- Amendment to IFRS 16 – Covid-19-Related Rent Concessions (effective from June 1, 2020)

The IASB and IFRIC have issued the following standards and amendments with an effective date after the date of these financial statements:

- Amendments to IFRS 9, IAS 39, IFRS 7, IFRS 4 and IFRS 16 – Interest Rate Benchmark Reform, Phase 2 (effective from January 1, 2021)
- Amendments to IFRS 3 – Reference to the Conceptual Framework (effective from January 1, 2022)
- Amendments to IAS 16 Property, Plant and Equipment – Proceeds before Intended Use (effective from January 1, 2022)
- Amendments to IAS 37 – Onerous Contracts: Costs of Fulfilling a Contract (effective from January 1, 2022)
- IFRS 17 Insurance Contracts (effective from January 1, 2023)
- Amendments to IAS 1 Presentation of Financial Statements – Classification of Liabilities as Current or Non-Current (effective from January 1, 2023)
- Amendments to IAS 1 Presentation of Financial Statements and IFRS Practice Statement 2 – Disclosure of Accounting Policies (effective from January 1, 2023)
- Amendments to IAS 8 Accounting Policies, Changes in Accounting Estimates and Errors – Definition of Accounting Estimates (effective from January 1, 2023)

The IASB has also issued the following amendments from the 2018-2020 annual improvement cycles with an effective date after the date of these financial statements:

- IFRS 1 – First-time Adoption of International Financial Reporting Standards – Subsidiary as a first-time adopter (effective from January 1, 2022)
- IFRS 9 Financial Instruments – Fees in the '10 per cent' test for derecognition of financial liabilities (effective from January 1, 2022)
- IAS 41 Agriculture – Taxation in fair value measurements (effective from January 1, 2022)

The Company has reviewed the above standards and amendments and considers that they either do not apply to the Company or will not have a material impact in future periods.

2. Critical accounting estimates and judgements

In the application of the Company's accounting policies, management are required to make judgements, estimates and assumptions about the carrying amount of assets and liabilities that are not readily apparent from other sources. The estimates and associated assumptions are based on historical experience and other factors that are considered to be relevant. Actual results may differ from these estimates.

The estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognized in the period in which the estimate is revised where the revision affects only that period, or in the period of the revision and future periods where the revision affects both current and future periods.

Judgements made in applying accounting policies other than those involving estimations

Revenue from contracts with customers

Identification of contracts with pharma partners

The Company has entered into collaboration agreements with a number of parties. Application of IFRS 15 "Revenue from contracts and customers" on collaboration agreements requires judgement around whether these contracts were within the scope of IFRS 15.

The Company's core business is around researching and developing immunotherapies and the contracts entered into with pharma partners are consistent with those objectives and the outputs are in line with the Company's ordinary activities.

The contracts with pharma partners do not involve sharing the risks and benefits of a joint arrangement in the sense of IFRS 11 "Joint arrangements".

In light of the nature of the work being undertaken with pharma partners, and the fact that these agreements have commercial substance with clearly defined milestones and rights and obligations for each party, management concluded that these collaboration agreements meet the definition of a contract with a customer and fall within the scope of IFRS 15.

Identification of performance obligations in contracts

The collaboration agreements entered into by the Company include obligations to fulfil the research and development programs. The Company identified, from reviews of the relevant agreements, that there are no specific obligations but an implied performance obligation to deliver each overall contracted research and development program. Reflecting the broad nature of these obligations, spanning the full duration of the contract, the obligations are satisfied over the expected duration of the relevant contract.

Determination and allocation of the transaction price

The collaboration agreements include a number of elements of consideration and are allocated to the satisfaction of the relevant obligation.

The Company can receive upfront payments as part of the consideration. The Company has determined that upfront payments are in connection with the performance of the research and development program and are satisfied during the duration of the contract.

The business is entitled to receive contractual milestone payments on achievement of certain performance obligations, with revenue being recognized in the same way. The relevant transaction price is allocated to the related milestone.

2. Critical accounting estimates and judgements (continued)

Assumptions about the future and other sources of estimation uncertainty

Revenue from contracts with customers

Timing of revenue recognition

Revenue from upfront payments in connection with collaboration agreements is recognized over the estimated term over which the services promised will be provided. This term was estimated by management at the inception of each contract and evaluated at the year end. The estimated time to complete as at the year end is 35 months.

The resulting deferred income liabilities are disclosed in Note 15. Due to the uncertainty around the time to complete multi-year collaboration programs it is possible that the estimated terms may be extended. If the estimated term of the current contracts had been adjusted by one year, then it would be expected that the corresponding revenue would have decreased by £588,888 and deferred income liabilities would have increased by £588,888. The business is entitled to receive contractual milestone payments on achievement of certain performance obligations. Due to significant uncertainties associated with the achievement of contractual milestones, no revenue has been recognized from milestone payments to date and these will be recognized when the milestones are certain to occur.

Valuation of ordinary shares

As there has been no public market for the Group's ordinary shares to date, the estimated fair value of the ordinary shares has been determined by management, considering the most recently available third-party valuations of the Group's ordinary shares, and the assessment of additional objective and subjective factors that it believed were relevant and which may have changed from the date of the most recent valuation through the date of the grant.

After considering the market approach, the income approach and the asset-based approach, we utilized the market approach to determine the estimated fair value of our ordinary shares based on its determination that this approach was most appropriate for a clinical-stage biopharmaceutical company at this point in its development, using the option-pricing method ("OPM"). Consideration was given to the American Institute of Certified Public Accountants' Practice Aid: "Valuation of Privately-Held Company Equity Securities Issued as Compensation," or the Practice Aid, in addition to input from management, the likelihood of completing an IPO and recent transactions with investors.

Once a public trading market for our ordinary shares has been established in connection with the completion of this offering, it will no longer be necessary to estimate the fair value of our ordinary shares in connection with our accounting for share-based payment expenses, as the fair value of our ordinary shares will be determinable by reference to the trading price of our ordinary shares on Nasdaq.

Share option and other share-based payment assumptions

The determination of the value of share-based payments requires management to use professional expertise to arrive at assumptions to be used to calculate the value of the share-based payment. The estimated fair value of the options outstanding in the period was calculated by applying a Monte Carlo Simulation for those options issued in 2020 and a Black Scholes Model for those options issued in prior periods. The most appropriate approach is selected with reference to the share capital structure at the time of grant and the directors need to use judgement in setting the key assumptions. Further details are included in Note 18.

The Company determines the share price used in the fair value calculation by reference to shares issued close to the time of grant of the share options. Consideration is given to the nature of the shares issued and investors in the rounds when evaluating the share price as well as an assessment of any factors that were relevant and which may have changed from the date of the most recent share issuance to the date of grant. As a privately held company, the Company's share price does not have sufficient historical volatility to adequately assess the fair value of the share option grants. As a result, management considered the historical volatility of other comparable publicly traded companies and, based on this analysis, concluded that a volatility range of 70% to 75% was appropriate for the valuation of our share options.

The expected life of the option, beginning with the option grant date, was used in valuing our share options. The expected life used in the calculation of share-based payment expense is the time from the grant date to the expected exercise date. The life of the options, which is a subjective estimate that can materially alter the valuation, depends on the option expiration date, volatility of the underlying shares and vesting features.

IFRS 2 "Share-based Payment" requires the use of the risk-free rate of the country in which the entity's shares are principally traded with a remaining term equal to the expected life of the option. This should also be the risk-free interest rate of the country in whose currency the exercise price is expressed. The Company has applied the appropriate risk-free rate, based on 4-year, 3-year and 2-year UK government bond yields as at the respective grant dates.

3. Revenue

	Year ended December 31, 2020 £	Year ended December 31, 2019 £

Revenue from collaboration agreements	1,978,659	3,426,846

The terms of business for payment on satisfaction of a performance obligation are typically 30 -60 days.

Collaboration agreements entered into by the Company provide for the entity to work with a partner to carry out collaborative research and development work.

Performance obligations around upfront payments are deemed to be satisfied over the estimated life of the services promised to be provided. As at the period end the amount of the transaction price allocated to performance obligations that are unsatisfied totaled £5,823,192 (2019: £7,801,851). The Company expects to recognize this revenue on a straight-line basis over the estimated life of the contract (six years). This method reflects the nature of the collaboration agreements which run for a multi-year period, recognizing the revenue in the period in which the research and development activities are performed. Additional information is provided in Note 3 regarding the determination and recognition of the transaction price.

Performance obligations in respect of contractual milestones are deemed to be satisfied when both parties agree the milestone has been met. Due to the uncertainties around contractual milestones, it is not possible to provide details around the amount of the transaction price allocated to performance obligations that are unsatisfied.

Revenue from reimbursement of research and development costs by collaboration partners is recognized as the costs are incurred.

Details of contract balances at the period end are provided in Note 21. Trade receivables are non-interest bearing. There are no significant financing components included in the contracts.

Amounts outstanding from customers at the year end totaled £Nil (2019: £107,750). The movement in the year reflects settlement of customer balances in the period.

4. Other income

	Year ended December 31, 2020 £	Year ended December 31, 2019 £
Grant income	547,928	1,163,624
Other income	21,272	397,642
	569,200	1,561,266

Grant income received in the year was represented by payments under the Coronavirus Job Retention Scheme. During the prior year grant income was received from the EU under the Horizon 2020 program (£686,162) and the Scottish Government (£477,462) for funding in respect of specific research programs. Other income includes research and development tax credits totaling £6,772 (2019: £394,642).

5. Operating loss

Operating loss is stated after charging the following:

	Year ended December 31, 2020 £	Year ended December 31, 2019 £
Included in research and development costs:		
Depreciation of property, plant and equipment	784,099	636,826
Amortization of intangible assets	51,889	52,847
Amortization of right of use assets	172,987	160,638
Included in administrative expenses:		
Loss on foreign exchange	1,891	61,922
Depreciation of property, plant and equipment	42,649	32,253
Amortization of right of use assets	23,589	21,905

6. Finance costs

	Year ended December 31, 2020 £	Year ended December 31, 2019 £
Interest on lease liabilities	292,062	275,410
	292,062	275,410

7. Income tax credit

	Year ended December 31, 2020 £	Year ended December 31, 2019 £
Current tax		
Corporation tax credit	1,171,928	826,065
Total current tax credit	1,171,928	826,065
Reconciliation of loss before tax to the tax credit for the year		
Loss before tax	6,629,844	6,894,049
Loss on ordinary activities multiplied by the standard rate of tax of 19% (2019: 19%)	1,259,670	1,309,869
Non-deductible expenses	(4,556)	(3,821)
Deferred tax movement on unrecognized fixed asset differences	(157,728)	56,935
Deferred tax movement on unrecognized timing differences	2,660	2,616
Deferred tax movement on share-based payments	(152,895)	(158,800)
Deferred tax asset not recognized	(278,753)	(695,881)
Additional allowance in respect of enhanced R&D relief	868,918	667,671
Surrender of tax losses for R&D tax credit refund	(1,537,316)	(1,178,589)
R&D tax credits generated	1,171,928	826,065
Current tax credit	1,171,928	826,065

Included within corporation tax receivable are research and development tax credits of £5,485 (2019: £576,161) which are included within other income.

Factors affecting future tax

The Finance (No.2) Act 2015 reduced the main rate of UK corporation tax to 19%, effective from April 1, 2017. A further reduction in the UK corporation tax rate to 17% was expected to come into effect from April 1, 2020 (as enacted by Finance Act 2016 on September 15, 2016). However, legislation introduced in the Finance Act 2020 (enacted on July 22, 2020) repealed the reduction of the corporation tax, thereby maintaining the current rate of 19%. Deferred taxes on the balance sheet have been measured at 19% (2019 – 19%) which represents the future corporation tax rate that was enacted at the balance sheet date.

The UK Budget 2021 announcements on March 3, 2021 included measures to support economic recovery as a result of the ongoing COVID-19 pandemic. These included an increase to the UK's main corporation tax rate to 25%, which is due to be effective from April 1, 2023. The Finance Bill 2021 was substantively enacted on May 24, 2021 and given Royal Assent on June 10, 2021. However as this was not substantively enacted at the balance sheet date this has not been reflected in the measurement of deferred tax balances at the period end.

If the company's deferred tax balances at the period end were remeasured at 25% this would result in the unrecognized deferred tax asset increasing by £1,139,000.

8. Employees

	Year ended December 31, 2020 Number	Year ended December 31, 2019 Number
Number of employees		
Average monthly number or persons (including directors) employed by the Company:		
Research and development	66	83
Management, administration and operations	13	11
	79	94

Management includes employees who are involved in both research and development and administrative operations.

	Year ended December 31, 2020 £	Year ended December 31, 2019 £
Staff costs – included in research and development		
Wages and salaries	3,443,726	3,663,845
Social security costs	386,063	411,114
Pension costs – defined contribution	130,339	145,223
Share based payments	316,259	373,414
	4,276,387	4,593,596
Staff costs – included in administrative expenses		
Wages and salaries	703,366	766,107
Social security costs	99,040	82,236
Pension costs – defined contribution	24,548	38,372
Share based payments	256,803	462,378
	1,083,757	1,349,093
Staff costs – combined		
Wages and salaries	4,147,091	4,429,952
Social security costs	485,102	493,350

Pension costs – defined contribution	154,887	183,595
Share based payments	573,062	835,792
Total staff costs	5,360,142	5,942,689

8. Employees (continued)

Directors' remuneration	**Year ended December 31, 2020 £**	**Year ended December 31, 2019 £**
Directors' remuneration in respect of qualifying services	967,651	676,557
Directors' employer's pension contributions	14,376	12,453
	982,027	689,010

The total remuneration of the highest paid or receivable by the highest paid director in the year ended December 31, 2020 was £365,194 (2019: £294,259). The Company pension contributions in respect of the highest paid director totaled £Nil for the year to December 31, 2020 (2019: £8,111). The highest paid director did not exercise any share options in the period. No other directors exercised share options in the period.

9. Basic and diluted loss per share

	Year ended December 31, 2020 £	**Year ended December 31, 2019 £**
Loss for the year	(5,457,916)	(6,067,984)
Basic and diluted weighted average number of shares outstanding(1)	18,922,470	17,917,600
Basic and diluted loss per share	**(0.29)**	**(0.34)**

(1) Following the year end, the Company undertook a group reorganization and a share split such that one issued share was exchanged for ten new shares. The outstanding shares presented above reflect the 10 for 1 share split.

Basic loss per share is calculated by dividing the loss for the year attributable to the equity holders of the Company by the weighted average number of shares outstanding during the year.

The dilutive effect of potential shares through equity settled transactions were considered to be anti-dilutive as they would have decreased the loss per share and were therefore excluded from the calculation of diluted loss per share.

10. Intangible assets

	Software £	**Patent and licence costs £**	**Total £**
Cost			
At January 1, 2019	158,489	157,758	316,247
Additions	7,960	162,096	170,056
Disposals	(130,069)	(11,838)	(141,907)
At December 31, 2019	36,380	308,016	344,396
Additions	13,233	156,865	170,098
Disposals	-	-	-
At December 31, 2020	49,613	464,881	514,494
Amortization			
At January 1, 2019	108,236	8,823	117,059
Charge for the year	31,266	21,581	52,847
Disposals	(130,069)	(1,069)	(131,138)
At December 31, 2019	9,433	29,335	38,768
Charge for the year	13,582	38,307	51,889
Disposals	-	-	-
At December 31, 2020	23,015	67,642	90,657
Net book value			
At December 31, 2020	26,598	397,239	423,837
At December 31, 2019	26,947	278,681	305,628

The amortization charge for the year is recognized within research and development costs in the statement of comprehensive loss.

11. Property, plant and equipment

	Facility & Scientific Equipment £	Computer Equipment £	Office Equipment £	Total £
Cost				
At January 1, 2019	2,897,095	255,307	75,260	3,227,662
Additions	1,953,431	64,330	8,784	2,026,545
At December 31, 2019	4,850,526	319,637	84,044	5,254,207
Additions	32,311	1,414	1,176	34,901
At December 31, 2020	4,882,837	321,051	85,220	5,289,108
Depreciation				
At January 1, 2019	647,233	90,623	11,770	749,626
Charge for the year	563,937	89,413	15,729	669,079
At December 31, 2019	1,211,170	180,036	27,499	1,418,705
Charge for the year	721,642	88,356	16,752	826,750
At December 31, 2020	1,932,812	268,392	44,251	2,245,455
Net book value				
At December 31, 2020	2,950,025	52,659	40,969	3,043,653
At December 31, 2019	3,639,356	139,601	56,545	3,835,502

The depreciation charge for the year is recognized within research and development and administrative expenses in the statement of comprehensive loss. Refer to Note 6 for further details.

The net book value of property, plant and equipment held under sale and leaseback arrangements is £535,456 (2019: £744,977).

12. Trade and other receivables: due within one year

	2020 £	2019 £
Trade receivables	-	107,750
Other receivables	5,822	9,031
VAT owed to the Company	53,796	3,349
Prepayments	230,718	242,406
Accrued income	-	952,060
	290,336	1,314,596

The fair value of trade and other receivables are not materially different to the book value. Accrued income represents grant income due to the Company as a result of costs incurred on grant funded projects.

13. Trade and other payables: due within one year

	2020 £	2019 £
Trade payables	638,366	627,933
Other tax and social security	143,600	272,260
Accruals	919,136	478,402
Other payables	64,318	60,264
	1,765,420	1,438,859

The fair value of trade and other payables are not materially different to the book value.

14. Lease liabilities and similar

Maturity analysis of leases and similar

December 31, 2020	Undiscounted lease payments £	**Interest** £	**Present value** £
Not later than one year	693,568	250,866	442,702
Between one year and five years	2,094,976	645,725	1,449,251
More than five years	1,340,753	207,604	1,133,149
	4,129,297	1,104,195	3,025,102

December 31, 2019	Undiscounted lease payments £	**Interest** £	**Present value** £
Not later than one year	703,337	288,707	414,630
Between one year and five years	2,341,528	778,098	1,563,430
More than five years	1,788,059	327,598	1,460,461
	4,832,924	1,394,403	3,438,521

14. Lease liabilities and similar (continued)

The balances relating to lease liabilities and similar can be further analyzed as follows:

Lease liabilities

December 31, 2020	Undiscounted lease payments £	**Interest** £	**Present value** £
Not later than one year	452,367	214,429	237,938
Between one year and five years	1,797,426	627,316	1,170,110
More than five years	1,340,753	207,604	1,133,149
	3,590,546	1,049,349	2,541,197

December 31, 2019	Undiscounted lease payments £	**Interest** £	**Present value** £
Not later than one year	452,368	233,909	218,459
Between one year and five years	1,802,778	723,253	1,079,525
More than five years	1,788,059	327,598	1,460,461
	4,043,205	1,284,760	2,758,445

The principal leasing activities undertaken by the Company relate to the lease of property for the business.

Interest expense on the lease liabilities recognized within finance costs was £292,062 (2019: £275,410). An incremental borrowing rate of 8.60% has been applied to leases during the reporting period. An incremental borrowing rate of 10.65% was applied at the date of initial application. Total cash outflows in the period in relation to leases are noted in the cash flow statement.

In addition, the Company undertakes some sale and leaseback transactions to secure financing. From a review of the sale and leaseback agreements, it is deemed that as no formal sale has occurred the Company continues to recognize the asset on the balance sheet with a corresponding liability stated at amortized cost. Liabilities in relation to sale and leaseback transactions totaled £483,905 (2019: £680,076) and are included in the above tables. There were no gains or losses recognized on sale and leaseback transactions in the period.

Sale and leaseback arrangements

In addition, the Company undertakes some sale and leaseback transactions to secure financing. From a review of the sale and leaseback agreements, it is deemed that as no formal sale has occurred the Company continues to recognize the asset on the balance sheet with a corresponding liability stated at amortized cost. There were no gains or losses recognized on sale and leaseback transactions in the period.

December 31, 2020	Undiscounted lease payments £	**Interest** £	**Present value** £
Not later than one year	241,200	36,437	204,763
Between one year and five years	297,550	18,408	279,142
	538,750	54,845	483,905

14. Lease liabilities and similar (continued)

December 31, 2019	Undiscounted lease payments	Interest	Present value
	£	£	£
Not later than one year	250,969	54,798	196,171
Between one year and five years	538,750	54,845	483,905
	789,719	109,643	680,076

Set out below are the carrying amounts of right-of-use assets recognized and the movements during the period:

	Buildings	Other	Total
	£	£	£
At January 1, 2019	893,128	18,488	911,616
Additions	1,049,603	-	1,049,603
Charge for the year	(178,434)	(4,109)	(182,543)
At December 31, 2019	1,764,297	14,379	1,778,676
At January 1, 2020	1,764,297	14,379	1,778,676
Charge for the year	(192,468)	(4,108)	(196,576)
At December 31, 2020	1,571,829	10,271	1,582,100

The following amounts are recognized in the profit and loss:

	Year ended December 31, 2020	Year ended December 31, 2019
	£	£
Amortization of right of use assets	196,576	182,543
Interest on lease liabilities	292,062	275,410
	488,638	457,953

Total cash outflows in respect of leases were £415,273 (2019: £184,401). Receipt of cashflows in respect of sale and leaseback transactions totaled £Nil (2019: 319,937). Total cash outflows in respect of interest on leases were £290,208 (2019: £87,468).

15. Deferred income

Year ended December 31, 2020

	Contracts with customers
	£
At January 1, 2020	7,801,851
Released to the statement of profit or loss	(1,978,660)
At December 31, 2020	5,823,191
Current	1,978,665
Non-current	3,844,526

Year ended December 31, 2019

	Contracts with customers
	£
At January 1, 2019	9,832,596
Released to the statement of profit or loss	(2,030,745)
At December 31, 2019	7,801,851
Current	2,030,746
Non-current	5,771,105

Movement in the period reflects the release of deferred income in respect of the long term research and development collaboration agreements. There have been no significant changes in the year.

16. Deferred taxation

The Company has not recognized a deferred tax asset in respect of tax losses carried forward and other timing differences as at December 31, 2020 on the basis that the timing during which the tax losses and other timing differences could be regarded as recoverable against future taxable profits cannot be determined with reasonable certainty.

The Company has tax losses carried forward of £12,793,486 (2019: £11,337,158) that are available for offset against future taxable profits.

The unrecognized deferred tax asset at 19% mainly consists of losses of £2,430,762 (2019 at 17%: £1,927,000) and share based payment temporary differences of £1,219,680 (2019 at 17%: £954,491).

17. Share capital and reserves

	2020 £	2019 £
Share capital	1,781,465	1,781,375
Share premium	11,095,365	11,095,365
	12,876,830	12,876,740

	2020 Number	2019 Number
Authorized, allotted, called up and fully paid share capital comprises:		
Ordinary shares of £0.10 each	17,813,010	17,813,010
A Ordinary shares of £0.0001 each	1,645,020	738,900
Total Ordinary share outstanding at the end of the period	19,458,030	18,551,910

	Number of shares	Share capital £	Share premium £
Fully paid share capital:			
Balance at December 31, 2019	18,551,910	1,781,375	11,095,365
Issue of A Ordinary shares	906,120	90	3,665,455
Balance at December 31, 2020	19,458,030	1,781,465	14,760,820

Ordinary shares

The Ordinary shares have no specific rights, preferences or restrictions attached to them.

A Ordinary shares

The A Ordinary shares rank equally with all other shares in issue in that on a vote every member has one vote for each share held. In August 2020 the Company issued 906,120 A ordinary shares at £4.30 each. The A ordinary shares contain preferential economic rights such that, in the event of a share or asset sale (as defined in the Articles of association), they provide a return to the holders of the A Ordinary Shares of an amount greater than or equal to 1.5x the price paid by the investors for A Ordinary Shares. The A Ordinary shares have an anti-dilution provision where shares are subsequently issued at a price below £4.30 per share, whereby the existing A Ordinary shareholders receive additional compensation shares in line with the formula set out in the Articles of association. The A Ordinary shares rank equally with all other shares in issue with respect to dividends.

The August 2020 A Ordinary shares included an additional right to subscribe for a fixed number (794,540) of shares at £4.30 per share at a future date based on certain clinical and commercial milestones. The estimated fair value of the right to subscribe was calculated by applying a Black Scholes Model. This was deemed the most appropriate approach due to the future liquidity event being date-uncertain and could take one of many forms.

The increase in share premium in the year is stated net of legal and associated fundraising costs totaling £233,404 including £180,000 settled by share-based payments.

Group reorganization

Following the year end, the Company undertook a group reorganization and a share split such that one issued share was exchanged for ten new shares. The outstanding shares presented above and in note 9 (Basic and diluted loss per share) reflect the 10 for 1 share split.

18. Share-based payments

The Company operates an HMRC Approved Enterprise Management Incentive (EMI) share option scheme for employees. Effective 16 December 2014, the Company approved a share option scheme under which the Board of Directors of the Company can award options to directors, officers, employees and consulting personnel of the Company. The Board of Directors will determine the terms, limitations, restrictions and conditions of the options granted under the plan.

The Company has granted options over shares to certain employees. The Company has one stock option plan: the TC BioPharm Limited Enterprise Management Incentive Plan 2014.

	Number of share options	Weighted average exercise price £
Outstanding at December 31, 2019	4,966,740	0.42
Granted during the period	465,490	1.08

Exercised during the period	-	-
Forfeited during the period	(103,000)	1.31
Outstanding at December 31, 2020	5,329,230	0.46
Exercisable at December 31, 2020	5,329,230	0.46
Unexercisable at December 31, 2020	-	-

	Number of share options	**Weighted average exercise price £**
Outstanding at January 1, 2018	4,221,050	0.10
Granted during the period	823,190	2.07
Exercised during the period	-	-
Forfeited during the period	(77,500)	0.60
Outstanding at December 31, 2019	4,966,740	0.42
Exercisable at December 31, 2019	4,492,740	0.32
Unexercisable at December 31, 2019	474,000	1.34

The estimated fair value of the options outstanding in the period was calculated by applying a Monte Carlo Simulation for those options issued in 2020 and 2019 and a Black Scholes Model for those options issued in prior periods. The most appropriate approach is selected with reference to the share capital structure at the time of grant. The weighted average fair value of the options at the measurement date was £1.18 (2019: £1.22). The expense recognized for share-based payments in respect of employee services received during the period to December 31, 2020 is £573,062 (2019: £835,792).

18. Share-based payments (continued)

The model inputs were as follows:

		2020		**2019**
Weighted average share price	£	2.16	£	3.85
Expected volatility		75%		70%
Risk free interest rate		0.01%		0.50%
Expected option life		1 year		2 years
Dividend yield		0.0%		0.0%

The weighted average remaining contractual life of the options at December 31, 2020 is 7 years (2019: 8 years).

As a privately held company, the Company's share price does not have sufficient historical volatility to adequately assess the fair value of the share option grants. As a result, management considered the historical volatility of other comparable publicly traded companies and, based on this analysis, concluded that a volatility of 75% was appropriate for the valuation of our share options.

As part of the valuation exercise reference was made to historical share issue prices, taking into account discounts for lack of control and marketability.

The options granted under the EMI share option scheme will typically vest between one and two years after the date of grant. The exception is options granted to senior management that vest immediately. As at the year end all options had fully vested. As at December 31, 2019, the unvested options would, under the agreed terms, vest within one year.

Upon vesting, each option entitles the holder to purchase one ordinary share at a specified option price determined at the grant date.

The Company also received services provided by a consultancy business that were settled by providing a right to subscribe for 232,550 A Ordinary shares at an exercise price of £4.30 per share at a future date, based on certain performance conditions being satisfied. The estimated fair value of the right to subscribe was calculated by applying a Black Scholes Model. This was deemed the most appropriate approach due to the future liquidity event being date-uncertain and could take one of many forms. The share-based payment charge totaled £411,652 (2019: £Nil).

The model inputs were as follows:

		2020	**2019**
Weighted average share price	£	4.16	-
Expected volatility		70%	-
Risk free interest rate		0.3%	-
Expected option life		1.33 years	-
Dividend yield		0.0%	-

Group reorganization

Following the year end, the Company undertook a group reorganization and a share split such that one issued share was exchanged for ten new shares. The share-based payment disclosures above reflect the 10 for 1 share split.

19. Related party transactions

The directors and senior executives who have the authority and responsibility for planning, directing and controlling the entity are considered to be key management personnel. Total remuneration in respect of these individuals is disclosed in the table below:

	2020 £	2019 £
Short-term employee benefits	982,027	688,325
Share-based payments	287,444	444,941
	1,269,471	1,133,266

During the years ended December 31, 2019 and 2020, the Company made purchases of cell culture media from Cell Science & Technology Institute, Inc., a company in which significant shareholder NIPRO Corporation (Osaka, Japan), has a significant interest in the amount of £79,826 and £30,775 respectively.

During the years ended December 31, 2019 and 2020, the Company used consultancy services from Theraldia Consulting Limited a company in which Dr Alan Clark has a significant interest in the amount of £13,068 and £22,621 respectively.

During the years ended December 31, 2019 and 2020, the Company used consultancy services from Dr Alan Clark to the amount of £31,784 and £Nil respectively.

During the year ended December 31, 2020, the executive directors agreed to defer a proportion of their compensation. Repayment of deferred compensation would be initiated on receipt of an agreed level of funding to support the future capital requirements of the business and settlement would be staged over twelve months. As at December 31, 2020 the balance outstanding to executive directors totaled £253,338.

20. Notes to the cash flow statement

	2020 £	2019 £
Cash and bank balances	748,015	956,495

Cash and cash equivalents comprise cash and short-term bank deposits with an original maturity of three months or less. The carrying amount of these assets is approximately equal to their fair value. Cash and cash equivalents at the end of the reporting period as shown in the statement of cash flows can be reconciled to the related items in the reporting position as shown above.

21. Financial instruments and risk management

The Company's principal financial instruments comprise trade and other receivables, cash and cash equivalents and trade and other payables. The main purpose of these financial instruments is to manage the Company's working capital for its operations. The Company's activities and current position do not expose it to significant financial risks, however the directors review and agree policies for monitoring and managing such risks on an ongoing basis.

Credit risk

Credit risk is the risk of financial loss to the Company if a customer or counterparty to a financial instrument fails to meet its contractual obligations, and arises principally from the Company's receivables from customers and from its financing activities, including deposits with banks and financial institutions, foreign exchange transactions and other financial instruments. The Company only engages with banks and financial institutions with a Standard and Poor credit rating of BBB or greater.

The Company has a small number of customers as part of its collaboration agreements. To manage the credit risks around collaboration agreements the Company will assess the creditworthiness of partners as part of the engagement process.

The Company has monitoring procedures in place to identify and follow up on any overdue debts.

Credit risk from balances with banks and financial institutions is managed by the Company's finance department in accordance with the Company's policy to only place funds with approved counterparties with the appropriate credit rating.

The Company is exposed to no material credit risk.

Liquidity risk

Liquidity risk is the risk that necessary sources of funding for the Company's business activities may not be available.

The Company manages liquidity risk by maintaining adequate reserves, banking facilities and reserve borrowing facilities, by continuously monitoring forecast and actual cash flows, and by matching the maturity profiles of financial assets and liabilities.

The Company is utilizing shareholder funds, collaboration agreements, grant funding and asset finance to support its working capital requirements.

All cash funds are held with a maturity of three months or less.

Market risk

Market risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in market prices. Market risk comprises three types of risk: interest rate risk, currency risk and other price risk, such as equity price risk and commodity risk.

Interest rate risk

Interest rate risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in market interest rates. The Company is exposed to no material interest rate risk.

Currency risk

Foreign currency risk is the risk that the fair value or future cash flows of an exposure will fluctuate because of changes in foreign exchange rates. The impact of the Company's exposure to foreign currency is not considered to be material to the overall results. The Company is currently not exposed to material foreign exchange risk.

21. Financial instruments and risk management (continued)

Other price risk

The Company is not exposed to material other price risks with regard to areas such as commodities or equity.

The following are the remaining contractual maturities of financial liabilities at the reporting date. The amounts are gross and undiscounted, and include estimated interest repayments.

Contractual cash flows

December 31, 2020 **Non-derivative financial liabilities**	**Carrying amounts £**	**Total £**	**2 months or less £**	**2-12 months £**	**12-24 months £**	More than 2 years **£**
Trade payables	638,366	638,366	638,366	-	-	-
Other payables	1,124,411	1,124,411	749,607	374,804	-	-
	1,762,777	1,762,777	1,387,973	374,804	-	-

December 31, 2019 **Non-derivative financial liabilities**	**Carrying amounts £**	**Total £**	**2 months or less £**	**2-12 months £**	**12-24 months £**	**More than 2 years £**
Trade payables	627,933	627,933	627,933	-	-	-
Other payables	808,283	808,283	538,855	269,428	-	-
	1,436,216	1,436,216	1,166,788	269,428	-	-

Changes in liabilities arising from financing activities

	January 1, 2020 £	**Cash flows £**	**New leases £**	**Other £**	**December 31, 2020 £**
Current lease liabilities	414,630	(415,273)	-	443,345	442,702
Non-current lease liabilities	3,023,891	-		(441,491)	2,582,400
	3,438,521	(415,273)	-	1,854	3,025,102

	January 1, 2019 £	**Cash flows £**	**New leases £**	**Other £**	**December 31, 2019 £**
Current lease liabilities	266,277	(184,401)	-	332,754	414,630
Non-current lease liabilities	1,799,163	-	1,369,540	(144,812)	3,023,891
	2,065,440	(184,401)	1,369,540	187,942	3,438,521

21. Financial instruments and risk management (continued)

The 'Other' column includes the effect of reclassification of non-current portion lease liabilities to current due to the passage of time and the effect of accrued but not yet paid interest on lease liabilities. The Company classifies interest paid as cash flows from operating activities.

22. Capital risk management

The Company is not subject to any externally imposed capital requirements.

For the purpose of the Company's capital management, capital includes issued share capital, share premium and all other equity reserves attributable to the equity holders of the parent.

The Company's objective when managing capital is to safeguard the Company's ability to continue as a going concern in order to provide returns for shareholders and benefits for other stakeholders and to maintain an optimal capital structure to reduce the cost of capital.

The Company manages its capital structure and makes adjustments in light of changes in economic conditions and the requirement of investors. To maintain or adjust the capital structure, the Company may adjust the dividend paid to shareholders, return capital to shareholders or issue new shares.

23. Subsequent events

In January 2021, the Company issued a further 47,840 A Ordinary shares at £4.30 per share raising gross proceeds of £205,712. There were no associated fundraising costs.

In April and June 2021, the Company issued further 41,720 A Ordinary shares at £4.30 per share raising gross equity investment totaling £179,396. Costs deducted as part of the fundraising totaled £20,845.

As part of the funding strategy ahead of the planned initial public offering later in 2021, the Company obtained shareholder approval, in April 2021, to issue convertible loan notes with a face value totaling $20,000,000. The loan note is issued with a 50% discount. Upon listing, 50% of the face value of the outstanding Convertible Loan Notes (including interest accrued to date) will convert into ADSs and Warrants at a conversion price for a unit comprised of one ADS and one Warrant, which is the lower of (a) the price per share calculated on a fully diluted basis (based on the number of shares in issue and vested share options immediately prior to the IPO being approved by the shareholders) on an assumed entity valuation of $120,000,000 and (b) the listing price. The remaining loan notes are repayable or convertible (at the same value) at the loan note holders' option in two equal tranches at 90 days and 180 days after the listing date. As at the date of the approval of the consolidated financial statements the Company had issued convertible loan notes with a face value of $5,266,700. In the event of an act of default (including if the Company does not list despite its and its bankers' efforts before December 15, 2021) the outstanding notes become repayable at their face value.

On June 8, 2021, the Company established a wholly owned subsidiary, TC BioPharm (North America) Inc., in Delaware, United States of America. This Company has not yet traded, although it has appointed and is compensating its director, who is the newly appointed US resident CEO of our planned post-listing US operations, Mr Bryan Kobel. It is anticipated that Mr Kobel will join the board of the listed entity upon listing and will serve as the group chief executive officer from that date, with the current CEO, Dr Michael Leek, acting as group executive chairman.

TCB Newco 2 Limited was incorporated in Scotland, United Kingdom on October 25, 2021. On November 1, 2021, TCB Newco 2 Limited changed its name to TC BioPharm (Holdings) Limited. On December 17, 2021, the shareholders and option holders of TC BioPharm Limited exchanged their shares or options for the same number (and classes) of shares and options in TC BioPharm (Holdings) Limited. As a result, TC BioPharm (Holdings) Limited became the sole shareholder of TC BioPharm Limited. TC BioPharm Limited and its two subsidiaries in the Netherlands and the United States will continue as the operating companies. Following the exchange, on December 17, 2021, TC BioPharm (Holdings) Limited undertook a stock split, whereby each ordinary and A ordinary (with nominal value of £0.10) were subdivided into 10 ordinary shares with nominal value of £0.01.

As a result of the forward share split, all references in these financial statements and accompanying notes to units of ordinary shares or per share amounts are reflective of the forward share split for all periods presented. In addition, the exercise prices and the numbers of shares issuable upon the exercise of any outstanding options to purchase ordinary shares were proportionally adjusted pursuant to the respective anti-dilution terms of the share-based payment plans.

None of the above events are considered to be adjusting post balance sheet events.

TC BIOPHARM LIMITED

UNAUDITED CONDENSED CONSOLIDATED STATEMENTS OF COMPREHENSIVE LOSS

FOR THE NINE MONTHS ENDED,

	Notes	September 30, 2021 £	September 30, 2020 £
Revenue	3	**1,483,994**	**1,483,994**
Research and development expenses		(4,511,206)	(5,112,495)
Administrative expenses		(1,381,910)	(1,651,196)
Administrative expenses – costs related to preparing for a listing		(550,450)	—
Other (expense)/income	4	(97,135)	555,490
Total operating expenses, net		**(6,540,701)**	**(6,208,201)**
Change in fair value of convertible loan derivatives		(3,889,879)	—
Finance income – interest		28	619
Finance costs	5	(1,516,676)	(222,841)
Loss before tax		**(10,463,234)**	**(4,946,429)**
Income tax credit	6	787,450	809,388
Net loss for the period		**(9,675,784)**	**(4,137,041)**
Total other comprehensive loss		**-**	**-**
Total comprehensive loss for the period		**(9,675,784)**	**(4,137,041)**
Basic and diluted loss per share	7	**(0.50)**	**(0.22)**

The accompanying notes form an integral part of these consolidated financial statements.

UNAUDITED CONDENSED CONSOLIDATED STATEMENTS OF FINANCIAL POSITION

AS AT,

	Notes	September 30, 2021 £	December 31, 2020 £
Assets			
Non-current assets			
Intangible assets		458,424	423,837
Right of use assets		1,434,668	1,582,100
Property, plant and equipment		2,472,971	3,043,653
Total non-current assets		4,366,063	5,049,590
Current assets			
Trade and other receivables	8	434,423	290,336
Corporation tax receivable		787,450	1,178,700
Cash and cash equivalents		1,550,772	748,015
Total current assets		2,772,645	2,217,051
Total assets		**7,138,708**	**7,266,641**
Equity			
Share capital	12	1,781,474	1,781,465
Share premium	12	15,124,758	14,760,820
Accumulated deficit		(29,565,141)	(19,889,357)
Total equity		**(12,658,909)**	**(3,347,072)**
Non-current liabilities			
Deferred income		2,360,538	3,844,526
Lease liabilities and similar	11	2,261,582	2,582,400
Total non-current liabilities		**4,622,120**	**6,426,926**
Current liabilities			
Deferred income		1,978,659	1,978,665
Trade and other payables	9	3,571,971	1,765,420
Convertible loan notes	10	4,931,023	—
Convertible loan - derivative	10	4,255,879	—
Lease liabilities and similar	11	437,965	442,702
Total current liabilities		**15,175,496**	**4,186,787**
Total liabilities		**19,797,617**	**10,613,713**
Total equity and liabilities		**7,138,708**	**7,266,641**

The accompanying notes form an integral part of these consolidated financial statements.

TC BIOPHARM LIMITED

UNAUDITED CONDENSED CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY

FOR THE NINE MONTHS ENDED,

	Notes	Share capital £	Share premium £	Accumulated deficit £	Total equity £
As at January 1, 2020		1,781,375	11,095,365	(15,416,155)	(2,539,415)
Net loss for the period		—	—	(4,137,041)	(4,137,041)
Recognition of share-based payment costs	13	—	—	614,396	614,396
Issue of share capital, net	12	91	3,665,454	—	3,665,545
As at September 30, 2020		1,781,466	14,760,819	(18,938,800)	(2,396,515)
As at January 1, 2021		1,781,465	14,760,820	(19,889,357)	(3,347,072)
Net loss for the period		-	-	(9,675,784)	(9,675,784)
Issue of share capital, net	12	9	363,938	-	363,947
As at September 30, 2021		**1,781,474**	**15,124,758**	**(29,565,141)**	**(12,658,909)**

The accompanying notes form an integral part of these consolidated financial statements.

TC BIOPHARM LIMITED

UNAUDITED CONDENSED CONSOLIDATED CASH FLOW STATEMENTS

FOR THE NINE MONTHS ENDED,

	September 30, 2021	September 30, 2020

	£	£
Cash flows from operating activities		
Loss before tax	(10,463,234)	(4,946,429)
Adjustments for: Depreciation	581,967	621,928
Amortization of intangible assets	45,311	37,292
Amortization of right of use assets	147,432	147,432
Change in fair value of derivative liability	3,889,879	-
Share-based payment expense	-	434,398
Net foreign exchange (gains)/losses	85,596	1,301
Finance income	(28)	(619)
Finance costs	1,516,676	222,841
Movements in working capital: Decrease in deferred income	(1,483,994)	(1,483,994)
(Increase)/decrease in trade and other receivables	(144,087)	1,676,364
Increase in trade and other payables	1,806,551	363,247
Cash used in operations	(4,017,931)	(2,926,239)
Interest paid	(194,921)	(222,841)
Interest received	28	619
Tax received	1,178,700	1,237,609
Net cash flows used in operating activities	(3,034,124)	(1,910,852)
Cash flows from investing activities		
Purchase of property, plant and equipment	(11,285)	(30,052)
Purchase of intangible assets	(79,898)	(121,910)
Net cash flows used in investing activities	(91,183)	(151,962)
Cash flows from financing activities		
Repayment of lease liabilities	(325,555)	(308,051)
Proceeds from receipt of convertible loan notes	3,972,187	-
Proceeds of sale of own shares	285,107	3,898,949
Share issue costs	(21,160)	(53,404)
Net cash flows from financing activities	3,910,579	3,537,494
Net increase in cash and cash equivalents	785,272	1,474,680
Net foreign exchange difference	17,485	(1,301)
Cash and cash equivalents at the beginning of the period	748,015	956,495
Cash and cash equivalents at the end of the period	**1,550,772**	**2,429,874**

The accompanying notes form an integral part of these consolidated financial statements.

TC BIOPHARM LIMITED

NOTES TO THE UNAUDITED CONDENSED CONSOLIDATED FINANCIAL STATEMENTS

1. Accounting policies

General information

TC BioPharm Limited ("TC BioPharm" or the "Company") is incorporated as a private company, limited by shares, in Scotland and domiciled in the United Kingdom (registration number: SC453579) and has the following wholly owned subsidiaries, TC BioPharm BV and TC BioPharm (North America) Inc. (together the "Group"). The registered office is: Maxim 1, 2 Parklands Way, Holytown, Motherwell, Lanarkshire, Scotland, ML1 4WR.

The principal activity of TC BioPharm is as a clinical stage immuno-therapy company pioneering commercialization of allogeneic, 'off-the-shelf' gamma-delta T cell ('GD-T') therapies, ranging from unmodified GD-T therapies to treat haematological cancers and viral infections, to sophisticated proprietary GD-T CAR-T products designed to reach and treat solid tumors.

The comparative figures for the year ended December 31, 2020 are not the Group's statutory accounts for that financial year within the meaning of section 434 of the Companies Act 2006. Those accounts have been reported on by the Company's auditor and delivered to the Registrar of Companies. The report of the auditor was (i) unqualified, (ii) noted that the disclosures made in the financial statements indicate that a material uncertainty exists that may cast significant doubt on the Group's ability to continue as a going concern, and (iii) did not contain a statement under section 498 (2) or (3) of the Companies Act 2006.

Following the period end, the Company undertook a group reorganization and a share split such that one issued share was exchanged for ten new shares. As a result of the forward share split, all references in these financial statements and accompanying notes to units of ordinary shares or per share amounts are reflective of the forward share split for all periods presented. In addition, the exercise prices and the numbers of shares issuable upon the exercise of any outstanding options to purchase ordinary shares were proportionally adjusted pursuant to the respective anti-dilution terms of the share-based payment plans.

Basis of preparation

The interim condensed consolidated financial statements for the nine months ended September 30, 2021 and September 30, 2020 have been prepared in accordance with International Accounting Standard 34, "*Interim Financial Reporting*" (IAS 34). The accounting policies and methods of computation applied in the preparation of the interim financial statements are consistent with those applied in the Group's annual financial statements for the year ended December 31, 2020.

The interim financial statements do not include all of the information required for the full annual financial statements and should be read in conjunction with the consolidated financial statements of the Group for the year ended December 31, 2020.

The interim condensed consolidated Group financial statements have been prepared under the historical cost basis and are presented in pounds sterling which is the Group's and parent's functional and presentation currency. All values are rounded to the nearest pound, except where otherwise indicated.

1. Accounting policies (continued)

Going concern

As of September 30, 2021, the Company had an accumulated deficit of £29.6 million. The Company has incurred recurring losses and has no sales as no products have obtained the necessary regulatory approval in order to market products. The Company expects to continue to incur losses as a result of costs and expenses related to the Company's clinical development and corporate general and administrative activities.

The Company had negative cash flows from operating activities during the nine month period ended September 30, 2021 of £3.0 million, and current projections indicate that the Company will have continued negative cash flows for the foreseeable future. Net losses incurred for the nine month period ended September 30, 2021 and 2020, amounted to £9.7 million and £4.2 million, respectively.

At September 30, 2021, the Company's cash and cash equivalents amounted to £1.6 million, current assets amounted to £2.8 million and current liabilities amounted to £15.2 million. At December 31, 2020, the Company's cash and cash equivalents amounted to £0.7 million, current assets amounted to £2.2 million and current liabilities amounted to £4.2 million. The Company received cash totaling £4.0 million through the issue of convertible loan notes in the nine month period to September 30, 2021 with a face value totaling $11.0 million. The loan note is issued with a 50% discount. The Company has additionally secured cash receipts from the issue of further convertible loan notes subsequent to September 30, 2021 totaling £2.5 million with a face value totaling £5.0 million. The existing cash and cash equivalents will not be sufficient to enable the Company to meet its short-term obligations or long-term plans, including completing its short-term clinical program and subsequent commercialization of therapeutic products, if approved, or initiation or completion of future registration studies.

Management believes that the existing cash and cash equivalents will be sufficient to fund the current operating plans through to end of February 2022 and with the addition of the net proceeds from this offering it would extend the cash runway for at least twelve months from the completion of this offering. An additional equity raise is anticipated in the second half of 2022 to meet the funding requirements of the Company. Should the proceeds from listing its securities not materialize or occur as expected, management will need to consider alternative arrangements and such arrangements could have a potentially significant negative impact on the current net asset value of the Company. The Company will consider the following ways to fund its operations including: (1) raising additional capital through equity and/or debt financings; (2) new commercial relationships to help fund future clinical trial costs (i.e. licensing and partnerships); (3) reducing and/or deferring discretionary spending on one or more research and development programs; and/or (4) restructuring operations to change its overhead structure. The Company's future liquidity needs, and ability to address those needs, will largely be determined by the success of its product candidates and key development and regulatory events and its decisions in the future.

The accompanying financial statements have been prepared in conformity with IFRS as issued by IASB, which contemplate continuation of the Company as a going concern. The Company has not established a source of revenues sufficient to cover its operating costs, and as such, have been dependent on funding operations primarily through the sale of equity securities and collaboration revenue. The Company expects to incur further losses over the next several years as it develops its business. The Company has spent, and expects to continue to spend, a substantial amount of funds to implement its business strategy, including its planned product development efforts, preparation for its planned clinical trials, performance of clinical trials and its research and discovery efforts. Although proceeds from listing its securities have not yet been obtained by the Group, management believes it is likely that adequate funding from the anticipated proceeds from listing its securities will be received, such that the Company consequently will have sufficient liquidity to fund the Company's operating activities for at least the next 12 months. On this basis management continues to view the Company as a going concern.

Management's plans include continuing to finance operations through the issuance of additional equity instruments to enable the and continuing the ongoing development of the current pipeline, and/or through entering into a development partnerships or sales and licensing agreements with the acquisition of a third party or license agreement. Any transactions which occur may contain covenants that restrict the ability of management to operate the business or may have rights, preferences or privileges senior to the Company's current shareholders and may dilute current shareholders of the Company.

Engaging in a transaction with a third party is contingent on negotiations among the parties; therefore, there is no certainty that the Company will enter into such an agreements should the Company so desire.

There can be no assurance that the Company will achieve or sustain positive cash flows from operations or profitability. If the Company is unable to maintain adequate liquidity, future operations will need to be scaled back or discontinued. These conditions raise substantial doubt about the Company's ability to continue as a going concern. The Company's consolidated financial statements do not include any adjustments that might result from the outcome of this uncertainty.

1. Accounting policies (continued)

Going concern (continued)

Impact of COVID-19

The Group was, like many other businesses, impacted materially by the COVID-19 pandemic. The impact is described in more detail as part of the note to the consolidated financial statements for the year ended December 31, 2020. The Group is not aware of any specific event or circumstance that arose during the nine month period ended September 30, 2021, that has impacted on its operations in a manner which would require the Group to update its estimates, judgments or revise the carrying value of its assets or liabilities. However, these estimates may change, as new events occur and additional information is obtained, relating to the COVID-19 pandemic or otherwise.

Adoption of New Accounting Standards

There have been no recent new accounting standards that have had an impact on the interim condensed consolidated financial statements.

Convertible loan

The Company established a $20.0 million convertible loan note instrument (see note 10, "Convertible loan") in April, 2021. During the period, the Group issued US dollar denominated convertible loan notes with a face value totaling $10,987,872 (£8,156,081 based on the exchange rate as at September 30, 2021).

The convertible loan has been recognized as a hybrid financial instrument and accounted for as two separate components: (i) a loan and (ii) an embedded conversion option derivative.

(i) The convertible loan's initial fair value is the residual amount of the consideration received, net of attributable costs, after separating out the fair value of the embedded conversion option derivative. The loan is subsequently measured at its amortized cost in accordance with IFRS 9 – Financial Instruments. It is presented as a financial liability in the Statement of Financial Position.

(ii) The embedded conversion option derivative was initially measured at fair value and is subsequently remeasured to fair value at each reporting date. Under IAS 32 Financial Instruments: Presentation, this derivative could have been classified as a component of equity only if in all cases the contract would be settled by the Company delivering a fixed number of its own equity instruments in exchange for a fixed amount of cash or debt redemption. However, the convertible instrument included a conversion feature resulting in settlement in a variable number of shares and consequently, none of the instrument comprises an equity component. As a result, the derivative is presented in the statement of financial position as a liability in accordance with IFRS 9 and IAS 32. Changes in the fair value (gains or losses) of the derivative at the end of each period are recorded in the interim condensed consolidated statements of comprehensive loss.

Initial public offering (IPO) related expenses

Incremental costs deemed to be incurred and directly attributable to the planned offering of securities were held as prepayments prior to being deducted from the related proceeds of the offering in due course. Costs that relate to the stock market listing or are otherwise not incremental and directly attributable to issuing new shares, are recorded as an expense in the statement of comprehensive income. Costs that relate to both share issuance and listing are allocated between those functions on a rational and consistent basis. In the absence of a more specific basis for apportionment, an allocation of common costs based on the proportion of new shares issued to the total number of (new and existing) shares listed has been used.

2. Critical accounting estimates and judgements

In the application of the Group's accounting policies, management are required to make judgements, estimates and assumptions about the carrying amount of assets and liabilities that are not readily apparent from other sources. The estimates and associated assumptions are based on historical experience and other factors that are considered to be relevant. Actual results may differ from these estimates.

The estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognized in the period in which the estimate is revised where the revision affects only that period, or in the period of the revision and future periods where the revision affects both current and future periods.

Judgements made in applying accounting policies other than those involving estimations

Revenue from contracts with customers

Identification of contracts with pharma partners

The Group has entered into collaboration agreements with a number of parties. Application of IFRS 15 "Revenue from contracts and customers" on collaboration agreements requires judgement around whether these contracts were within the scope of IFRS 15.

The Group's core business is around researching and developing immunotherapies and collaborative agreements entered into with pharma partners are consistent with those objectives and the outputs are in line with the Group's ordinary activities.

The contracts with pharma partners do not involve sharing the risks and benefits of a joint arrangement in the sense of IFRS 11 "Joint arrangements".

In light of the nature of the work being undertaken with pharma partners, and the fact that these agreements have commercial substance with clearly defined milestones and rights and obligations for each party, management has concluded that these collaboration agreements meet the definition of a contract with a customer and fall within the scope of IFRS 15.

Identification of performance obligations in contracts

The collaboration agreements entered into by the Group include obligations to fulfil the research and development programs. Management identified, from reviews of the relevant agreements, that there are no specific obligations but an implied performance obligation to deliver each overall contracted research and development program. Reflecting the broad nature of these obligations, spanning the full duration of the contract, the obligations are satisfied over the expected duration of the relevant contract.

Determination and allocation of the transaction price

The collaboration agreements include a number of elements of consideration and are allocated to the satisfaction of the relevant obligation.

The Group can receive upfront payments as part of the consideration. The Group has determined that upfront payments are in connection with the performance of the research and development program and are satisfied during the duration of the contract.

The business is entitled to receive contractual milestone payments on achievement of certain performance obligations, with revenue being recognized in the same way. The relevant transaction price is allocated to the related milestone.

2. Critical accounting estimates and judgements (continued)

Assumptions about the future and other sources of estimation uncertainty

Revenue from contracts with customers

Timing of revenue recognition

Revenue from upfront payments in connection with collaboration agreements is recognized over the estimated term over which the services promised will be provided. This term was estimated by management at the inception of each contract and evaluated for the period ended September 30, 2021. The estimated time to complete as at September 30, 2021 is 26 months.

Due to the uncertainty around the time to complete multi-year collaboration programs it is possible that the estimated terms may be extended. If the estimated term of the current contracts had been adjusted by one year, then it would be expected that the corresponding revenue for the nine month period to September 30, 2021 would have decreased by £441,666 and deferred income liabilities would have increased by £441,666 as at September 30, 2021. The business is entitled to receive contractual milestone payments on achievement of certain performance obligations. Due to significant uncertainties associated with the achievement of contractual milestones, no revenue has been recognized in relation to potential future milestone receipts and these will be recognized when the milestones are certain to occur.

Valuation of ordinary shares

As there has been no public market for the Group's ordinary shares to date, the estimated fair value of the ordinary shares has been determined by management, considering the most recently available third-party valuations of the Group's ordinary shares, and the assessment of additional objective and subjective factors that it believed were relevant and which may have changed from the date of the most recent valuation through the date of the grant.

After considering the Market Approach, the Income Approach and the Asset-based Approach, we utilized the Market Approach to determine the estimated fair value of our ordinary shares based on management's determination that this approach was most appropriate for a clinical-stage biopharmaceutical company at this point in its development, using the option-pricing method ("OPM"). Consideration was given to the American Institute of Certified Public Accountants' Practice Aid: "Valuation of Privately-Held Company Equity Securities Issued as Compensation", the likelihood of completing an IPO and recent transactions with investors.

Once a public trading market for our ordinary shares has been established in connection with the completion of this offering, it will no longer be necessary to estimate the fair value of our ordinary shares in connection with our accounting for share-based payment expenses, as the fair value of our ordinary shares will be determinable by reference to the trading price of our ordinary shares on Nasdaq.

2. Critical accounting estimates and judgements (continued)

Share option and other share-based payment assumptions

The determination of the value of share-based payments requires management to use professional expertise to arrive at assumptions to be used to calculate the value of the share-based payment. The estimated fair value of the options outstanding in the period was calculated by applying a Monte Carlo Simulation for those options issued in 2020 and a Black Scholes Model for those options issued in prior periods. The most appropriate approach is selected with reference to the share capital structure at the time of grant and the directors need to use judgement in setting the key assumptions. Further details are included in Note 13.

The Group determines the share price used in the fair value calculation in line with the methods discussed in Note 2 in connection with the 'Valuation of ordinary shares'. As a privately held company, the Group's share price does not have sufficient historical volatility to adequately assess the fair value of the share option grants. As a result, management considered the historical volatility of other comparable publicly traded companies and, based on this analysis, concluded that a volatility of 70% was appropriate for the valuation of share options granted during the nine months ended September 30, 2020. There were no share options granted in the nine months ended September 30, 2021 and all options were fully vested as of December 31, 2020.

The expected life of the option, beginning with the option grant date, was used in valuing our share options. The expected life used in the calculation of share-based payment expense is the time from the grant date to the expected exercise date. The life of the options, which is a subjective estimate that can materially alter the valuation, depends on the option expiration date, volatility of the underlying shares and vesting features.

IFRS 2 "Share-based Payment" requires the use of the risk-free rate of the country in which the entity's shares are principally held with a remaining term equal to the expected life of the option. This should also be the risk-free interest rate of the country in whose currency the exercise price is expressed. The Group has applied the appropriate risk-free rate, based on 4-year, 3-year and 2-year UK government bond yields as at the respective grant dates.

Convertible loan redemption date

The Group calculates the effective interest rate ("EIR") to consider the potential repayment at redemption date by reference to the face value amount and including the 5% of interest rate in each relevant cash outflow period. At the time of a listing, 50% of the face value of loan notes in issue at the time (including interest accrued to date) convert to equity in the listed entity with the remaining loan notes are repayable or convertible at the loan note holders' option in two equal tranches at 90 days and 180 days after the listing date. For the purpose of calculating the EIR, management estimates the listing date to be on or around December 15, 2021. The expected listing date has subsequently been revised to January 2022, however, for reporting purposes the accounts have been prepared based on management estimates as at the period end.

2. Critical accounting estimates and judgements (continued)

Embedded derivative assumptions

The estimated fair value of the embedded derivatives related to the issue of convertible loan notes at the point of recognition and at the period end was calculated by using a Black Scholes option pricing model.

The Group determined the share price used in the fair value calculation in line with the methods discussed in Note 2 in connection with the 'Valuation of ordinary shares', in particular noting the recent valuation obtained from advisers in connection with the IPO. As a privately held company, the Group's share price does not have sufficient historical volatility to adequately assess the fair value of the embedded derivative. As a result, management considered the historical volatility of other comparable publicly traded companies and, based on this analysis, concluded that a volatility of 71% was appropriate for the valuation of embedded derivatives in in existence as at September 30, 2021.

The expected life of the embedded derivative was directly linked to expected redemption dates of the convertible loan note, as noted above.

The Black-Scholes option pricing model requires the use of the risk-free rate of the currency in which the convertible loan note is denominated (US dollars). The Group has applied the appropriate risk-free rate, US treasury bond yields as at the respective redemption dates.

3. Revenue

	Nine months ended September 30, 2021 £	Nine months ended September 30, 2020 £
Revenue from collaboration agreements	1,483,994	1,483,994

Collaboration agreements entered into by the Group provide for the entity to work with a partner to carry out collaborative research and development work.

Performance obligations around upfront payments are deemed to be satisfied over the estimated life of the services promised to be provided. As at September 30, 2021 the amount of the transaction price allocated to performance obligations that are unsatisfied totaled £4,339,197 (December 31, 2020: £6,317,856). The Group expects to recognize this revenue on a straight-line basis over the estimated life of the contract (six years). This method reflects the nature of the collaboration agreements which run for a multi-year period, recognizing the revenue in the period in which the research and development activities are performed.

4. Other (expense)/income

	Nine months ended September 30, 2021 £	Nine months ended September 30, 2020 £
Unrealized and realized exchange differences	(103,081)	-
Grant income	5,946	555,490
	(97,135)	555,490

Unrealized and realized exchange differences in the period relate to retranslation of the US dollar denominated convertible loan notes as at the period end.

Grant income received in the current and prior periods was represented by payments under the Coronavirus Job Retention Scheme.

5. Finance costs

	Nine months ended September 30, 2021 £	Nine months ended September 30, 2020 £
Interest on lease liabilities	194,921	222,841
Interest on convertible loan (Note 10)	1,321,755	-
	1,516,676	222,841

6. Income tax credit

The income tax credit recognized primarily represents the U.K. research and development tax credit. In the United Kingdom, the Company is able to surrender some of its losses for a cash rebate of up to 33.35% of expenditure related to eligible research and development projects.

7. Basic and diluted loss per share

	Nine months ended September 30, 2021 £	Nine months ended September 30, 2020 £
Loss for the period	(9,675,784)	(4,137,041)
Basic and diluted weighted average number of shares outstanding (1)	19,523,080	18,744,750
Basic and diluted loss per share	**(0.50)**	**(0.22)**

(1) Following the period end, the Company undertook a group reorganization and a share split such that one issued share was exchanged for ten new shares. The outstanding shares presented above reflect the 10 for 1 share split.

Basic loss per share is calculated by dividing the loss for the period attributable to the equity holders of the Group by the weighted average number of shares outstanding during the period.

The dilutive effect of potential shares through equity settled transactions were considered to be anti-dilutive as they would have decreased the loss per share and were therefore excluded from the calculation of diluted loss per share.

The following potential shares, presented to reflect the 10 for 1 share split noted above are anti-dilutive and are therefore excluded from the weighted average number of shares for the purpose of diluted loss per share:

	Nine months ended September 30, 2021 Number of shares	Nine months ended September 30, 2020 Number of shares
Convertible loan notes – assuming all loan notes are converted to equity (including all options to convert being fully exercised)	2,362,192	-
TC BioPharm Limited Enterprise Management Incentive Plan 2014	5,329,230	4,876,240
Options to subscribe for ordinary shares at a future date based on certain clinical and commercial milestones	794,540	794,540
	8,485,962	5,670,780

8. Trade and other receivables: due within one year

	September 30, 2021 £	December 31, 2020 £
Other receivables	2,089	5,822
VAT owed to the Group	99,880	53,796
Prepayments	332,454	230,718
	434,423	290,336

The fair value of trade and other receivables are not materially different to the book value.

9. Trade and other payables: due within one year

	September 30, 2021 £	December 31, 2020 £
Trade payables	1,372,088	638,366
Other tax and social security	132,387	143,600
Accruals	2,028,272	919,136
Other payables	39,224	64,318
	3,571,971	1,765,420

The fair value of trade and other payables are not materially different to the book value.

10. Convertible loan

The following table summarizes the changes in the convertible debt instrument during the nine month period to September 30, 2021:

	Residual loan	Embedded derivative £	Total £
Balance at December 31, 2020	-	-	-
Loan notes issued in the period	3,506,187	366,000	3,872,187
Accrued interest	1,321,755	-	1,321,755
Fair value adjustment	-	3,889,879	3,889,879
Currency adjustment	103,081	-	103,081
Balance at September 30, 2021	4,931,023	4,255,879	9,186,902

The fair value of the residual loan is not materially different to the book value.

During the period, the Group issued US dollar denominated convertible loan notes with a face value totaling \$10,987,872 (£8,156,081 based on the exchange rate as at September 30, 2021). The loan note is issued with a 50% discount. In the event of and at the time of a listing, 50% of the face value of the outstanding Convertible Loan Notes (including interest accrued to date) will convert into ADSs and Warrants at a conversion price for a unit comprised of one ADS and one Warrant, which is the lower of (a) the price per share calculated on a fully diluted basis (based on the number of shares in issue and vested share options immediately prior to the IPO being approved by the shareholders) on an assumed entity valuation of \$120,000,000 (£89,073,634 based on the exchange rate as at September 30, 2021) and (b) the listing price. The remaining amount due under the loan notes are repayable or convertible (on the same value) into shares in the listed entity at the loan note holders' option in two equal tranches at 90 days and 180 days after the listing date.

10. Convertible loan (continued)

In the event of an act of default (including if the Group does not list despite its and its bankers' efforts before October 15, 2021, subject to such date being automatically extended until December 15, 2021 in the event that the currently anticipated listing has not been terminated or an extension agreed with the note holders) the outstanding notes become immediately repayable at their face value. Following the period end, the loan note holders agreed to extend the redemption date to February 15, 2022. The extension does not affect accounting calculations as at the period end, which were based on management estimates of the listing date to be on or around December 15, 2021. The expected listing date has subsequently been revised to January 2022, however, for reporting purposes the accounts have been prepared based on management estimates as at the period end.

As the loan notes have two elements, the debt instrument and the conversion option which is accounted for as an embedded derivative liability, the fair value of the conversion option is calculated first and then subtracted from the fair value of the entire instrument net of issuance costs totaling £100,000 (see Note 13).

When considering the fair value of the conversion option at the points of initial recognition management took into account the probability of a listing happening before maturity and what the expected fair value of the shares would be at the listing. The embedded derivative was measured at fair value on the date of issuance (based on the Black-Scholes valuation model).

The loan is subsequently measured at amortized cost. Management calculates the effective interest rate ("EIR") to consider the potential repayment at redemption date by reference to the face value amount after taking into account the 5% of interest rate.

The value of the embedded derivative is remeasured at fair value at each reporting date (based on the Black-Scholes valuation model) with recognition of the changes in fair value in the consolidated statements of comprehensive loss in accordance with IFRS 9. The inputs associated with calculating the fair value of the embedded derivative are considered to be Level 3 (inputs not based on observable market data) as defined by IFRS 7 – Financial instruments: Disclosures.

The model inputs were as follows:

		2021
Exercise price in USD	$	4.82
Share price in USD		8.00
Time to maturity		3 to 9 months
Expected volatility		71%
Risk free interest rate (US treasury bond)		0.08%
Dividend yield		-
Probability, as at the reporting date, of IPO completion		75%

11. Lease liabilities and similar

Maturity analysis of leases and similar

September 30, 2021	Undiscounted lease payments	Interest	Present value
	£	£	£
Not later than one year	693,567	255,602	437,965
Between one year and five years	1,798,308	532,731	1,265,577
More than five years	1,117,538	121,533	996,005
	3,609,413	909,866	2,699,547

December 31, 2020	Undiscounted lease payments	Interest	Present value
	£	£	£
Not later than one year	693,568	250,866	442,702
Between one year and five years	2,094,976	645,725	1,449,251
More than five years	1,340,753	207,604	1,133,149
	4,129,297	1,104,195	3,025,102

The balances relating to lease liabilities and similar can be further analyzed as follows:

Lease liabilities

September 30, 2021	Undiscounted lease payments	Interest	Present value
	£	£	£
Not later than one year	452,367	233,832	218,535
Between one year and five years	1,681,658	528,767	1,152,891
More than five years	1,117,538	121,533	996,005
	3,251,563	884,132	2,367,431

December 31, 2020	Undiscounted lease payments	Interest	Present value
	£	£	£
Not later than one year	452,367	214,429	237,938
Between one year and five years	1,797,426	627,316	1,170,110
More than five years	1,340,753	207,604	1,133,149
	3,590,546	1,049,349	2,541,197

The principal leasing activities undertaken by the Group relate to the lease of property for the business.

Interest expense on the lease liabilities recognized within finance costs for the nine months ended September 30, 2021 was £194,921 (nine months ended September 30, 2020: £222,841). An incremental borrowing rate of 8.60% has been applied to leases during the reporting period. Total cash outflows in the period in relation to leases are noted in the cash flow statement.

11. Lease liabilities and similar (continued)

Sale and leaseback arrangements

In addition, the Group undertakes some sale and leaseback transactions to secure financing. From a review of the sale and leaseback agreements, it is deemed that as no formal sale has occurred the Group continues to recognize the asset on the balance sheet with a corresponding liability stated at amortized cost. There were no gains or losses recognized on sale and leaseback transactions in the period.

September 30, 2021	**Undiscounted lease payments** £	**Interest** £	**Present value** £
Not later than one year	241,200	21,770	219,430
Between one year and five years	116,650	3,963	112,687
	357,850	25,733	332,117

December 31, 2020	**Undiscounted lease payments** £	**Interest** £	**Present value** £
Not later than one year	241,200	36,437	204,763
Between one year and five years	297,550	18,408	279,142
	538,750	54,845	483,905

Set out below are the carrying amounts of right-of-use assets recognized and the movements during the period:

	Buildings £	**Other £**	**Total £**
At January 1, 2021	1,571,829	10,271	1,582,100
Charge for the period	(144,351)	(3,081)	(147,432)
At September 30, 2021	1,427,478	7,190	1,434,668

The following amounts are recognized in the profit and loss:

	Nine months ended September 30, 2021 £	**Nine months ended September 30, 2020 £**
Amortization of right of use assets	147,432	147,432
Interest on lease liabilities	167,085	176,532
	314,517	323,964

12. Share capital and reserves

	September 30, 2021 £	**December 31, 2020 £**
Share capital	1,781,474	1,781,465
Share premium	15,124,758	14,760,820
	16,906,232	16,542,285

	September 30, 2021 Number	**December 31, 2020** Number
Authorized, allotted, called up and fully paid share capital comprises:		
Ordinary shares of £0.10 each	17,813,010	17,813,010
A Ordinary shares of £0.0001 each	1,734,580	1,645,020
Total Ordinary shares outstanding at the end of the period	19,547,590	19,458,030

	Number of shares	**Share capital £**	**Share premium £**
Fully paid share capital:			
Balance at December 31, 2020	19,458,030	1,781,465	14,760,820

Issue of A Ordinary shares	89,560	9	363,938
Balance at September 30, 2021	19,547,590	1,781,474	15,124,758

Ordinary shares

The Ordinary shares have no specific rights, preferences or restrictions attached to them.

A Ordinary shares

The A Ordinary shares rank equally with all other shares in issue in that on a vote every member has one vote for each share held. During the nine months to September 30, 2021 the Company issued 89,560 A ordinary shares at £4.30 each. The A ordinary shares contain preferential economic rights such that, in the event of a share or asset sale (as defined in the Articles of association), they provide a return to the holders of the A Ordinary Shares of an amount greater than or equal to 1.5x the price paid by the investors for A Ordinary Shares. The A Ordinary shares have an anti-dilution provision where shares are subsequently issued at a price below £4.30 per share, whereby the existing A Ordinary shareholders receive additional compensation shares in line with the formula set out in the Articles of association. The A Ordinary shares rank equally with all other shares in issue with respect to dividends.

The increase in share premium in the period is stated net of legal and associated fundraising costs totaling £21,160.

Group reorganization

Following the period end, the Company undertook a group reorganization and a share split such that one issued share was exchanged for ten new shares (further details are provided in note 17). The outstanding shares presented above and in note 7 (Basic and diluted loss per share) reflect the 10 for 1 share split.

13. Share-based payments

The Company operates an HMRC Approved Enterprise Management Incentive (EMI) share option scheme for employees. Effective December 16, 2014, the Company approved a share option scheme under which the Board of Directors of the Company can award options to directors, officers, employees and consulting personnel of the Company. The Board of Directors will determine the terms, limitations, restrictions and conditions of the options granted under the plan.

The Company has granted options over shares to certain employees. The Company has one stock option plan: the TC BioPharm Limited Enterprise Management Incentive Plan 2014.

	Number of share options	Weighted average exercise price £
Outstanding at December 31, 2020	5,329,230	0.46
Granted during the period	-	-
Exercised during the period	-	-
Forfeited during the period	-	-
Outstanding at Sept 30, 2021	5,329,230	0.46
Exercisable at September 30, 2021	5,329,230	0.46
Unexercisable at September 30, 2021	-	-

The estimated fair value of the options outstanding in the period was calculated by applying a Monte Carlo Simulation for those options issued in 2020 and 2019 and a Black Scholes Model for those options issued in prior periods. The most appropriate approach is selected with reference to the share capital structure at the time of grant. The weighted average fair value of the options at the measurement date was £Nil (2020: £1.18). The expense recognized for share-based payments in respect of employee services received during the nine months to September 30, 2021 is £Nil as all options were fully vested as of December 31, 2021 (nine months to September 30, 2020: £202,746).

13. Share-based payments (continued)

As a privately held company, the Company's share price does not have sufficient historical volatility to adequately assess the fair value of the share option grants. As a result, management considered the historical volatility of other comparable publicly traded companies and, based on this analysis, concluded that a volatility of 75% was appropriate for the valuation of our share options.

As part of the valuation exercise reference was made to historical share issue prices, taking into account discounts for lack of control and marketability.

The options granted under the EMI share option scheme will typically vest between one and two years after the date of grant. The exception is options granted to senior management that vest immediately. As at the period end all options had fully vested. As at September 30, 2020 the unvested options would, under the agreed terms, vest within one year.

Upon vesting, each option entitles the holder to purchase one ordinary share at a specified option price determined at the grant date.

During the nine months to September 30, 2020, the Company also received services provided by a consultancy business that were settled by providing a right to subscribe for 232,550 A Ordinary shares at an exercise price of £4.30 per share at a future date, based on certain performance conditions being satisfied. The estimated fair value of the right to subscribe was calculated by applying a Black Scholes Model. This was deemed the most appropriate approach due to the future liquidity event being date-uncertain and could take one of many forms. The share-based payment charge is accrued over the performance period and the total recognized in the nine months to

September 30, 2021 was £Nil (Nine months to September 30, 2020: £411,651 of which £180,000 was debited to the share premium account).

The model inputs were as follows:

		2021	2020
Weighted average share price	£	-	4.16
Expected volatility		-	70%
Risk free interest rate		-	0.3%
Expected option life		-	1.33 years
Dividend yield		-	0.0%

During the nine months to September 30, 2021, the Company settled issuance costs with respect to securing convertible loan finance by the issue of 23,260 A Ordinary shares at £4.30 per share for a total consideration of £100,000.

Group reorganization

Following the period end, the Group undertook a group reorganization and a share split such that one issued share was exchanged for ten new shares (further details are provided in note 17). The share-based payment disclosures above reflect the 10 for 1 share split.

14. Related party transactions

The directors and senior executives who have the authority and responsibility for planning, directing and controlling the entity are considered to be key management personnel. Total remuneration in respect of these individuals is disclosed in the table below:

	Nine months ended September 30, 2021 £	Nine months ended September 30, 2020 £
Short-term employee benefits	827,249	854,298
Share-based payments	-	-
	827,249	854,298

During the nine month period ended September 30, 2021 and 2020, the Group made purchases of cell culture media from Cell Science & Technology Institute, Inc., a company in which significant shareholder NIPRO Corporation (Osaka, Japan), has a significant interest, in the amount of £41,482 and £30,722 respectively.

During the nine month period ended September 30, 2021 and 2020, the Group used consultancy services from Theraldia Consulting Limited a company in which Dr Alan Clark has a significant interest in the amount of £Nil and £22,621 respectively.

From March 2020, the executive directors agreed to defer a proportion of their compensation. Repayment of deferred compensation would be initiated on receipt of an agreed level of funding to support the future capital requirements of the business and settlement would be staged over twelve months. As at September 30, 2021 the balance outstanding to executive directors totaled £590,532 (December 31, 2020: £253,338).

15. Financial liabilities

The following are the remaining contractual maturities of financial liabilities at the reporting date. The amounts are gross and undiscounted, and include estimated interest repayments.

September 30, 2021 Non-derivative financial liabilities	Carrying amounts £	Total £	2 months or less £	2-12 months £	12-24 months £	More than 2 years £
Trade payables	1,372,088	1,372,088	1,372,088	-	-	-
Convertible loan	4,931,023	8,410,090	4,167,337	4,242,753	-	-
Other payables	2,199,883	2,199,883	553,792	1,646,091	-	-
	8,502,994	11,982,061	6,093,217	5,888,844	-	-

December 31, 2020 Non-derivative financial liabilities	Carrying amounts £	Total £	2 months or less £	2-12 months £	12-24 months £	More than 2 years £
Trade payables	638,366	638,366	638,366	-	-	-
Other payables	1,124,411	1,124,411	749,607	374,804	-	-
	1,762,777	1,762,777	1,387,973	374,804	-	-

In respect of the convertible loan noted as a financial liability as at September 30, 2021, a proportion of the loan under the loan agreement is expected to convert to equity and will not result in a cash outflow. The date upon which the convertible loans become immediately repayable, in the event that an IPO has not been concluded, has been extended, with the agreement of the note holders, to February 15, 2022. Further details about the convertible loan note are included in Note 10.

16. Risk management

The Group is exposed to a variety of risks in the ordinary course of our business, including, but not limited to, currency risk, liquidity risk, equity price risk and credit risk, as discussed below. The Group regularly assess each of these risks to minimize any adverse effects on our business as a result of those factors.

Credit risk

Credit risk is the risk of financial loss to the Group if a customer or counterparty to a financial instrument fails to meet its contractual obligations, and arises principally from the Group's receivables from customers and from its financing activities, including deposits with banks and financial institutions, foreign exchange transactions and other financial instruments. The Group only engages with banks and financial institutions with a Standard and Poor credit rating of BBB or greater.

The Group has a small number of customers as part of its collaboration agreements. To manage the credit risks around collaboration agreements the Group will assess the creditworthiness of partners as part of the engagement process.

The Group has monitoring procedures in place to identify and follow up on any overdue debts.

Credit risk from balances with banks and financial institutions is managed by the Group's finance department in accordance with the Group's policy to only place funds with approved counterparties with the appropriate credit rating.

The Group is exposed to no material credit risk.

Liquidity risk

Liquidity risk is the risk that necessary sources of funding for the Group's business activities may not be available.

The Group manages liquidity risk by maintaining adequate reserves, banking facilities and reserve borrowing facilities, by continuously monitoring forecast and actual cash flows, and by matching the maturity profiles of financial assets and liabilities.

The Group is utilizing shareholder funds, collaboration agreements, grant funding and asset finance to support its working capital requirements.

All cash funds are held with a maturity of three months or less.

16. Risk management (continued)

Market risk

Market risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in market prices. Market risk comprises three types of risk: interest rate risk, currency risk and other price risk, such as equity price risk and commodity risk.

Interest rate risk

Interest rate risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in market interest rates. The Group is exposed to no material interest rate risk.

Currency risk

The Group has transactions denominated in various currencies, with the principal currency exposure being fluctuations in U.S. Dollars and Euros against pound sterling. The Group's exposure to the risk of changes in foreign exchange rates relates primarily to the Group's Convertible Loan Notes that are denominated in US Dollars and a limited number of supplier agreements denominated in currencies other than pound sterling. As at September 30, 2021, a 1% increase in GBPUSD exchange rate would reduce the liability for the Convertible Loan Notes by £48,822. As at September 30, 2021, a 1% decrease in GBPUSD exchange rate would reduce the liability for the Convertible Loan Notes by £49,808.

Equity price risk

The Convertible Loan Notes issued by the Group contain an embedded derivative component that is accounted for at fair value at each period end. A change in the estimated underlying price per share will impact on the valuation of the embedded derivative. As at September 30, 2021, a 5% increase in the estimated share price would increase the value of the embedded derivative by £471,981. As at September 30, 2021, a 5% decrease in the estimated share price would increase the value of the embedded derivative by £463,933.

Other price risk

The Group is not exposed to material other price risks with regard to areas such as commodities or equity.

The following are the remaining contractual maturities of financial liabilities at the reporting date. The amounts are gross and undiscounted, and include estimated interest repayments.

17. Subsequent events

During the period, the Group issued US dollar denominated convertible loan notes (further details are included within Note 10). As at the date of the approval of the interim condensed consolidated financial statements the Group had issued further convertible loan notes for a cash subscription amount of $3,299,968 and a face value of $6,719,936.

Following the period end, the convertible loan note holders agreed to extend the redemption date to February 15, 2022. As such, in the event of an act of default (including if the Group does not list despite its and its bankers' efforts before February 15, 2022, in the event that the currently anticipated listing has not been terminated) the outstanding notes become immediately repayable at their face value.

TCB Newco 2 Limited was incorporated in Scotland, United Kingdom on October 25, 2021. On November 1, 2021, TCB Newco 2 Limited changed its name to TC BioPharm (Holdings) Limited. On December 17, 2021, the shareholders and option holders of TC BioPharm Limited exchanged their shares or options for the same number (and classes) of shares and options in TC BioPharm (Holdings) Limited. As a result, TC BioPharm (Holdings) Limited became the sole shareholder of TC BioPharm Limited. TC BioPharm Limited and its two subsidiaries in the Netherlands and the United States will continue as the operating companies. Following the exchange, on

December 17, 2021, TC BioPharm (Holdings) Limited undertook a stock split, whereby each ordinary and A ordinary (with nominal value of £0.10) were subdivided into 10 ordinary shares with nominal value of £0.01.

As a result of the forward share split, all references in these financial statements and accompanying notes to units of ordinary shares or per share amounts are reflective of the forward share split for all periods presented. In addition, the exercise prices and the numbers of shares issuable upon the exercise of any outstanding options to purchase ordinary shares were proportionally adjusted pursuant to the respective anti-dilution terms of the share-based payment plans.

5,176,468 American Depositary Shares

Representing 5,176,468 Ordinary Shares

TC BioPharm (Holdings) plc

$22,000,000

PROSPECTUS

__________, 2022

EF Hutton
division of Benchmark Investments, LLC

Until ____ , 2022 (25 days from the date of this prospectus), all dealers that effect transactions in these securities, whether or not participating in this offering, may be required to deliver a prospectus. This is in addition to the dealers' obligation to deliver a prospectus when acting as underwriters and with respect to their unsold allotments or subscriptions.

[Alternate Page for Security Holders Prospectus]

The information in this preliminary prospectus is not complete and may be changed. These securities may not be sold until the registration statement filed with the Securities and Exchange Commission is effective. This preliminary prospectus is not an offer to sell nor does it seek an offer to buy these securities in any jurisdiction where the offer or sale is not permitted.

SUBJECT TO COMPLETION DATED JANUARY 31, 2022

PRELIMINARY PROSPECTUS

10,429,596 AMERICAN DEPOSITARY SHARES

REPRESENTING 10,429,596 ORDINARY SHARES

WARRANTS TO PURCHASE 5,794,220 AMERICAN DEPOSITARY SHARES

TC BIOPHARM (HOLDINGS) PLC

The selling security holders named in this prospectus, referred to as the "Security Holders" in this prospectus, may offer and sell, from time to time, in one or more offerings, up to 10,429,596 American Depositary shares, or ADSs, each representing one of our ordinary shares, par value £0.01 per share, and up to 5,794,220 warrants to purchase ADSs, or Warrants. The ADSs and Warrants may be sold by the Security Holders at prevailing market prices at the times of sale, prices related to the prevailing market prices or negotiated prices. The ADSs and Warrants may be offered by the Security Holders to or through underwriters, dealers or other agents, directly to investors or through any other manner permitted by law, on a continued or delayed basis. See "Plan of Distribution" beginning on page 6 of this prospectus. The Security Holders have agreed to a 180-day lock-up for sales into the public market with respect to all of these ADSs and Warrants, subject to various leak out and early termination provisions based on the market price of the ADSs.

We are not selling any securities in this offering, and we will not receive any proceeds from the sale of any securities by the Security Holders. The registration of the securities covered by this prospectus does not necessarily mean that any of these securities will be offered or sold by the Security Holders. The timing and amount of any sale is within the respective Security Holder's sole discretion, subject to certain restrictions. To the extent that any Security Holder sells any securities, such holder may be required to provide you with this prospectus identifying and containing specific information about the selling Security Holder and the terms of the securities being offered. Note that in the case where Warrants are sold, the number of ADSs would reduce one for one.

The ADSs and Warrants, will each be quoted on The NASDAQ Stock Market and will trade separately. Usual and customary or specifically negotiated brokerage fees or commissions may be paid by the Security Holders upon the sale of the ADSs and Warrants being registered. No sales of the ADSs or Warrants covered by this prospectus shall occur until the ADSs sold in our initial public offering begin trading on The NASDAQ Stock Market.

The Security Holders and intermediaries through whom the securities are sold may be deemed "underwriters" within the meaning of the Securities Act of 1933, as amended (the "Securities Act"), with respect to the securities offered hereby, and any profits realized or commissions received may be deemed underwriting compensation.

On [__________], 2022, a registration statement under the Securities Act with respect to our initial public offering of $22,000,000 of the ADSs and Warrants was declared effective by the Securities and Exchange Commission. We received approximately $18.8 million in net proceeds from the offering of ADSs and Warrants after payment of underwriting discounts and commissions and estimated expenses of the offering.

We are a "foreign private issuer," and an "emerging growth company" each as defined under the federal securities laws, and, as such, we will be subject to reduced public company reporting requirements. See the section entitled "Prospectus Summary—Implications of Being an Emerging Growth Company and a Foreign Private Issuer" for additional information.

Investing in the ADSs and Warrants involves a high degree of risk. Before buying any securities, you should carefully read the discussion of material risks of investing in the ADSs, Warrants and the company. See "Risk Factors" beginning on page 13 for a discussion of information that should be considered in connection with an investment in our securities.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

The date of this prospectus is ______ , 2022

[Alternate Page for Security Holder Prospectus]

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You should rely only on the information contained in this prospectus. We have not authorized anyone to provide you with additional or different information. The information contained in this prospectus is accurate only as of the date on the front cover of this prospectus, regardless of the time of delivery of this prospectus or of any sale of our common stock.

No dealer, salesperson or any other person is authorized in connection with this offering to give any information or make any representations about us, the securities offered hereby or any matter discussed in this prospectus, other than those contained in this prospectus and, if given or made, the information or representations must not be relied upon as having been authorized by us. This prospectus does not constitute an offer to sell or a solicitation of an offer to buy any security other than the securities offered by this prospectus, or an offer to sell or a solicitation of an offer to buy any securities by anyone in any circumstance in which the offer or solicitation is not authorized or is unlawful.

[Alternate Page for Security Holder Prospectus]

USE OF PROCEEDS

There will not be any proceeds from the distribution of the ADSs or Warrants by the Security Holders. All proceeds from the sale of the ADSs and Warrants will be paid directly to the selling security holders.

Upon exercise of the Warrants, if they are exercised, we will receive the cash exercise price. If all the Warrants are exercised, we expect to receive approximately $30,691,233.

[Alternate Page for Security Holder Prospectus]

ADSs AND WARRANTS REGISTERED FOR DISTRIBUTION

As part of this prospectus, we are registering up to 4,632,639 ADSs and 5,794,220 Warrants for resale, which are subject to a 180-day lock-up for sales into the public market. The lock up agreement has leak out and early termination provisions that are based on the market price of an ADS during the 180-day lock up period. The ADSs and Warrants described in the following table consist of the ADSs and Warrants issuable for the ADSs to be issued on conversion of the promissory notes in issued in the 2021 private placement thereof. From April 2021 to January 28, 2022, TC BioPharm (Holdings) plc, issued Convertible Loan Notes with a face value amount of $17.7 million and has shareholder approval to issue Convertible Loan Notes with a face value for a further $2.3 million prior to the completion of the offering. This prospectus assumes a further $1.3 million Convertible Loan Notes are issued. The loan notes were issued at a 50% discount to face value. At the time of an exchange listing of a company within the Group, 50% of the face value of the outstanding Convertible Loan Notes (including interest due thereon), and any further balance as elected by the noteholders, will convert into ADSs and Warrants at a conversion price for a unit comprised of one ADS and 1.25 Warrants, which is the lower of (a) the price per share calculated on a fully diluted basis (based on the number of shares in issue and vested share options immediately prior to the IPO being approved by the shareholders) on an assumed entity valuation of $120,000,000 and (b) the listing price. The principal will convert into ADSs and Warrants at a proportion of one ADS and 1.25 Warrants. The remaining balance of the loan notes are repayable in cash or convertible (at the same value) at the loan note holders' option in two equal tranches at 90 days and 180 days after the listing date. In the event of an act of default (including if the Group does not obtain a listing on an exchange, notwithstanding its and its bankers' efforts, before February 15, 2022) the outstanding notes become repayable at their full face value. The loan notes carry interest, which is also payable in cash or ADSs and Warrants, which as the face value is paid, until the principle is paid or converted. The security holders have the right to have their ordinary shares and Warrants, and the ordinary shares issuable on exercise of the Warrants or in this case the ADSs into which the ordinary shares may be dematerialized, registered in the event that the Group files an initial registration statement for the sale of securities to the public.

The Warrants will be issued only for the purchase of whole ADSs, and will not be issued to purchase fractional ADSs. Only whole ADSs will trade.

As a result of filing the registration statement of which this prospectus is a part, for the registration and distribution of ADSs and Warrants as an initial public offering, we became obligated to register the ADSs, Warrants and the underlying ADSs issuable and dematerializeable on exercise thereof, held by the Security Holders for public offer and sale under the same registration statement.

The Security Holders do not have, nor within the past three years has any of them had, any position, office or other material relationship with us or any of our predecessors or affiliates other than as a result of the ownership of our securities.

The following table provides certain information with respect to the Security Holder's ownership of our securities as of September 30, 2021, extrapolating thereafter for the amount of interest payable and any additional notes that may be sold, the total number of securities it may distribute under this prospectus from time to time, and the number of securities it will own thereafter assuming no other acquisitions or dispositions of our securities. The number of shares may change as the Security Holders may exercise their right of conversion earlier than the dates as provided. The Security Holders may distribute all, some or none of its securities hereunder, thus we have no way of determining the number a Security Holder will hold after this offering. Therefore, we have prepared the table below on the assumption that the Security Holders will sell all the ADSs, all the Warrants and all the underlying ADSs obtained upon exercise of the Warrants covered by this prospectus.

Any of the corporate Security Holders may dividend or distribute its securities from time to time to their respective security holders. The Security Holders may also transfer ADSs owned by it by gift. Upon any such transfer the recipient would have the same right of sale as the Security Holder.

See our discussion titled "Plan of Distribution" for further information regarding the Security Holder's method of distribution of the ADSs.

Security Holder Table

Name (1)	ADS Being Offered (2) (3)	Warrants Being Offered (2)	ADS Owned Before the Offering (4)	Percent of ADS Owned Before Offering (5)	ADS Owned After Offering (6)	Percentage Owned After Offering (5)
Adam Jacobson	39,654	22,030	39,654	0.1%	-	-%
Alon Berkowitz	27,542	15,301	27,542	0.1%	-	-%
Alta Partners LLC	1,630,217	905,676	1,630,217	5.6%	-	-%
Corporation One Limited	337,050	187,250	337,050	1.2%	-	-%
David Krok	55,078	30,599	55,078	0.2%	-	-%
Dawn Simone Kravitz	161,638	89,799	161,638	0.6%	-	-%
Jonathan Goldstein	109,915	61,064	109,915	0.4%	-	-%
Marc Gordon	330,136	183,409	330,136	1.1%	-	-%
Maurice Helfgott	27,538	15,299	27,538	0.1%	-	-%
Norman Ralph Freedman	27,259	15,144	27,259	0.1%	-	-%
Peter Charles	110,133	61,185	110,133	0.4%	-	-%
Renaissance Capital Partners Limited	4,705,040	2,613,911	5,714,180	19.6%	1,009,140	3.5%
Richard Bolchover	110,016	61,120	110,016	0.4%	-	-%
Richard Goldstein	110,149	61,194	110,149	0.4%	-	-%
Silver Cloud Ventures Limited	54,965	30,536	54,965	0.2%	-	-%
Simone Krok	55,078	30,599	55,078	0.2%	-	-%
Sixth Borough Capital Fund, LP	1,635,874	908,819	1,635,874	5.6%	-	-%
Steven Daniels	37,269	20,705	37,269	0.1%	-	-%
Sunil Nair	55,055	30,586	55,055	0.2%	-	-%
Talia Berkowitz	27,542	15,301	27,542	0.1%	-	-%
Terri Jacobson	39,654	22,030	39,654	0.1%	-	-%

(1) The address of the security holder is c/o Maxim 1, 2 Parklands Way, Holytown, Motherwell, ML1 4WR, Scotland, United Kingdom.

(2) The Security Holders listed in the table above acquired the securities being offered as the result of converting outstanding notes and interest under in the terms of the 2021 private placement of loan notes. The amount listed includes an estimate of the maximum of securities to be issued on conversion of the principle amount of the loan notes, assuming no repayment in cash, in payment of interest on the loan notes through the maturity date, payable at the annual rate of 5%, which estimated amount, plus a margin have been registered pursuant to the requirements of the Securities Act of 1933, as amended. If the estimated security amounts are determined to be different, the above table may be amended from time to time to update the securities to be sold hereunder.

(3) The amount in this column represents the actual number of ordinary shares held and included the ordinary shares that may be obtained on exercise of the Warrants in full. However, if a Warrant is sold, then the number of ordinary shares that may be sold will be reduced by the number of Warrants sold.

(4) Assumes exercise of all the Warrants for ADSs before selling any ADSs, and no sales of Warrants are to be made by the Security Holder.

(5) Percentages stated in the above table are based on a total of 19,547,600 ordinary shares outstanding as of September 30, 2021 and adjusted for up to 1,234,646 ordinary shares issued immediately prior to completion. The percentage includes the actual number of ordinary shares that are held, plus the beneficial ownership of the Warrants, which are immediately exercisable.

(6) Assumes that all of the ADSs, Warrants and the underlying ADSs obtained on exercise of the Warrants offered hereby are distributed and that ADSs, or their equivalent ordinary shares, owned before the offering but not offered hereby are not sold.

[Alternate Page for Security Holder Prospectus]

PLAN OF DISTRIBUTION

We are registering the ADSs and Warrants issuable to Security Holders to permit the resale of these securities by the Security Holders from time to time after the date of this prospectus. We will bear all fees and expenses incident to our obligation to register ADSs and Warrants issuable to the Security Holders upon conversion of the Convertible Loan Notes.

The Security Holders and any of their pledgees, assignees and successors-in-interest may, from time to time, sell any or all of their respective ADSs and Warrants on The NASDAQ Stock Market or any other stock exchange, market or trading facility on which the ADSs and Warrants are traded or in private transactions or a combination thereof. These sales may be at fixed or negotiated prices. The ADSs and Warrants may be sold together or separately; The ADSs and Warrants are not inseparable units. The Security Holders may use any one or more of the following methods when selling the ADSs and Warrants:

- ordinary brokerage transactions and transactions in which the broker-dealer solicits purchasers;
- block trades in which the broker-dealer will attempt to sell the securities as agent but may position and resell a portion of the block as principal to facilitate the transaction;
- purchases by a broker-dealer as principal and resale by the broker-dealer for its account;
- an exchange distribution in accordance with the rules of the applicable exchange;
- privately negotiated transactions;
- settlement of short sales entered into after the effective date of the registration statement of which this prospectus is a part;
- broker-dealers may agree with the selling security holder to sell a specified number of securities at a stipulated price per security;
- through the writing or settlement of options or other hedging transactions, whether through an options exchange or otherwise;
- a combination of any such methods of sale; or
- any other method permitted pursuant to applicable law.

The Security Holders may distribute the ADSs and Warrants of which it is the owner by means of a dividend or other form of distribution, including in connection with a declaration of a dividend or distribution, reorganization, combination, consolidation and dissolution.

Broker-dealers engaged by any selling Security Holder may arrange for other brokers-dealers to participate in sales. Broker-dealers may receive commissions or discounts from the selling security holders (or, if any broker-dealer acts as agent for the purchaser of the securities, from the purchaser) in amounts to be negotiated, but the maximum amount of compensation to be received by any participating FINRA member may not exceed 8%.

We are required to pay certain fees and expenses incurred by us incident to the registration of the ADSs and Warrants, and the underlying ADSs obtained on exercise of the Warrants. The Security Holder is responsible for any selling commissions and other expenses of sale of the securities.

Since any one or more of the Security Holders may be deemed to be an "underwriter" within the meaning of the Securities Act, those deemed Security Holders will be subject to the prospectus delivery requirements of the Securities Act including Rule 172 thereunder. In addition, any securities covered by this prospectus which qualify for sale pursuant to Rule 144 under the Securities Act may be sold under Rule 144 rather than under this prospectus. We have been informed by the Security Holders that there is no underwriter or single coordinating broker acting in connection with the proposed distribution of the ADSs and Warrants by the Security Holders.

We intend, but are not obligated, to keep this prospectus and the registration statement of which this prospectus forms a part effective until the earlier to occur of (i) such time as Rule 144 or another similar exemption under the Securities Act is available for the sale of all the ADSs, Warrants and ADS obtained upon exercise of the Warrants, without volume or manner of sale restrictions during a three month period without registration or (ii) all of the securities have been sold pursuant to this prospectus or Rule 144 under the Securities Act or any other rule of similar effect. The public resale of the securities will be sold only through registered or licensed brokers or dealers if required under applicable state securities laws. In addition, in certain states, the public resale of the securities may not be sold unless they have been registered or qualified for sale in the applicable state or an exemption from the registration or qualification requirement is available and is complied with.

Pursuant to applicable rules and regulations under the Exchange Act, any person engaged in the distribution of the public resale of securities may not simultaneously engage in market making activities with respect to the ADSs or Warrants for the applicable restricted period, as defined in Regulation M, prior to the commencement of the distribution. In addition, the Security Holders will be subject to applicable provisions of the Exchange Act and the rules and regulations thereunder, including Regulation M, which may limit the timing of purchases and sales of ADSs and Warrants by any person. We will make copies of this prospectus available to the Security Holders and have informed the Security Holders of the need to deliver a copy of this prospectus to each purchaser at or prior to the time of the sale (including by compliance with Rule 172 under the Securities Act).

[Alternative Page for Security Holder Prospectus]

EXPENSES OF THE OFFERING

Set forth below is an itemization of the total expenses, excluding underwriting discounts, expected to be incurred in connection with the offer and sale of the ADSs and Warrants by us. With the exception of the SEC registration fee and the FINRA filing fee, all amounts are estimates, in United States dollars:

SEC registration fee	$	12,973
Nasdaq listing fee	$	150,000
FINRA filing fee	$	9,125
Transfer agent, depositary fees and expenses	$	30,776
Printer fees and expenses	$	6,000
Legal fees and expenses	$	771,245
Accounting fees and expenses	$	390,630
Miscellaneous	$	13,514
Total	$	1,384,263

LEGAL MATTERS

We are being represented by Golenbock Eiseman Assor Bell & Peskoe LLP, New York, New York with respect to certain legal matters of United States federal securities and New York state law. We are being represented by Addleshaw Goddard LLP, Glasgow, Scotland with respect to certain legal matters of the law of Scotland and other applicable law of the United Kingdom and as to certain patent law matters by Murgitroyd & Company Limited. The validity of the ordinary shares offered in this offering and legal matters as to the law of Scotland were passed upon for us by Addleshaw Goddard LLP, Glasgow, Scotland.

EXPERTS

The consolidated financial statements of TC BioPharm Limited at December 31, 2020 and 2019, and for each of the two years in the period ended December 31, 2020, appearing in this prospectus and registration statement have been audited by Ernst & Young LLP, independent registered public accounting firm, as set forth in their report thereon (which contains an explanatory paragraph describing conditions that raise substantial doubt about the Company's ability to continue as a going concern as described in Note 1 to the consolidated financial statements) appearing elsewhere herein, and are included in reliance upon such report given on the authority of such firm as experts in accounting and auditing.

The statement of financial position of TC BioPharm (Holdings) Limited at October 25, 2021, appearing in this prospectus and registration statement has been audited by Ernst & Young LLP, independent registered public accounting firm, as set forth in their report thereon appearing elsewhere herein, and is included in reliance upon such report given on the authority of such firm as experts in accounting and auditing.

The registered business address of Ernst & Young LLP is 144 Morrison Street, Edinburgh, EH3 8EX, United Kingdom.

WHERE YOU CAN FIND MORE INFORMATION

We have filed with the SEC a registration statement on Form F-1 under the Securities Act relating to this offering of the ADSs and Warrants. This prospectus does not contain all of the information contained in the registration statement. The rules and regulations of the SEC allow us to omit certain information from this prospectus that is included in the registration statement. Statements made in this prospectus concerning the contents of any contract, agreement or other document are summaries of all material information about the documents summarized, but are not complete descriptions of all terms of these documents. If we filed any of these documents as an exhibit to the registration statement, you may read the document itself for a complete description of its terms.

You may read and copy the registration statement, including the related exhibits and schedules, and any document we file with the SEC without charge at the SEC's public reference room at 100 F Street, N.E., Room 1580, Washington, DC 20549. You may also obtain copies of the documents at prescribed rates by writing to the Public Reference Section of the SEC at 100 F Street, N.E., Room 1580, Washington, DC 20549. Please call the SEC at 1-800-SEC-0330 for further information on the public reference room. The SEC also maintains an Internet website that contains reports and other information regarding issuers that file electronically with the SEC. Our filings with the SEC are also available to the public through the SEC's website at http://www.sec.gov.

Upon completion of this offering, we will become subject to the information reporting requirements of the Exchange Act that are applicable to foreign private issuers, and under those requirements are filing reports with the SEC. Those other reports or other information may be inspected without charge at the locations described above. As a foreign private issuer, we will be exempt from the rules under the Exchange Act related to the furnishing and content of proxy statements, and our officers, directors and principal shareholders will be exempt from the reporting and short-swing profit recovery provisions contained in Section 16 of the Exchange Act. In addition, we will not be required under the Exchange Act to file annual, quarterly and current reports and financial statements with the SEC as frequently or as promptly as U.S. registrants whose securities are registered under the Exchange Act. However, we will be required to file with the SEC, within 120 days after the end of each fiscal year, or such applicable time as required by the SEC, an annual report on Form 20-F containing financial statements audited by an independent registered public accounting firm, and will submit to the SEC, on Form 6-K, unaudited quarterly financial information.

We maintain a corporate website at https://tcbiopharm.com/. Information contained on, or that can be accessed through, our website does not constitute a part of this prospectus. We have included our website address in this prospectus solely as an inactive textual reference. We will post on our website any materials required to be so posted on such website under applicable corporate or securities laws and regulations, including, posting any XBRL interactive financial data required to be filed with the SEC and any notices of general meetings of our shareholders.

[Alternate Page for Security Holder Prospectus]

10,429,596 AMERICAN DEPOSITARY SHARES

REPRESENTING 10,429,596 ORDINARY SHARES

WARRANTS TO PURCHASE 5,794,220 AMERICAN DEPOSITARY SHARES

TC BioPharm (Holdings) plc

____

PROSPECTUS

__________, 2022

____

Until , 2022, all dealers that effect transactions in the ADSs, whether or not participating in this offering, may be required to deliver a prospectus. This is in addition to the dealers' obligation to deliver a prospectus when acting as an underwriter or dealer with respect to their unsold allotments or subscriptions of ADSs.

PART II

INFORMATION NOT REQUIRED IN PROSPECTUS

Item 6. Indemnification of Directors and Officers

Scottish law does not limit the extent to which a company's articles of association may provide indemnification of officers and directors, except to the extent that it may be held by the Scottish and United Kingdom courts to be contrary to public policy, such as providing indemnification against civil fraud or the consequences of committing a crime.

Our Memorandum and Articles of Association provide that, to the maximum extent permitted by law, every current and former director and officer (excluding an auditor) is entitled to be indemnified out of our assets against any liability, action, proceeding, claim, demand, costs, damages or expenses, including legal expenses, which such indemnified person may incur in that capacity unless such liability arose as a result of the actual fraud or willful default.

A company formed under the laws of Scotland may also purchase insurance for directors and certain other officers against liability incurred as a result of any negligence, default, breach of duty or breach of trust in relation to the company. We expect to maintain director's and officer's liability insurance covering our directors and officers with respect to general civil liability, including liabilities under the Securities Act of 1933, as amended (or the "Securities Act"), which he or she may incur in his or her capacity as such. We have entered into a deed of indemnity with each of our directors and members of our senior management, each of which provides the office holder with indemnification permitted under applicable law and to the extent that these liabilities are not covered by directors' and officers' insurance.

The form of underwriting agreement to be filed as Exhibit 1.1 to this registration statement will provide for indemnification by the underwriter of the registrant and its directors and officers for certain liabilities, including liabilities arising under the Securities Act, but only to the extent that these liabilities are caused by information relating to the underwriter that was furnished to us by the underwriter in writing expressly for use in this registration statement and certain other disclosure documents.

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers or persons controlling us under the foregoing provisions, we have been informed that in the opinion of the SEC such indemnification is against public policy as expressed in the Securities Act and is therefore unenforceable.

Item 7. Recent Sales of Unregistered Securities

Set forth below is information regarding share capital issued by TC BioPharm Limited since January 1, 2018. Some of the transactions described below involved directors, officers and 5% shareholders and are more fully described under the section titled "Related Party Transactions".

- On December 17, 2018, the Company issued an aggregate of 174,940 ordinary shares to 19 accredited investors and insiders at a purchase price of £3.5696 per share for aggregate consideration totaling £624,500 in respect of satisfying a convertible loan note.

- In November 2019, the Company issued an aggregate of 734,390 A ordinary shares to 25 accredited investors and insiders at a purchase price of £4.30 per share for aggregate cash consideration totaling £3,157,877.

- From December 2019 until July 2020, the Company issued an aggregate of 116,090 A ordinary shares to 8 accredited investors and insiders at a purchase price of £4.30 per share for aggregate cash consideration totaling £499,187.

- On August 25, 2020, the Company issued an aggregate of 794,540 A ordinary shares to 14 accredited investors and insiders at a purchase price of £4.30 per share for aggregate cash consideration totaling £3,416,522.

- On January 18, 2021, the Company issued an aggregate of 1330 A ordinary shares to one accredited investor and insider at a purchase price of £4.30 per share for aggregate cash consideration totaling £5,719.

- On January 19, 2021, the Company issued an aggregate of 46,510 A ordinary shares to one accredited investor and insider at a purchase price of £4.30 per share for aggregate cash consideration totaling £199,993.

- On April 30, 2021, the Company issued an aggregate of 23,260 A ordinary shares to one accredited investor and insider at a purchase price of £4.30 per share for aggregate consideration totaling £100,018.

- On April 30, 2021, the Company issued an aggregate of 18,460 A ordinary shares to one accredited investor and insider at a purchase price of £4.30 per share for aggregate consideration totaling £79,378.

From April 2021 to January 28, 2022, the Company issued Convertible Loan Notes with a face value amount of $17.7 million. The loan note was issued with a 50% discount. Upon listing, 50% of the face value of the outstanding Convertible Loan Notes (including interest accrued to date), and any further balance as elected by the noteholders, will convert into ADSs and Warrants at a conversion price for a unit comprised of one ADS and 1.25 Warrants, which is the lower of (a) the price per share calculated on a fully diluted basis (based on the number of shares in issue and vested share options immediately prior to the IPO being approved by the shareholders) on an assumed entity valuation of $120,000,000 and (b) the listing price. The remaining balance of the loan notes are repayable or convertible (at the same value) at the loan note holders' option in two equal tranches at 90 days and 180 days after the listing date. In the event of an act of default (including if the Company does not list despite its and its bankers' efforts before February 15, 2022) the outstanding notes become repayable at their face value.

The Warrants will be issued only for the purchase of whole ADSs, and will not be issued to purchase fractional ADSs. Only whole ADSs will trade.

Immediately prior to the completion of this offering and in line with the Articles of Association of the Company, up to a further 1,234,646 ordinary shares issuable, immediately prior to the IPO, under the terms of our Articles of Association to certain shareholders who, prior to the IPO, owned certain ordinary share which carried the right, to subscribe at nominal value for a certain number of additional shares, calculated by reference to the pre-money valuation of the IPO.

The offers, sales and issuances of the securities and loan notes described above were exempt from registration either (i) under Section 4(a)(2) of the Securities Act in that the transactions did not involve any public offering, (ii) under Rule 701 promulgated under the Securities Act in that the transactions were under compensatory benefit plans and contracts relating to compensation or (iii) under Regulation S promulgated under the Securities Act in that offers, sales and issuances were not made to persons in the United States and no directed selling efforts were made in the United States.

Item 8. Exhibits and Financial Statement Schedules

Exhibits:

Exhibit No.	Description
1.1	Form of Underwriting Agreement *
3.1	Articles of Association of TC BioPharm (Holdings) Limited, effective prior to the re-registration of the registrant as a public limited company **
3.2	Form of Articles of Association of TC BioPharm (Holdings) plc to be effective with the completion of this offering **
4.1	Form of Deposit Agreement for American Depositary Shares **
4.2	Form of American Depositary Share (Included in Exhibit 4.1) **
4.3	Form of Representative's Warrant **
4.4	Form of Warrant Agent Agreement between the Registrant and the Warrant Agent *
4.5	Form of Warrant to be offered in this offering (included in Exhibit 4.4) *
4.6	Form of certificate evidencing ordinary shares **
5.1	Opinion of Addleshaw Goddard as to matters of the law of Scotland and the United Kingdom **
10.1	Form of 2014 Share Option Scheme of TC BioPharm (Holdings) plc as amended by the Board **
10.2	Form of 2021 Share Option Scheme (including sub-plan for U.S. based persons) of TC BioPharm (Holdings) plc **
10.3	Form of 2021 Company Share Option Plan (CSOP) of TC BioPharm (Holdings) plc **
10.4	Reserved
10.5	Reserved
10.6	Convertible Loan Note, up to $20,000,000 in principal amount **
10.7	Reserved
10.8	Form of Lock Up Agreement of Pre-IPO Smaller Shareholders **
10.9	Form of Lock Up Agreement of Pre-IPO Management and Larger Shareholders **

10.10	Form of Lock Up Agreement of Holders of Convertible Loan Notes *
11.1	Code of Ethics of the registrant **
21.1	List of Subsidiaries of registrant **
23.1	Consent of Ernst & Young LLP, independent registered public accounting firm*
23.2	Consent of Addleshaw Goddard (included in Exhibit 5.1) **
23.3	Consent to be named as a prospective director by Dr Mark Bonyhadi **
23.4	Consent to be named as a prospective director by James Culverwell **
23.5	Consent to be named as a prospective director by Arlene Morris **
23.6	Consent to be named as a prospective director by Edward Niemczyk **
24.1	Power of Attorney (included as part of the signature page of original filed Registration Statement) **
99.1	Financial Statement Representation pursuant to Instruction 8.A.4 of Item 8 of Form 20-F.**

* Filed Herewith

** Previously filed.

□ To be filed by amendment.

\+ Indicates management contract or compensatory plan.

Schedules:

None

Item 9. Undertakings

(a) The undersigned Registrant hereby undertakes:

(1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:

(i) To include any prospectus required by Section 10(a)(3) of the Securities Act of 1933;

(ii) To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high and of the estimated maximum offering range may be reflected in the form of prospectus filed with the Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than a 20 percent change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement; and

(iii) To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement.

(2) That, for the purpose of determining any liability under the Securities Act of 1933, each post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.

(3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

(4) To file a post-effective amendment to the registration statement to include any financial statements required by Item 8.A. of Form 20-F at the start of any delayed offering or throughout a continuous offering. Financial statements and information otherwise required by Section 10(a)(3) of the Act need not be furnished, provided that the registrant includes in the prospectus, by means of a post-effective amendment, financial statements required pursuant to this paragraph (a)(4) and other information necessary to ensure that all other information in the prospectus is at least as current as the date of those financial statements.

(5) That, for the purpose of determining liability of the Registrant under the Securities Act of 1933 to any purchaser in the initial distribution of the securities:

The undersigned Registrant undertakes that in a primary offering of securities of the undersigned Registrant pursuant to this registration statement, regardless of the underwriting method used to sell the securities to the purchaser, if the securities are offered or sold to such purchaser by means of any of the following communications, the undersigned registrant will be a seller to the purchaser and will be considered to offer or sell such securities to such purchaser:

i. Any preliminary prospectus or prospectus of the undersigned Registrant relating to the offering required to be filed pursuant to Rule 424;

ii. Any free writing prospectus relating to the offering prepared by or on behalf of the undersigned registrant or used or referred to by the undersigned Registrant;

iii. The portion of any other free writing prospectus relating to the offering containing material information about the undersigned registrant or its securities provided by or on behalf of the undersigned Registrant; and

iv. Any other communication that is an offer in the offering made by the undersigned Registrant to the purchaser.

(6) Insofar as indemnification for liabilities arising under the Securities Act, may be permitted to directors, officers and controlling persons of the Registrant pursuant to the foregoing provisions, or otherwise, the Registrant has been advised that in the opinion of the SEC such indemnification is against public policy as expressed in the

Securities Act, and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the Registrant of expenses incurred or paid by a director, officer or controlling person of the Registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the Registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act, and will be governed by the final adjudication of such issue.

(7) For determining liability of the undersigned registrant under the Securities Act to any purchaser:

(i) For purposes of determining any liability under the Securities Act of 1933, the information omitted from the form of prospectus filed as part of this Registration Statement in reliance upon Rule 430A and contained in a form of prospectus filed by the Registrant pursuant to Rule 424(b)(1) or (4) or 497(h) under the Securities Act of 1933 shall be deemed to be part of this Registration Statement as of the time it was declared effective.

(ii) For the purpose of determining any liability under the Securities Act of 1933, each post-effective amendment that contains a form of prospectus shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the Registrant certifies it has reasonable grounds to believe that it meets all of the requirements for filing this amended registration statement on Form F-1 with the Securities and Exchange Commission and has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in Glasgow, Scotland, United Kingdom, on January 31, 2022.

TC BIOPHARM (HOLDINGS) PLC

By: */S/ Michael Leek*
Dr. Michael Leek
Executive Chairman of the Board of Directors

Pursuant to the requirements of the Securities Act of 1933, this amended registration statement has been signed by the following persons in the capacities and on the dates indicated.

Signature	Title	Date
/S/ Michael Leek Dr. Michael Leek	Executive Chairman of the Board of Directors (Principal Executive Officer)	January 31, 2022
/S/ Bryan Kobel Bryan Kobel	Chief Executive Officer and Director	January 31, 2022
/S/ Martin Thorp Martin Thorp	Chief Financial Officer and Director (Principal Financial and Accounting Officer)	January 31, 2022

SIGNATURE OF AUTHORIZED U.S. REPRESENTATIVE OF THE REGISTRANT

Pursuant to the Securities Act of 1933, the undersigned, the duly authorized representative in the United States of the registrant has signed this registration statement or amendment thereto on January 31, 2022.

TC BioPharm (North America) Inc.

By: */S/ Bryan Kobel*
Name: Bryan Kobel
Title: Chief Executive Officer and Director

Authorized Representative in the United States

Exhibit 1.1

UNDERWRITING AGREEMENT

between

TC BIOPHARM (HOLDINGS) PLC

and

EF HUTTON,
division of Benchmark Investments, LLC,

as Representative of the Several Underwriters

UNDERWRITING AGREEMENT

between

TC BIOPHARM (HOLDINGS) PLC

and

EF HUTTON
division of Benchmark Investments, LLC,
as Representative of the Several Underwriters

New York, New York
[●], 2022

EF Hutton,
division of Benchmark Investments, LLC
as Representative of the several Underwriters named on Schedule 1 hereto
590 Madison Avenue, 39th Floor
New York, New York 10022

Ladies and Gentlemen:

The undersigned, TC BioPharm (Holdings) plc, a public limited company incorporated in Scotland pursuant to the Companies Act 2006, as amended (the "**Companies Act**") with company number SC713098 (collectively with its subsidiaries and affiliates, including, without limitation, all entities disclosed or described in the Registration Statement (as hereinafter defined) as being subsidiaries, the "**Company**"), hereby confirms its agreement (this "**Agreement**") with EF Hutton, division of Benchmark Investments, LLC (hereinafter referred to as "you" (including its correlatives) or the "**Representative**"), and with the other underwriters named on Schedule 1 hereto for which the Representative is acting as representative (the Representative and such other underwriters being collectively called the "**Underwriters**" or, individually, an "**Underwriter**") as follows:

1. PURCHASE AND SALE.

1.1. Firm Securities.

1.1.1. Purchase of Firm Securities. On the basis of the representations and warranties herein contained, but subject to the terms and conditions herein set forth, the Company agrees to issue and sell to the several Underwriters, severally and not jointly, and the Underwriters agree to purchase from the Company, severally and not jointly, the following securities of the Company:

(a) an aggregate of 5,176,468 Ordinary Shares, par value £0.01 per share, of the Company (the "**Ordinary Shares**") to be represented by American Depositary Shares (the "**Firm Shares**", each individually an "**ADS**" and collectively, the "**ADSs**"), each ADS representing one authorized and issued Ordinary Share and

(b) an aggregate of 6,470,585 warrants to purchase 6,470,585 Ordinary Shares ("**Warrants**"), with each warrant entitling the holder thereof to purchase one (1) Ordinary Share at the exercise price thereof with such Ordinary Share being deposited upon issuance with the Depositary (as defined below) in exchange for an ADS (the "**Firm Warrants**", and together with the Firm Shares, the "**Firm Securities**")

each, as set forth opposite their respective names on Schedule 1 hereto, at a combined purchase price (net of underwriting discounts and commissions) of $3.91 per one ADS and 1.25 Warrant, being equal to 92% of the public offering price of the Firm Securities. The combined purchase price of $3.91 shall be $3.9008 per ADS (the "Share Purchase Price") and $0.0092 per Warrant (the "Warrant Purchase Price"). The Firm Securities are to be offered initially to the public at the offering price set forth on the cover page of the Prospectus (as defined in Section 2.1.1 hereof).

Each ADS represents one Ordinary Share deposited with The Bank of New York Mellon, as depositary (the "**Depositary**") pursuant to a deposit agreement, dated _________, 2022, among the Company, the Depositary and all owners and holders (as defined therein) from time to time of ADSs (the "**Deposit Agreement**"). The Depositary may issue American Depositary Receipts ("**ADRs**") evidencing the ADSs. The Warrants are to be issued pursuant to a Warrant Agent Agreement dated the date hereof (the "**Warrant Agent Agreement**"), between the Company and Computershare Inc., a Delaware corporation ("**Computershare**"), and its wholly owned subsidiary, Computershare Trust Company, N.A., a federally chartered trust company, as warrant agent (the "**Warrant Agent**").

1.1.2. Payment and Delivery. Delivery and payment for the Firm Securities shall be made at 10:00 a.m., New York City time, on the second (2nd) Business Day following the effective date (the "**Effective Date**") of the Registration Statement (as defined in Section 2.1.1 below) (or the third (3rd) Business Day following the Effective Date if the Registration Statement is declared effective after 4:00 p.m. New York City time) or at such earlier time as shall be agreed upon by the

Representative and the Company, at the offices of Lucosky Brookman LLP, counsel to the Underwriters, or at such other place (or remotely by facsimile or other electronic transmission) as shall be agreed upon by the Representative and the Company. The hour and date of delivery and payment for the Firm Securities is called the "**Closing Date**". Payment for the Firm Securities shall be made on the Closing Date by wire transfer in Federal (same day) funds, payable to the order of the Company upon delivery to the Representative of the certificates (in form and substance satisfactory to the Representative) representing the Firm Securities (or through the facilities of the Depository Trust Company ("**DTC**")) for the account of the Underwriters. The Firm Securities shall be registered in such name or names and in such authorized denominations as the Representative may request in writing at least two (2) Business Days prior to the Closing Date. The Company will permit the Representative to examine and package the Firm Securities for delivery, at least one (1) full Business Day prior to the Closing Date. The Company shall not be obligated to sell or deliver the Firm Securities except upon tender of payment by the Representative for all of the Firm Securities. The term "**Business Day**" means any day other than Saturday, Sunday or other day on which commercial banks in The City of New York are authorized or required by law to remain closed; provided, however, for clarification, commercial banks shall not be deemed to be authorized or required by law to remain closed due to "stay-at-home," "shelter-in-place," "non-essential employee" or any other similar orders or restrictions or the closure of any physical branch locations at the direction of any governmental authority so long as the electronic funds transfer systems (including for wire transfers) of commercial banks in The City of New York generally are open for use by customers on such day.

1.2. Over-allotment Option.

1.2.1. Option Shares. For the purposes of covering any over-allotments in connection with the distribution and sale of the Firm Securities, the Company hereby grants to the Underwriters an option to purchase up to an additional 776,470 Ordinary Shares represented by ADSs ("**Option Shares**") and up to an additional 970,587 Warrants ("**Option Warrants**"), representing fifteen percent (15%) of the Firm Securities sold in the offering (the Option Shares and the Option Warrants together being as the "**Option Securities**"), from the Company (the "**Over-allotment Option**"). The Option Securities shall be identical in all respects to the Firm Securities. The Option Securities shall be purchased for the account of each of the several Underwriters in the same proportion as the number of Firm Securities, set forth opposite such Underwriter's name on Schedule 1 hereto, bears to the total number of Firm Securities (subject to adjustment by the Representative to eliminate fractions). No Option Securities shall be sold or delivered unless the Firm Securities previously have been, or simultaneously are, sold and delivered. The right to purchase the Option Securities, or any portion thereof, may be exercised from time to time and to the extent not previously exercised may be surrendered and terminated at any time upon notice by the Representative to the Company. The purchase price to be paid per Option Share shall be equal to the Share Purchase Price and the Purchase price to be paid per Option Warrant shall be the Warrant Purchase Price, each as set forth in Section 1.1.1 hereof. The Firm Securities and the Option Securities are hereinafter collectively referred to as the "**Public Securities**." The offering and sale of the Public Securities is hereinafter referred to as the "**Offering**."

1.2.2. Exercise of Option. The Over-allotment Option granted pursuant to Section 1.2.1 hereof may be exercised by the Representative as to all (at any time) or any part (from time to time) of the Option Securities within 45 days after the Effective Date. The Underwriters shall not be under any obligation to purchase any Option Securities prior to the exercise of the Over-allotment Option. The Over-allotment Option granted hereby may be exercised by the giving of oral notice to the Company from the Representative, which must be confirmed in accordance with Section 1.2.1 hereof setting forth the number of Option Shares and Option Warrants to be purchased and the date and time for delivery of and payment for the Option Shares and Option Warrants (the "**Option Closing Date**"), which shall not be later than five (5) Business Days after the date of the notice or such other time as shall be agreed upon by the Company and the Representative, at the offices of counsel to the Underwriters or at such other place (including remotely by facsimile or other electronic transmission) as shall be agreed upon by the Company and the Representative. If such delivery and payment for the Option Securities does not occur on the Closing Date, the Option Closing Date will be as set forth in the notice. Upon exercise of the Over-allotment Option with respect to all or any portion of the Option Securities subject to the terms and conditions set forth herein, the Company shall become obligated to sell to the Underwriters the number of Option Shares and Option Warrants specified in such notice and, subject to the terms and conditions set forth herein, the Underwriters, acting severally and not jointly, shall purchase the number of Option Shares and Option Warrants specified in such notice.

1.2.3. Payment and Delivery. Payment for the Option Securities shall be made on the Option Closing Date by wire transfer in Federal (same day) funds, payable to the order of the Company upon delivery to the Representative of certificates (in form and substance satisfactory to the Representative) representing the Option Securities (or through the facilities of DTC) for the account of the Underwriters. The Option Securities shall be registered in such name or names and in such authorized denominations as the Representative may request in writing at least two (2) Business Days prior to the Option Closing Date. The Company will permit the Representative to examine and package the Option Securities for delivery, at least one (1) full Business Day prior to the Option Closing Date. The Company shall not be obligated to sell or deliver the Option Securities except upon tender of payment by the Representative for applicable Option Securities.

1.3. Representative's Warrants.

1.3.1. Purchase Warrants. The Company hereby agrees to issue and sell to the Representative (and/or its designees) on the Closing Date a warrant ("**Representative's Warrant**") exercisable for an aggregate of 258,823 Ordinary Shares (or 323,529 Ordinary Shares if the Underwriters exerciser the Over-allotment Option in full) representing 5% of the aggregate number of Firm Shares pursuant to a warrant agreement, substantially in the form attached hereto as Exhibit A (the "**Representative's Warrant Agreement**"). Each Representative's Warrant entitles the holder thereof to purchase one Ordinary Share at the exercise price thereof, with such Ordinary Share being deposited upon issuance with the Depositary (as defined herein) in exchange for an ADS. The Representative's Warrant shall be exercisable, in whole or in part, commencing on a date which is six (6) months after the Effective Date and expiring on the five-year anniversary of the Effective Date at an initial exercise price of $4.25 per share, which is equal to 100% of the initial public offering price of the Firm Shares. The Representative's Warrant, the Ordinary Shares and the ADSs issuable upon exercise thereof are hereinafter referred to together as the "**Representative's Securities**". The Representative understands and agrees that there are significant restrictions pursuant to FINRA Rule 5110 on the transfer of the Representative's Warrant and the ADSs issuable upon exercise of the Representative Warrant during the one hundred eighty (180) day period commencing on the Effective Date and by its acceptance thereof shall agree that it will not sell, transfer, assign, pledge or hypothecate the Representative's Warrant, or any portion thereof, or be the subject of any hedging, short sale, derivative, put or call transaction that would result in the effective economic disposition of such securities for a period of one hundred eighty (180) days following the Effective Date to anyone other than (i) an Underwriter or a selected dealer in connection with the Offering, or (ii) a bona fide officer or partner of the Representative or of any such Underwriter or selected dealer; and only if any such transferee agrees to the foregoing restrictions and those in the Representative's Warrant Agreement.

1.3.2. Delivery. Delivery of the Representative's Warrant shall be made on the Closing Date and shall be issued in the name or names and in such authorized denominations as the Representative may request.

2. REPRESENTATIONS AND WARRANTIES OF THE COMPANY.

The Company represents and warrants to the Underwriters as of the Applicable Time (as defined below), as of the Closing Date and as of the Option Closing Date, if any, as follows:

2.1. Filing of Registration Statement.

2.1.1. Pursuant to the Securities Act. The Company has prepared and filed with the U.S. Securities and Exchange Commission (the "**Commission**") a registration statement, and an amendment or amendments thereto, on Form F-1 (File No. 333-260492), including any related prospectus or prospectuses, for the registration of the Public Securities and the Representative's Securities under the Securities Act of 1933, as amended (the "**Securities Act**"), which registration statement and amendment or amendments have been prepared by the Company in conformity with the requirements of the Securities Act and the rules and regulations of the

Commission under the Securities Act (the "**Securities Act Regulations**"). The conditions for use of Form F-1 as set forth in the General Instructions to such Form, to register the Public Securities and the Representative's Securities under the Securities Act, have been satisfied. Except as the context may otherwise require, such registration statement, as amended, on file with the Commission at the time the registration statement became effective (including the Preliminary Prospectus included in the registration statement, financial statements, schedules, exhibits and all other documents filed as a part thereof or incorporated therein and all information deemed to be a part thereof as of the Effective Date pursuant to Rule 430A of the Securities Act Regulations (the "**Rule 430A Information**")), is referred to herein as the "**Registration Statement**." If the Company files any registration statement pursuant to Rule 462(b) of the Securities Act Regulations, then after such filing, the term "**Registration Statement**" shall include such registration statement filed pursuant to Rule 462(b). The Registration Statement has been declared effective by the Commission on the date hereof.

Each prospectus used prior to the effectiveness of the Registration Statement, and each prospectus that omitted the Rule 430A Information that was used after such effectiveness and prior to the execution and delivery of this Agreement, is herein called a "**Preliminary Prospectus**." The Preliminary Prospectus, subject to completion, dated [●], 2022, that was included in the Registration Statement immediately prior to the Applicable Time is hereinafter called the "**Pricing Prospectus**." The final prospectus in the form first furnished to the Underwriters for use in the Offering, that includes the Rule 430A Information, is hereinafter called the "**Prospectus**." Any reference to the "most recent Preliminary Prospectus" shall be deemed to refer to the latest Preliminary Prospectus included in the Registration Statement.

A registration statement on Form F-6 (File No. 333-262149) covering the registration of the ADSs (the "**ADS Registration Statement**") under the Securities Act has also been filed with the Commission by the Company and the Depositary.

"**Applicable Time**" means p.m., New York City time, on the date of this Agreement.

"**Issuer Free Writing Prospectus**" means any "issuer free writing prospectus," as defined in Rule 433 of the Securities Act Regulations ("**Rule 433**"), including without limitation any "free writing prospectus" (as defined in Rule 405 of the Securities Act Regulations) relating to the Public Securities that is (i) required to be filed with the Commission by the Company, (ii) a "road show that is a written communication" within the meaning of Rule 433(d)(8)(i), whether or not required to be filed with the Commission, or (iii) exempt from filing with the Commission pursuant to Rule 433(d)(5)(i) because it contains a description of the Public Securities or of the Offering that does not reflect the final terms, in each case in the form filed or required to be filed with the Commission or, if not required to be filed, in the form retained in the Company's records pursuant to Rule 433(g).

"**Issuer General Use Free Writing Prospectus**" means any Issuer Free Writing Prospectus that is intended for general distribution to prospective investors (other than a "*bona fide* electronic road show," as defined in Rule 433(h)(5) (the "**Bona Fide Electronic Road Show**")), as evidenced by its being specified in Schedule 2-B hereto.

"**Issuer Limited Use Free Writing Prospectus**" means any Issuer Free Writing Prospectus that is not an Issuer General Use Free Writing Prospectus.

"**Pricing Disclosure Package**" means any Issuer General Use Free Writing Prospectus issued at or prior to the Applicable Time, the Pricing Prospectus and the information included on Schedule 2-A hereto, all considered together.

2.1.2. Pursuant to the Exchange Act. The Company has filed with the Commission a Form 8-A (File No. 001-41231) providing for the registration pursuant to Section 12(b) under the Securities Exchange Act of 1934, as amended (the "**Exchange Act**"), of the Ordinary Shares and the Warrants (including the Ordinary Shares to be represented by ADSs and Ordinary Shares into which the Warrants are exercisable); provided, however, that the Ordinary Shares are not being registered for trading, but only in connection with the registration of the Ordinary Shares to be represented by ADSs and Ordinary Shares for which the Warrants are exercisable pursuant to requirements of the Commission). The registration of the Ordinary Shares and the Warrants under the Exchange Act has been declared effective by the Commission on or prior to the date hereof. The Company has taken no action designed to, or likely to have the effect of, terminating the registration of the ADSs, Warrants or Ordinary Shares under the Exchange Act, nor has the Company received any notification that the Commission is contemplating terminating such registration.

2.2. Stock Exchange Listing. The ADSs and Warrants have been approved for listing on the Nasdaq Global Market (the "**Exchange**"), subject only to official notice of issuance, and the Company has taken no action designed to, or likely to have the effect of, delisting the ADSs or Warrants from the Exchange, nor has the Company received any notification that the Exchange is contemplating terminating such listing except as described in the Registration Statement, the Pricing Disclosure Package and the Prospectus.

2.3. No Stop Orders, etc. Neither the Commission nor any state regulatory authority has issued any order preventing or suspending the use of the Registration Statement, the ADS Registration Statement, any Preliminary Prospectus or the Prospectus or has instituted or, to the Company's knowledge, threatened to institute, any proceedings with respect to such an order. The Company has complied with each request (if any) from the Commission for additional information.

2.4. Disclosures in Registration Statement.

2.4.1. Compliance with Securities Act and 10b-5 Representation.

(i) At the time of effectiveness of the Registration Statement and the ADS Registration Statement (or at the time of any post-effective amendments thereto) and at all times subsequent thereto up to the Closing Date and the Option Closing Date, if any, the Registration Statement, the ADS Registration Statement, the Preliminary Prospectus and the Prospectus do and will contain all material statements that are required to be stated therein in accordance with the Securities Act and the Securities Act Regulations, and did or will, in all material respects, conform to the requirements of the Securities Act and the Securities Act Regulations. Each of the Registration Statement, the ADS Registration Statement and any post-effective amendments thereto, at the time it became effective, complied in all material respects with the requirements of the Securities Act and the Securities Act Regulations. Each Preliminary Prospectus, including the prospectus filed as part of the Registration Statement as originally filed or as part of any amendment or supplement thereto, and the Prospectus, at the time each was filed with the Commission, complied in all material respects with the requirements of the Securities Act and the Securities Act Regulations. Each Preliminary Prospectus delivered to the Underwriters for use in connection with this Offering and the Prospectus was or will be identical to the electronically transmitted copies thereof filed with the Commission pursuant to the Commission's EDGAR filing system ("**EDGAR**"), except to the extent permitted by Regulation S-T promulgated under the Securities Act ("**Regulation S-T**").

(ii) Neither the Registration Statement, the ADS Registration Statement nor any amendment thereto, at its effective time, as of the Applicable Time, at the Closing Date or at any Option Closing Date, contained, contains or will contain an untrue statement of a material fact or omitted, omits or will omit to state a material fact required to be stated therein or necessary to make the statements therein not misleading.

(iii) The Pricing Disclosure Package, as of the Applicable Time, at the Closing Date or at any Option Closing Date, did not, does not and will not include an untrue statement of a material fact or omit to state a material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading; and each Issuer Limited Use Free Writing Prospectus hereto does not conflict in any material respect with the information contained in the Registration Statement, the ADS Registration Statement, any Preliminary Prospectus, the Pricing Prospectus or the Prospectus, and each such Issuer

Limited Use Free Writing Prospectus, as supplemented by and taken together with the Pricing Prospectus as of the Applicable Time, did not include an untrue statement of a material fact or omit to state a material fact necessary in order to make the statements therein, in light of the circumstances under which they were made, not misleading; provided, however, that this representation and warranty shall not apply to statements made or statements omitted in reliance upon and in conformity with written information furnished to the Company with respect to the Underwriters by the Representative expressly for use in the Registration Statement, the ADS Registration Statement, the Pricing Prospectus or the Prospectus or any amendment thereof or supplement thereto. The parties acknowledge and agree that such information provided by or on behalf of any Underwriter consists solely of the following disclosure contained in the "Underwriting" section of the Prospectus: the names of the Underwriters, the information in the second paragraph under the subheading titled "Discounts, Commissions and Reimbursement" and the information under the subheadings titled "Stabilization" and "Electronic Offer, Sale and Distribution of Securities" (the "**Underwriters' Information**").

(iv) Neither the Prospectus nor any amendment or supplement thereto, as of its issue date, at the time of any filing with the Commission pursuant to Rule 424(b), at the Closing Date or at any Option Closing Date, included, includes or will include an untrue statement of a material fact or omitted, omits or will omit to state a material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading; provided, however, that this representation and warranty shall not apply to the Underwriters' Information.

2.4.2. Disclosure of Agreements. The agreements and documents described in the Registration Statement, the ADS Registration Statement, the Pricing Disclosure Package and the Prospectus conform in all material respects to the descriptions thereof contained therein and there are no agreements or other documents required by the Securities Act and the Securities Act Regulations to be described in the Registration Statement, the ADS Registration Statement, the Pricing Disclosure Package and the Prospectus or to be filed with the Commission as exhibits to the Registration Statement or the ADS Registration Statement, that have not been so described or filed. Each agreement or other instrument (however characterized or described) to which the Company is a party or by which it is or may be bound or affected and (i) that is referred to in the Registration Statement, the ADS Registration Statement, the Pricing Disclosure Package and the Prospectus, or (ii) is material to the Company's business, has been duly authorized and validly executed by the Company, is in full force and effect in all material respects and is enforceable against the Company and, to the Company's knowledge, the other parties thereto, in accordance with its terms. None of such agreements or instruments has been assigned by the Company, and neither the Company nor, to the Company's knowledge, any other party is in default thereunder and, to the Company's knowledge, no event has occurred that, with the lapse of time or the giving of notice, or both, would constitute a default thereunder except for such defaults that would not reasonably be expected to result in a Material Adverse Change (as defined in Section 2.5.1 below). To the Company's knowledge, performance by the Company of the material provisions of such agreements or instruments will not result in a violation of any existing applicable law, rule, regulation, judgment, order or decree of any governmental or regulatory agency, authority, body, entity or court, domestic or foreign, having jurisdiction over the Company or any of its assets or businesses (each, a " **Governmental Entity**"), including, without limitation, those relating to environmental laws and regulations.

2.4.3. Regulations. The disclosures in the Registration Statement, the Pricing Disclosure Package and the Prospectus concerning the effects of applicable federal, state, local and foreign laws, rules and regulations relating to the Offering and the Company's business as currently conducted or contemplated are correct and complete in all material respects and no other such laws, rules or regulations are required under the Securities Act and the Securities Act Regulations to be disclosed in the Registration Statement, the Pricing Disclosure Package and the Prospectus which are not so disclosed.

2.4.4. No Other Distribution of Offering Materials. The Company has not, directly or indirectly, distributed and will not distribute any offering material in connection with the Offering other than any Preliminary Prospectus, any Issuer Free Writing Prospectus, the Prospectus and other materials, if any, permitted under the Securities Act and consistent with Section 3.2 below.

2.5. Changes After Dates in Registration Statement.

2.5.1. No Material Adverse Change. Since the respective dates as of which information is given in the Registration Statement, the Pricing Disclosure Package and the Prospectus, except as otherwise specifically stated therein: (i) there has been no material adverse change in the condition, financial or otherwise, results of operations, or business, assets or prospects of the Company and its Subsidiaries taken as a whole, nor to the Company's knowledge, any change or development that, individually or in the aggregate, would have a material adverse effect on the condition (financial or otherwise), results of operations, business, or assets or prospects of the Company and its Subsidiaries taken as a whole (a "**Material Adverse Change**"); (ii) there have been no material transactions entered into by the Company or its Subsidiaries, other than as contemplated pursuant to this Agreement; and (iii) no officer or director of the Company has resigned from any position with the Company.

2.5.2. Recent Securities Transactions, etc. Subsequent to the respective dates as of which information is given in the Registration Statement, the Pricing Disclosure Package and the Prospectus, and except as may otherwise be indicated or contemplated herein or disclosed in the Registration Statement, the Pricing Disclosure Package and the Prospectus, the Company has not: (i) issued any securities or incurred any liability or obligation, direct or contingent, for borrowed money; or (ii) declared or paid any dividend or made any other distribution on or in respect to its capital stock.

2.6. Independent Accountants. Ernst & Young LLP of Edinburgh, United Kingdom (the "**Auditor**"), whose reports are filed with the Commission as part of the Registration Statement, the Pricing Disclosure Package and the Prospectus, is an independent registered public accounting firm as required by the Securities Act and the Securities Act Regulations and the Public Company Accounting Oversight Board (the " **PCAOB**"), including the rules and regulations promulgated by such entity. To the Company's knowledge, after reasonable inquiry, the Auditor is currently registered and in good standing with the PCAOB. The Auditor has not, during the periods covered by the financial statements included in the Registration Statement, the Pricing Disclosure Package and the Prospectus, provided to the Company any non-audit services, as such term is used in Section 10A(g) of the Exchange Act.

2.7. Financial Statements, etc.

2.7.1 Financial Statements. The financial statements, including the notes thereto and supporting schedules (if any) included in the Registration Statement, the Pricing Disclosure Package and the Prospectus, fairly present the consolidated financial position, the results of operations, changes in shareholders' equity and cash flows at the dates and for the periods to which they apply. Such financial statements have been prepared in conformity with International Financial Reporting Standards ("**IFRS**") as issued by the International Accounting Standards Board (the "**IASB**") applied on a consistent basis throughout the periods involved (provided that unaudited interim financial statements are subject to year-end audit adjustments that are not expected to be material in the aggregate and do not contain all of the notes required by IFRS and the supporting schedules, if any, included in the Registration Statement present fairly the information required to be stated thereir. No other financial statements or supporting schedules are required to be included in the Registration Statement, the Pricing Disclosure Package or the Prospectus under the Securities Act or the Securities Act Regulations. The financial data set forth in each of the Registration Statement, the Pricing Disclosure Package and the Prospectus under the captions "Prospectus Summary—Summary Consolidated Financial Data," "Selected Consolidated Financial Data" and "Capitalization" fairly present, in all material respects, the information set forth therein on a basis consistent with that of the audited consolidated financial statements contained in the Registration Statement, the Pricing Disclosure Package and the Prospectus. To the Company's knowledge, no person who has been suspended or barred from being associated with a registered public accounting firm, or who has failed to comply with any sanction pursuant to Rule 5300 promulgated by the PCAOB, has participated in or otherwise aided the preparation of, or audited, the financial statements, supporting schedules or other financial data filed with the Commission as a part of the Registration Statement, the Pricing Disclosure Package or the Prospectus. The Registration Statement, the Pricing Disclosure Package and the Prospectus disclose all material off-balance sheet transactions, arrangements, obligations (including contingent obligations), and other relationships of the Company with unconsolidated entities or other persons that may have a material current or future effect on the Company's financial condition, results of operations, liquidity, capital expenditures, capital resources, or significant components of revenues or expenses. Except as disclosed in the Registration Statement, the Pricing Disclosure Package and the Prospectus, (a) since the date of the last balance sheet included in the Registration Statement, the Pricing Disclosure Package and the Prospectus, neither the Company nor any of its direct and indirect subsidiaries, including each entity disclosed or described in the Registration Statement, the Pricing Disclosure Package and the Prospectus as being a subsidiary of the Company (each, a "**Subsidiary**" and, collectively, the "**Subsidiaries**"), has incurred any material liabilities or obligations, direct or contingent, or entered into any material transactions other than in the ordinary course of business, (b) the Company has not declared or paid any dividends or made any distribution of any kind with respect to its capital stock, (c) there has not been any change in the capital stock of the Company or any of its Subsidiaries, or, other than in the ordinary course of business, any grants under any stock compensation plan, and (d) there has not been any Material Adverse Change in the Company's long-term or short-term debt. The Company represents that it has no direct or indirect subsidiaries other than those listed in Exhibit 21.1 to the Registration Statement.

2.7.2. Company's Accounting System. The Company and each of its subsidiaries make and keep accurate books and records and maintain a system of internal accounting controls designed, and which the Company reasonably believes is sufficient, to provide reasonable assurance that: (i) transactions are executed in accordance with management's general or specific authorization; (ii) transactions are recorded as necessary to permit preparation of financial statements in conformity with IFRS as issued by IASB and to maintain accountability for assets; (iii) access to assets is permitted only in accordance with management's general or specific authorization; and (iv) the recorded accountability for assets is compared with existing assets at reasonable intervals and appropriate action is taken with respect to any differences. The Company has not received any notice, oral or written, from the Company's board of directors stating that it is reviewing or investigating, and neither the Company's independent auditors nor its internal auditors have recommended that the Company's board of directors review or investigate, (i) adding to, deleting, changing the application of, or changing the Company's disclosure with respect to, any of the Company's material accounting policies; or (ii) any matter which could result in a restatement of the Company's financial statements for any annual or interim period during the current or prior three fiscal years.

2.8. Authorized Capital; Options, etc. The Company had, at the date or dates indicated in the Registration Statement, the Pricing Disclosure Package and the Prospectus, the duly authorized, issued and outstanding capitalization as set forth therein. Based on the assumptions stated in the Registration Statement, the Pricing Disclosure Package and the Prospectus, the Company will have on the Closing Date the adjusted capitalization set forth therein. Except as set forth in, or contemplated by, the Registration Statement, the Pricing Disclosure Package and the Prospectus, on the Effective Date, as of the Applicable Time and on the Closing Date and any Option Closing Date, there will be no stock options, warrants, or other rights to purchase or otherwise acquire any authorized, but unissued shares of Ordinary Shares or any security convertible or exercisable into Ordinary Shares, or any contracts or commitments to issue or sell Ordinary Shares or any such options, warrants, rights or convertible securities.

2.9. Valid Issuance of Securities, etc.

2.9.1. Outstanding Securities. All issued and outstanding securities of the Company issued prior to the transactions contemplated by this Agreement have been duly authorized and validly issued and are fully paid and non-assessable; the holders thereof have no rights of rescission or the ability to force the Company or any of its Subsidiaries to repurchase such securities with respect thereto, and are not subject to personal liability by reason of being such holders; and none of such securities were issued in violation of the preemptive rights, rights of first refusal or rights of participation of any holders of any security of the Company or similar contractual rights granted by the Company. The Ordinary Shares conform in all material respects to all statements relating thereto contained in the Registration Statement, the Pricing Disclosure Package and the Prospectus. The offers and sales of the outstanding Ordinary Shares, options, warrants and other outstanding securities convertible into or exercisable for Ordinary Shares, were at all relevant times either registered under the Securities Act and the applicable state securities or "blue sky" laws or, based in part on the representations and warranties of the purchasers of such shares, exempt from such registration requirements. The description of the Company's share option, stock bonus and other related plans or arrangements, and options and/or other rights granted thereunder, as described in the Registration Statement, the Pricing Disclosure Package and the Prospectus, accurately and fairly present, in all material respects, the information required to be shown with respect to such plans, arrangements, options and rights.

2.9.2. Securities Sold Pursuant to this Agreement. The Public Securities and Representative's Securities have been duly authorized for issuance and sale and, when issued and paid for, will be validly issued, fully paid and non-assessable; the holders thereof are not and will not be subject to personal liability by reason of being such holders; the Public Securities and Representative's Securities are and will be free from all pre-emptive rights of any holders of any security of the Company, or similar contractual rights granted by the Company; and all corporate action required to be taken for the authorization, issuance and sale of the Public Securities and Representative's Securities has been duly and validly taken. The Public Securities and Representative's Securities conform in all material respects to all statements with respect thereto contained in the Registration Statement, the Pricing Disclosure Package and the Prospectus. The Ordinary Shares issuable upon exercise of the Representative's Warrant have been duly authorized for issuance by all necessary corporate action on the part of the Company and when paid for and issued in accordance with the Representative's Warrant and the Representative's Warrant Agreement, such shares will be validly issued, fully paid and nonassessable; the holders thereof are not and will not be subject to personal liability by reason of being such holders; and such ordinary shares are not and will not be subject to the pre-emptive rights of any holders of any security of the Company or similar contractual rights granted by the Company.

2.9.3. Validity of the ADSs. Upon the issuance, sale and payment for the Ordinary Shares represented by ADSs in accordance with the terms hereof and the due issuance by the Depositary of the ADSs against the deposit of the Ordinary Shares in accordance with the provisions of the Deposit Agreement, such ADSs will be duly and validly issued, and the persons in whose names the ADSs are registered will be entitled to the rights specified in the Deposit Agreement. Upon the exercise of the Warrants pursuant to their terms, the issuance, sale and payment for the Ordinary Shares issued upon exercise of the Warrants and the due issuance by the Depositary of the ADSs representing the Ordinary Shares issued upon exercise of Warrants in accordance with the provisions of the Deposit Agreement, such ADSs will be duly and validly issued, and the persons in whose names the ADSs are registered will be entitled to the rights specified in the Deposit Agreement. The Deposit Agreement and the ADSs conform in all material respects to the descriptions thereof contained in the Registration Statement and the Prospectus. There has been no change in the Company's agreement with the Depositary in connection with any pre-release of the Company's ADSs and no such change is currently contemplated.

2.10. Registration Rights of Third Parties. Except as set forth in the Registration Statement, the Pricing Disclosure Package and the Prospectus, no holders of any securities of the Company or any options, warrants, rights or other securities exercisable for or convertible or exchangeable into securities of the Company have the right to require the Company to register any such securities of the Company under the Securities Act or to include any such securities in the Registration Statement or any other registration statement to be filed by the Company.

2.11. Validity and Binding Effect of Agreements. The execution, delivery and performance of this Agreement, the Representative's Warrants, and the Representative's Warrant Agreement, the Warrant Agent Agreement and the Deposit Agreement have been duly and validly authorized by the Company, and, when executed and delivered, will constitute, the legal, valid and binding obligations of the Company, enforceable against the Company in accordance with their respective terms.

2.12. No Conflicts, etc. The execution, delivery and performance by the Company of this Agreement, the Representative's Warrants, the Representative's Warrant Agreement, the Warrant Agent Agreement, the Deposit Agreement and all documents ancillary thereto, the consummation by the Company of the transactions herein and therein contemplated and the compliance by the Company with the terms hereof and thereof do not and will not, with or without the giving of notice or the lapse of time or both: (i) result in any violation of the provisions of the Company's Memorandum and Articles of Association (as the same have been amended or restated from time to time, the "**Charter**") of the Company; (ii) result in a breach of, or conflict with any of the terms and provisions of, or constitute a default under, or result in the creation, modification, termination or imposition of any lien, charge or encumbrance upon any property or assets of the Company pursuant to the terms of any indenture, mortgage, deed of trust, loan agreement or any other agreement or instrument to which the Company is a party or as to which any property of the Company is a party except breaches, conflicts or defaults that would not reasonably be expected to result in a Material Adverse Change, or (iii) violate in any material respect any existing applicable law, rule, regulation, judgment, order or decree of any Governmental Entity as of the date hereof, except, in the case of (ii) or (iii), for those breaches, conflicts, defaults or violations which (individually or in the aggregate) would not have or would not reasonably be expected to result in a Material Adverse Change.

2.13. No Defaults; Violations. Except as set forth in the Registration Statement, the Pricing Disclosure Package and the Prospectus, no default exists in the due performance and observance of any term, covenant or condition of any license, contract, indenture, mortgage, deed of trust, note, loan or credit agreement, or any other agreement or instrument evidencing an obligation for borrowed money, or any other agreement or instrument to which the Company is a party or by which the Company may be bound or to which any of the properties or assets of the Company is subject except, in each case, for any such default that would not be reasonably expected to result in a Material Adverse Change. The Company is not in violation of any franchise, license, permit, applicable law, rule, regulation, judgment or decree of any Governmental Entity, except for such violations that, individually or in the aggregate, would not have or would not reasonably be expected to result in a Material Adverse Change.

2.14. Corporate Power; Licenses; Consents.

2.14.1. Conduct of Business. Except as described in the Registration Statement, the Pricing Disclosure Package and the Prospectus, the Company has all requisite corporate power and authority, and has all requisite consents, authorizations, approvals, licenses, certificates, clearances, permits and orders and supplements and amendments thereto (collectively, "**Authorizations**") of and from all Governmental Entities that it needs as of the date hereof to conduct its business purpose as described in the Registration Statement, the Pricing Disclosure Package and the Prospectus, except, in each case, where the failure to have such Authorizations (individually or in the aggregate) would not have or would not reasonably be expected to have a Material Adverse Change.

2.14.2. Transactions Contemplated Herein. The Company has all corporate power and authority to enter into this Agreement, the Representative's Warrant Agreement, the Warrant Agent Agreement and the Deposit Agreement and to carry out the provisions and conditions hereof and thereof, and all Authorizations required in connection therewith have been obtained. No Authorization of, and no filing with, any Governmental Entity, the Exchange or another body is required for the valid issuance, sale and delivery of the Public Securities and the Representative's Securities and the consummation of the transactions and agreements contemplated by this Agreement, the Representative's Warrant Agreement, the Warrant Agent Agreement or the Deposit Agreement and as contemplated by the Registration Statement, the Pricing Disclosure Package and the Prospectus, except with respect to applicable federal and state securities or blue-sky laws, the rules of the Exchange and the rules and regulations of the Financial Industry Regulatory Authority, Inc. ("**FINRA**").

2.15. D&O Questionnaires. All information contained in the questionnaires (the "**Questionnaires**") completed by each of the Company's directors and officers prior to the Offering, as may be updated to the time of the Offering (the "**Insiders**") and as may be supplemented by all information concerning the Insiders described in the Registration Statement, the Pricing Disclosure Package and the Prospectus provided to the Representative and to counsel to the Underwriters, is, to the knowledge of the Company, true and correct and the Company has not become aware of any information which would cause the information disclosed in the Questionnaires to become inaccurate, incorrect or incomplete.

2.16. Litigation; Governmental Proceedings. There is no action, suit, proceeding, inquiry, arbitration, investigation, litigation or governmental proceeding pending or, to the Company's knowledge, threatened against, or involving the Company or, to the Company's knowledge, any executive officer or director which has not been disclosed in the Registration Statement, the Pricing Disclosure Package and the Prospectus, or in connection with the Company's listing application for the listing of the Public Securities on the Exchange, and is required to be disclosed therein.

2.17. Due Incorporation; Valid Existence. The Company has been duly incorporated and is validly existing as a public limited company in the United Kingdom and has the corporate power and authority to own, lease and operate its properties and to conduct its business as described in the Registration Statement, the Pricing Disclosure Package and the Prospectus, and to enter into and perform its obligations under this Agreement. The Company is duly qualified as a foreign corporation to transact business and is in good standing in each other jurisdiction in which such qualification is required, whether by reason of the ownership or leasing of property or the conduct of business, except where the failure to so qualify or be in good standing would not have or would not reasonably be expected to result in a Material Adverse Change.

2.18. Insurance. The Company carries or is entitled to the benefits of insurance (including, without limitation, as to directors' and officers' insurance coverage), with reputable insurers, in such amounts and covering such risks which the Company believes are adequate as are customary for companies engaged in similar business, and to the Company's knowledge all such insurance is in full force and effect. The Company has no reason to believe that it will not be able (i) to renew its existing insurance coverage as and when such policies expire or (ii) to obtain comparable coverage from similar institutions as may be necessary or appropriate to conduct its business as now conducted and at a cost that would not reasonably be expected to result in a Material Adverse Change.

2.19. Transactions Affecting Disclosure to FINRA.

2.19.1. Finder's Fees. Except as described in the Registration Statement, the Pricing Disclosure Package and the Prospectus, there are no claims, payments, arrangements, agreements or understandings relating to the payment of a finder's, consulting or origination fee by the Company or, to the Company's knowledge, by any Insider with respect to the sale of the Public Securities hereunder or any other arrangements, agreements or understandings of the Company or, to the Company's knowledge, any of its stockholders that may affect the Underwriters' compensation, as determined by FINRA.

2.19.2. Payments Within Twelve (12) Months. Except as described in the Registration Statement, the Pricing Disclosure Package and the Prospectus, the Company has not made any direct or indirect payments in connection with the Offering (in cash, securities or otherwise) to: (i) any person, as a finder's fee, consulting fee or otherwise, in consideration of such person raising capital for the Company or introducing to the Company persons who raised or provided capital to the Company; (ii) any FINRA member; or (iii) any person or entity that has any direct or indirect affiliation or association with any FINRA member, within the twelve (12) months prior to the Effective Date, other than the payment to the Underwriters as provided hereunder in connection with the Offering.

2.19.3. Use of Proceeds. None of the net proceeds of the Offering will be paid by the Company to any participating FINRA member or its affiliates, except as specifically authorized herein.

2.19.4. FINRA Affiliation. There is no (i) officer or director of the Company, (ii) beneficial owner of 10% or more of any class of the Company's securities or (iii) beneficial owner of the Company's unregistered equity securities which were acquired during the 180-day period immediately preceding the filing of the Registration Statement that is an affiliate or associated person of a FINRA member participating in the Offering (as determined in accordance with the rules and regulations of FINRA).

2.19.5. Information. All information provided by the Company in its FINRA questionnaire to counsel to the Underwriters specifically for use by them in connection with its Public Offering System filings (and related disclosure) with FINRA is true, correct and complete in all material respects.

2.20. Foreign Corrupt Practices Act / UK Bribery Act. None of the Company and its Subsidiaries or, to the Company's knowledge, any director, officer, agent, employee or affiliate of the Company and its Subsidiaries or any other person acting on behalf of, and with authority from, the Company and its Subsidiaries, has, directly or indirectly, given or agreed to give any money, gift or similar benefit (other than legal price concessions to customers in the ordinary course of business) to any customer, supplier, employee or agent of a customer or supplier, or official or employee of any Governmental Entity (domestic or foreign) or any political party or candidate for office (domestic or foreign) or other person who was, is, or may be in a position to help or hinder the business of the Company (or assist it in connection with any actual or proposed transaction) that (i) might subject the Company to any damage or penalty in any civil, criminal or governmental litigation or proceeding, (ii) if not given in the past, might have had a Material Adverse Change or (iii) if not continued in the future, might adversely affect the assets, business, operations or prospects of the Company. The Company has taken reasonable steps to ensure that its accounting controls and procedures are sufficient to cause the Company to comply in all material respects with the Foreign Corrupt Practices Act of 1977, as amended, and with the UK Bribery Act 2010.

2.21. Compliance with Sanction Laws. None of the Company, any of its Subsidiaries or, to the Company's knowledge, any director, officer, agent, employee or affiliate of the Company or any of its Subsidiaries or any other person acting on behalf of, and with authority from, the Company or any of its Subsidiaries, is currently subject to any sanctions administered by the Office of Foreign Assets Control of the U.S. Department of the Treasury ("**OFAC**") or by HM Treasury's Office for Financial Sanctions Implementation ("**OFSI**"), and the Company will not, directly or indirectly, use the proceeds of the Offering hereunder, or lend, contribute or otherwise make available such proceeds to any subsidiary, joint venture partner or other person or entity, for the purpose of financing the activities of any person currently subject to any sanctions administered by OFAC or OFSI.

2.22. Money Laundering Laws. The operations of the Company and its Subsidiaries are and have been conducted at all times in compliance in all material respects with applicable financial recordkeeping and reporting requirements of the U.S. Currency and Foreign Transactions Reporting Act of 1970, as amended, including the U.S. Money Laundering Control Act of 1986, as amended, the rules and regulations thereunder, the rules and regulations thereunder, the U.K. Proceeds of Crime Act 2002, Terrorist Financing and Transfer of Funds (Information on the Payer) Regulations 2017 and Sanctions and Anti-Money Laundering Act 2018 and any related or similar rules, regulations or guidelines, issued, administered or enforced by any Governmental Entity (collectively, the "**Money Laundering Laws**"); and no action, suit or proceeding by or before any Governmental Entity involving the Company with respect to the Money Laundering Laws is pending or, to the knowledge of the Company, threatened.

2.23. Officers' Certificate. Any certificate signed by any duly authorized officer of the Company and delivered to the Representative or to counsel to the Underwriters on the Closing Date or on the Option Closing Date shall be deemed a representation and warranty by the Company to the Underwriters as to the matters covered thereby.

2.24. Lock-Up Agreements. Schedule 3 hereto contains a complete and accurate list of the Company's officers, directors and each owner of 5% or more of the Company's outstanding Ordinary Shares (or securities convertible or exercisable into Ordinary Shares) (collectively, the "**Lock-Up Parties**"). The Company has caused each of the Lock-Up Parties to deliver to the Representative an executed Lock-Up Agreement, in a form substantially similar to that attached hereto as Exhibits B-1 through B-3 (each, a "**Lock-Up Agreement**"), prior to the execution of this Agreement.

2.25. Subsidiaries. Each of the Company's "subsidiaries" (for purposes of this Agreement, as defined in Rule 405 under the Securities Act) has been duly incorporated or organized, as the case may be, and is validly existing as a corporation, partnership or limited liability company, as applicable, in good standing under the laws of the jurisdiction of its incorporation or organization and has the power and authority (corporate or other) to own, lease and operate its properties and to conduct its business as described in the Registration Statement, the Pricing Disclosure Package and the Prospectus. Each of the Company's subsidiaries is duly qualified as a foreign corporation, partnership limited liability company or similar corporate entity, as applicable, to transact business and is in good standing in each jurisdiction in which such qualification is required, whether by reason of the ownership or leasing of property or the conduct of business, except where the failure to so qualify or be in good standing would not reasonably be expected, individually or in the aggregate, to have a Material Adverse Change. All of the issued and outstanding share capital or other equity or ownership interests of each of the Company's subsidiaries have been duly authorized and validly issued, are fully paid and nonassessable and are owned by the Company, directly or through subsidiaries, free and clear of any security interest, mortgage, pledge, lien, encumbrance or adverse claim. None of the outstanding share capital or equity interest in any subsidiary was issued in violation of preemptive or similar rights of any security holder of such subsidiary. The constitutive or organizational documents of each of the subsidiaries comply in all material respects with the requirements of applicable laws of its jurisdiction of incorporation or organization and are in full force and effect. The Company does not own or control, directly or indirectly, any corporation, association or other entity other than the subsidiaries listed in Exhibit 21.1 to the Registration Statement.

2.26. Related Party Transactions. There are no business relationships or related party transactions involving the Company or any other person required to be described in the Registration Statement, the Pricing Disclosure Package and the Prospectus that have not been described as required under the Securities Act and the Securities Act Regulations.

2.27. Board of Directors. The Board of Directors of the Company is comprised of the persons set forth under the heading of the Pricing Prospectus and the Prospectus captioned "Management." The qualifications of the persons serving as board members and the overall composition of the board comply with the provisions applicable to the Company of the Exchange Act and the rules and regulations of the Commission promulgated thereunder (the "**Exchange Act Regulations**"), the Sarbanes-Oxley Act of 2002 and the rules promulgated thereunder (the "**Sarbanes-Oxley Act**") and the listing rules of the Exchange. At least one member of the Audit Committee of the Board of Directors of the Company qualifies as an "audit committee financial expert," as such term is defined under Regulation S-K and the listing rules of the Exchange. In addition, at least a majority of the persons serving on the Board of Directors qualify as "independent," as defined under the listing rules of the Exchange.

2.28. Sarbanes-Oxley Compliance.

2.28.1. Disclosure Controls. The Company has developed and currently maintains disclosure controls and procedures that comply in all material respects with Rule 13a-15 or 15d-15 under the Exchange Act Regulations, and except as disclosed in the Registration Statement, the Pricing Disclosure Package and the Prospectus, such controls and procedures are effective to ensure that all material information concerning the Company will be made known on a timely basis to the individuals responsible for the preparation of the Company's Exchange Act filings and other public disclosure documents.

2.28.2. Compliance. The Company is and at the Applicable Time and on the Closing Date will be, in material compliance with the provisions of the Sarbanes-Oxley Act applicable to it, and has implemented or will implement such programs and has taken reasonable steps to ensure the Company's future compliance (not later than the relevant statutory and regulatory deadlines therefor) with all of the material provisions of the Sarbanes-Oxley Act.

2.29. Disclosure Controls and Procedures; Deficiencies in or Changes to Internal Control Over Financial Reporting. The Company and its Subsidiaries maintain systems of "internal control over financial reporting" (as defined under Rules 13a-15 and 15d-15 under the Exchange Act Regulations) that comply in all material respects with the requirements of the Exchange Act and have been designed by, or under the supervision of, their respective principal executive and principal financial officers, or persons performing similar functions, which (i) enable the Company to comply with the applicable international rules for companies; (ii) are designed to ensure that material information relating to the Company, including its consolidated subsidiaries, is made known to the Company's principal executive officer and its principal financial officer by others within those entities; and (iii) are effective in all material respects to perform the functions for which they were established. Since the end of the Company's most recent audited fiscal year, there have been no significant deficiencies or material weakness in the Company's internal control over financial reporting (whether or not remediated) and no change in the Company's internal control over financial reporting that has materially affected, or is reasonably likely to materially affect, the Company's internal control over financial reporting. The Company is not aware of any change in its internal control over financial reporting that has occurred during its most recent fiscal quarter that has materially affected, or is reasonably likely to materially affect, the Company's internal control over financial reporting. Except as disclosed in the Registration Statement, the Pricing Disclosure Package and the Prospectus, the Company is not aware of any material weaknesses in its internal controls. The Company's auditors and the Audit Committee of the Board of Directors of the Company have been advised of: (i) all significant deficiencies and material weaknesses in the design or operation of internal controls over financial reporting which are known to the Company's management and that have adversely affected or are reasonably likely to adversely affect the Company's ability to record, process, summarize and report financial information; and (ii) any fraud known to the Company's management, whether or not material, that involves management or other employees who have a significant role in the Company's internal controls over financial reporting.

2.30. No Investment Company Status. The Company is not and, after giving effect to the Offering and the application of the proceeds thereof as described in the Registration Statement, the Pricing Disclosure Package and the Prospectus, will not be, required to register as an "investment company," as defined in and pursuant to the Investment Company Act of 1940, as amended.

2.31. No Labor Disputes. No labor dispute with the employees of the Company or any of its Subsidiaries exists or, to the knowledge of the Company, is imminent. The Company is not aware that any officer, key employee or significant group of employees of the Company plans to terminate employment with the Company.

2.32. Intellectual Property Rights. The Company and each of its Subsidiaries owns or possesses or has valid rights to use all patents, patent applications, trademarks, service marks, trade names, trademark registrations, service mark registrations, copyrights, licenses, inventions, trade secrets and similar rights ("**Intellectual Property Rights**") for the conduct of the business of the Company and each of its Subsidiaries as currently carried on and as described in the Registration Statement, the Pricing Disclosure Package and the Prospectus. To the knowledge of the Company, no action or use by the Company or any of its Subsidiaries necessary for the conduct of its business as currently carried on and as described in the Registration Statement and the Prospectus will involve or give rise to any infringement of, or license or similar fees for, any Intellectual Property Rights of others. Neither the Company nor any of its Subsidiaries has received any notice alleging any such infringement, fee or conflict with asserted Intellectual Property Rights of others. Except as would not reasonably be expected to result, individually or in the aggregate, in a Material Adverse Change: (A) to the knowledge of the Company, there is no infringement, misappropriation or violation by third parties of any of the Intellectual Property Rights owned by the Company; (B) there is no pending or, to the knowledge of the Company, threatened action, suit, proceeding or claim by others challenging the rights of the Company in or to any such Intellectual Property Rights, and the Company is unaware of any facts which would form a reasonable basis for any such claim, that would, individually or in the aggregate, together with any other claims in this Section 2.32, reasonably be expected to result in a Material Adverse Change; (C) the Intellectual Property Rights owned by the Company and, to the knowledge of the Company, the Intellectual Property Rights licensed to the Company have not been adjudged by a court of competent jurisdiction invalid or unenforceable, in whole or in part, and there is no pending or, to the Company's knowledge, threatened action, suit, proceeding or claim by others challenging the validity or scope of any such Intellectual Property Rights, and the Company is unaware of any facts which would form a reasonable basis for any such claim that would, individually or in the aggregate, together with any other claims in this Section 2.32, reasonably be expected to result in a Material Adverse Change; (D) there is no pending or, to the Company's knowledge, threatened action, suit, proceeding or claim by others that the Company infringes, misappropriates or otherwise violates any Intellectual Property Rights or other proprietary rights of others, the Company has not received any written notice of such claim and the Company is unaware of any other facts which would form a reasonable basis for any such claim that would, individually or in the aggregate, together with any other claims in this Section 2.32, reasonably be expected to result in a Material Adverse Change; and (E) to the Company's knowledge, no employee of the Company is in or has ever been in violation in any material respect of any term of any employment contract, patent disclosure agreement, invention assignment agreement, non-competition agreement, non-solicitation agreement, nondisclosure agreement or any restrictive covenant to or with a former employer where the basis of such violation relates to such employee's employment with the Company, or actions undertaken by the employee while employed with the Company and could reasonably be expected to result, individually or in the aggregate, in a Material Adverse Change. To the Company's knowledge, all material technical information developed by and belonging to the Company which has not been patented has been kept confidential. For all Company Intellectual Property, the Company and its Representatives have met their duty of candor as required under 37 C.F.R. § 1.56 and complied with analogous Law outside the United States requiring disclosure of references. To the Company's knowledge, the Company has taken all actions reasonably necessary to protect, and where necessary register, the copyrights, trademarks, patent rights and trade secrets owned by or licensed exclusively to the Company (solely where the Company has the right to take such actions as to in-licensed intellectual property rights). Each current and former employee and individual contractor of the Company who is or was involved in the creation or development of any Company Intellectual Property has executed and delivered and, to the Company's knowledge, is in compliance with an employment or consulting agreement containing nondisclosure, assignment and non-solicitation provisions, except as could not reasonably be expected to have, individually or in the aggregate, a Material Adverse Change. The Company is not a party to or bound by any options, licenses or agreements with respect to the Intellectual Property Rights of any other person or entity that are required to be set forth in the Registration Statement, the Pricing Disclosure Package and the Prospectus and are not described therein. The Registration Statement, the Pricing Disclosure Package and the Prospectus contain in all material respects the same description of the matters set forth in the preceding sentence. None of the technology employed by the Company has been obtained or is being used by the Company in violation of any contractual obligation binding on the Company or, to the Company's knowledge, any of its officers, directors or employees, or otherwise in violation of the rights of any persons.

2.33. Taxes. Each of the Company and its Subsidiaries has filed all returns (as hereinafter defined) required to be filed with taxing authorities prior to the date hereof or has duly obtained extensions of time for the filing thereof. Each of the Company and its Subsidiaries has paid all taxes (as hereinafter defined) shown as due on such returns that were filed and has paid all taxes imposed on or assessed against the Company or such respective Subsidiary except those that are being contested in good faith or as would not have, individually or in the aggregate, result in a Material Adverse Change. The provisions for taxes payable, if any, shown on the financial statements filed with or as part of the Registration Statement are sufficient for all accrued and unpaid taxes, whether or not disputed, and for all periods to and including the dates of such consolidated financial statements. Except as disclosed in writing to the Underwriters, (i) no material issues have been raised (and are currently pending) by any taxing authority in connection with any of the returns or taxes asserted as due from the Company or its Subsidiaries, and (ii) no waivers of statutes of limitation with respect to the returns or collection of taxes have been given by or requested from the Company or its Subsidiaries. To the Company's knowledge, there are no tax liens against the assets, properties or business of the Company or its Subsidiaries. The term "**taxes**" means all federal, state, local, foreign and other net income, gross income, gross receipts, sales, use, ad valorem, transfer, franchise, profits, license, lease, service, service use, withholding, payroll, employment, excise, severance, stamp, occupation, premium, property, windfall profits, customs, duties or other taxes, fees, assessments or charges of any kind whatever, together with any interest and any penalties, additions to tax or additional amounts with respect thereto. The term "**returns**" means all returns, declarations, reports, statements and other documents required to be filed in respect to taxes.

2.34. Compliance with Laws. Each of the Company and each Subsidiary: (A) is and at all times has been in compliance with all statutes, rules, or regulations applicable to the business of the Company as currently conducted ("**Applicable Laws**"), except as could not, individually or in the aggregate, would not or would not reasonably be expected to result in a Material Adverse Change; (B) has not received any warning letter, untitled letter or other correspondence or notice from any Governmental Entity alleging or asserting noncompliance with any Applicable Laws or any Authorizations; (C) possesses all Authorizations and such Authorizations are valid and in full force and effect and are not in violation of any term of any such Authorizations, except where the invalidity of such Authorizations or the failure of such Authorizations to be in full force and effect would not or would not reasonably be expected to result in a Material Adverse Change; (D) has not received notice of any claim, action, suit, proceeding, hearing, enforcement, investigation, arbitration or other action from any Governmental Entity or third party alleging that any activity conducted by the Company is in violation of any Applicable Laws or Authorizations and has no knowledge that any such Governmental Entity or third party is considering any such claim, litigation, arbitration, action, suit, investigation or proceeding; (E) has not received notice that any Governmental Entity has taken, is taking or intends to take action to limit, suspend, modify or revoke any Authorizations and has no knowledge that any such Governmental Entity is considering such action; and (F) has filed, obtained, maintained or submitted all reports, documents, forms, notices, applications, records, claims, submissions and supplements or amendments as required by any Applicable Laws or Authorizations and that all such reports, documents, forms, notices, applications, records, claims, submissions and supplements or amendments were complete and correct on the date filed (or were corrected or supplemented by a subsequent submission), except where the failure to be so in compliance, individually or in the aggregate, would not or would not reasonably be expected to result in a Material Adverse Change.

2.35. Environmental Laws. The Company is in compliance with all foreign, federal, state and local rules, laws and regulations relating to the use, treatment, storage and disposal of hazardous or toxic substances or waste and protection of health and safety or the environment which are applicable to their businesses ("**Environmental Laws**"), except where the failure to comply would not, singularly or in the aggregate, result in a Material Adverse Change. There has been no storage, generation, transportation, handling, treatment, disposal, discharge, emission, or other release of any kind of toxic or other wastes or other hazardous substances by, due to, or caused by the Company (or, to the Company's knowledge, any other entity for whose acts or omissions the Company is or may otherwise be liable) upon any of the property now or previously owned or leased by the Company, or upon any other property, in violation of any law, statute, ordinance, rule, regulation, order, judgment, decree or permit or which would, under any law, statute, ordinance, rule (including rule of common law), regulation, order, judgment, decree or permit, give rise to any liability, except for any violation or liability which would not have, singularly or in the aggregate with all such violations and liabilities, a Material Adverse Change; and there has been no disposal, discharge, emission or other release of any kind onto such property or into the environment surrounding such property of any toxic or other wastes or other hazardous substances with respect to which the Company has knowledge, except for any such disposal, discharge, emission, or other release of any kind which would not have, singularly or in the aggregate with all such discharges and other releases, a Material Adverse Change. In the ordinary course of business, the Company conducts periodic reviews of the effect of Environmental Laws on its business and assets, in the course of which they identify and evaluate associated costs and liabilities (including, without limitation, any capital or operating expenditures required for clean-up, closure of properties or compliance with Environmental Laws or governmental permits issued thereunder, any related constraints on operating activities and any potential liabilities to third parties). On the basis of such reviews, the Company has reasonably concluded that such associated costs and liabilities would not have, singularly or in the aggregate, a Material Adverse Change.

2.36. Title to Property. Except as set forth in the Registration Statement, the Pricing Disclosure Package and the Prospectus, the Company and its Subsidiaries have good and marketable title in fee simple to, or have valid rights to lease or otherwise use, all items of real or personal property which are material to the business of the Company and its Subsidiaries taken as a whole, in each case free and clear of all liens, encumbrances, security interests, claims and defects that do not, singly or in the aggregate, materially affect the value of such property and do not interfere with the use made and proposed to be made of such property by the Company or its Subsidiaries; and all of the leases and subleases material to the business of the Company and its Subsidiaries, considered as one enterprise, and under which the Company or any of its Subsidiaries holds properties described in the Registration Statement, the Pricing Disclosure Package and the Prospectus, are, to the Company's knowledge, in full force and effect, and neither the Company nor any Subsidiary has received any notice of any material claim of any sort that has been asserted by anyone adverse to the rights of the Company or any Subsidiary under any of the leases or subleases mentioned above, or affecting or questioning the rights of the Company or any Subsidiary to the continued possession of the leased or subleased premises under any such lease or sublease.

2.37. Contracts Affecting Capital. There are no transactions, arrangements or other relationships between and/or among the Company, any of its affiliates (as such term is defined in Rule 405 of the Securities Act Regulations) and any unconsolidated entity, including, but not limited to, any structured finance, special purpose or limited purpose entity that could reasonably be expected to materially affect the Company's or its Subsidiaries' liquidity or the availability of or requirements for their capital resources required to be described or incorporated by reference in the Registration Statement, the Pricing Disclosure Package and the Prospectus which have not been described or incorporated by reference as required.

2.38. Loans to Directors or Officers. There are no outstanding loans, advances (except normal advances for business expenses in the ordinary course of business) or guarantees or indebtedness by the Company or its Subsidiaries to or for the benefit of any of the officers or directors of the Company, its Subsidiaries, or any of their respective family members, except as disclosed in the Registration Statement, the Pricing Disclosure Package and the Prospectus.

2.39. Ineligible Issuer. At the time of filing the Registration Statement and any post-effective amendment thereto, at the Effective Date and at the time of any amendment thereto, at the earliest time thereafter that the Company or another offering participant made a bona fide offer (within the meaning of Rule 164(h)(2) of the Securities Act Regulations) of the Public Securities and at the Effective Date, the Company was not and is not an "ineligible issuer," as defined in Rule 405, without taking account of any determination by the Commission pursuant to Rule 405 that it is not necessary that the Company be considered an ineligible issuer.

2.40. Emerging Growth Company Status. From the time of initial confidential submission of the Registration Statement to the Commission (or, if earlier, the first date on which the Company engaged in any Section 5(d) Written Communication or any Section 5(d) Oral Communication) through the date hereof, the Company has been and is an "emerging growth company," as defined in Section 2(a) of the Securities Act (an "**Emerging Growth Company**"). The Company will promptly notify the Representatives if the Company ceases to be an Emerging Growth Company at any time prior to the later of (i) the time when a prospectus relating to the Offered Securities is not required by the Securities Act to be delivered (whether physically or through compliance with Rule 172 under the Securities Act or any similar rule) and (ii) the expiration of the Lock-Up Period (as defined herein).

2.41. Foreign Private Issuer Status. The Company is a "foreign private issuer" as defined in Rule 405 under the Securities Act, Rule 3b-4 under the Exchange Act and Nasdaq Listing Rule 5005(a)(19).

2.42. Industry Data. The statistical and market-related data included in each of the Registration Statement, the Pricing Disclosure Package and the Prospectus are based on or derived from sources that the Company reasonably and in good faith believes are reliable and accurate or represent the Company's good faith estimates that are made on the basis of data derived from such sources.

2.43. Electronic Road Show. The Company has made available a Bona Fide Electronic Road Show in compliance with Rule 433(d)(8)(ii) of the Securities Act Regulations such that no filing of any "road show" (as defined in Rule 433(h) of the Securities Act Regulations) is required in connection with the Offering.

2.44. Margin Securities. The Company owns no "margin securities" as that term is defined in Regulation U of the Board of Governors of the Federal Reserve System (the "**Federal Reserve Board**"), and none of the proceeds of Offering will be used, directly or indirectly, for the purpose of purchasing or carrying any margin security, for the purpose of reducing or retiring any indebtedness which was originally incurred to purchase or carry any margin security or for any other purpose which might cause any of the Public Securities to be considered a "purpose credit" within the meanings of Regulation T, U or X of the Federal Reserve Board.

2.45. Dividends and Distributions. Except as disclosed in the Pricing Disclosure Package, Registration Statement and the Prospectus, no Subsidiary of the Company is currently prohibited or restricted, directly or indirectly, from paying any dividends to the Company, from making any other distribution on such Subsidiary's capital stock (to the extent that any such prohibition or restriction on dividends and/or distributions would have a material effect to the Company), from repaying to the Company any loans or advances to such Subsidiary from the Company or from transferring any of such Subsidiary's property or assets to the Company or any other Subsidiary of the Company, except as may otherwise be provided in current loan or mortgage-related documents.

2.46. Forward-Looking Statements. No forward-looking statement (within the meaning of Section 27A of the Securities Act and Section 21E of the Exchange Act) contained in the Registration Statement, the Pricing Disclosure Package or the Prospectus has been made or reaffirmed without a reasonable basis or has been disclosed other than in good faith.

2.47. Integration. Neither the Company, nor any of its affiliates, nor any person acting on its or their behalf has, directly or indirectly, made any offers or sales of any security or solicited any offers to buy any security, under circumstances that would cause the Offering to be integrated with prior offerings by the Company for purposes of the Securities Act that would require the registration of any such securities under the Securities Act.

2.48. Confidentiality and Non-Competition. To the Company's knowledge, no director, officer, key employee or consultant of the Company or any Subsidiary is subject to any confidentiality, non-disclosure, non-competition agreement or non-solicitation agreement with any employer (other than the Company) or prior employer that could materially affect his or her ability to be and act in his or her respective capacity of the Company or such Subsidiary or be expected to result in a Material Adverse Change.

2.49. Corporate Records. The minute books of the Company have been made available to the Representative and counsel to the Underwriters and such books (i) contain minutes of all material meetings and actions of the Board of Directors (including each board committee) and stockholders of the Company, and (ii) reflect all material transactions referred to in such minutes.

2.50. Diligence Materials. The Company has provided to the Representative and counsel to the Underwriters all materials required or necessary to respond in all material respects to the diligence request submitted to the Company or Company Counsel by the Representative.

2.51. Stabilization. Neither the Company nor, to its knowledge, any of its employees, directors or stockholders (without the consent of the Representative) has taken, directly or indirectly, any action designed to or that has constituted or that might reasonably be expected to cause or result in, under Regulation M of the Exchange Act, or otherwise, stabilization or manipulation of the price of any security of the Company to facilitate the sale or resale of the Public Securities.

2.52. Non-Contravention of Existing Instruments; No Further Authorizations or Approvals Required. Neither the Company nor any of its subsidiaries (i) is in violation of its articles of association, partnership agreement or operating agreement or similar constitutional or organizational documents, as applicable, or (ii) is in default (or, with the giving of notice or lapse of time, would be in default) ("**Default**") under any indenture, loan, credit agreement, note, lease, license agreement, contract, franchise or other instrument (including, without limitation, any pledge agreement, security agreement, mortgage or other instrument or agreement evidencing, guaranteeing, securing or relating to indebtedness) to which the Company or any of its subsidiaries is a party or by which it or any of them may be bound, or to which any of their respective properties or assets are subject (each, an "**Existing Instrument**"), except for such Defaults as would not reasonably be expected, individually or in the aggregate, to have a Material Adverse Change. The Company's execution, delivery and performance of this Agreement, consummation of the transactions contemplated hereby, by the Deposit Agreement and by the Registration Statement, the Pricing Disclosure Package or the Prospectus and the issuance and sale of the Offered Securities (including the use of proceeds from the sale of the Offered Securities as described in the Registration Statement, the Pricing Disclosure Package or the Prospectus (i) have been duly authorized by all necessary corporate action and will not result in any violation of the provisions of the articles of association, partnership agreement or operating agreement or similar constitutional or organizational documents, as applicable, of the Company or any subsidiary (ii) will not conflict with or constitute a breach of, or Default or a Debt Repayment Triggering Event (as defined below) under, or result in the creation or imposition of any lien, charge or encumbrance upon any property or assets of the Company or any of its subsidiaries pursuant to, or require the consent of any other party to, any Existing Instrument, and (iii) will not result in any violation of any law, administrative regulation or administrative or court decree applicable to the Company or any of its subsidiaries, except in the case of clauses (ii) and (iii), as would not reasonably be expected, individually or in the aggregate, to have a Material Adverse Change. No consent, approval, authorization or other order of, or registration or filing with, any court or other governmental or regulatory authority or agency, is required for the Company's execution, delivery and performance of this Agreement and consummation of the transactions contemplated hereby, by the Deposit Agreement and by the Registration Statement, the Pricing Disclosure Package or the Prospectus, except such as have been obtained or made by the Company and are in full force and effect under the Securities Act and such as may be required under applicable state securities or blue sky laws or FINRA, the Companies Act, the UK Financial Services and Markets Act 2000, as amended, EU Regulation (EU 596/2014) on market abuse (the "**Market Abuse Regulation**"), the Nasdaq, or the UK Financial Conduct Authority. As used herein, a "**Debt Repayment Triggering Event**" means any event or condition which gives, or with the giving of notice or lapse of time would give, the holder of any note, debenture or other evidence of indebtedness (or any person acting on such holder's behalf) the right to require the purchase redemption or repayment of all or a portion of such indebtedness by the Company or any of its subsidiaries.

2.53. Clinical Data and Regulatory Compliance. The preclinical tests and clinical trials, and other studies (collectively, "**studies**") that are described in, or the results of which are referred to in, Registration Statement, the Pricing Disclosure Package or the Prospectus were and, if still pending, are being conducted in all material respects in accordance with applicable laws, rules, regulations and policies of the Food and Drug Administration of the U.S. Department of Health and Human Services (the "**FDA**") or any committee thereof or of any other U.S. or foreign government or drug or medical device regulatory agency, or health care facility Institutional Review Board; each description of the results of such studies is accurate and complete in all material respects and fairly presents the data derived from such studies, and the Company and its subsidiaries have no knowledge of any other studies the results of which are materially inconsistent with, or otherwise call into question, the results described or referred to in the Registration Statement, the Pricing Disclosure Package or the Prospectus; for such studies that have been or are being conducted, the Company and its subsidiaries have made all such filings and obtained all such approvals as may be required by foreign government or drug or medical device regulatory agencies, or foreign health care facility Institutional Review Boards; and no investigational new drug application filed by or on behalf of the Company or any of its subsidiaries with the FDA has been terminated or suspended by the FDA, and neither the FDA nor any applicable foreign regulatory agency has commenced, or, to the knowledge of the Company, threatened to initiate, any action to place a clinical hold order on, or otherwise terminate, delay or suspend, any proposed or ongoing studies conducted or proposed to be conducted by or on behalf of the Company or any of its subsidiaries.

2.54. Corporate Governance. The directors of the Company have considered the compliance by the Company with the provisions of the Companies Act.

2.55. No Public Offering in the United Kingdom or European Economic Area The Company has not made and will not make an offer to the public of the Public Securities in any member state of the European Economic Area or in the United Kingdom.

2.56. Regulatory Compliance. Except as described in the Registration Statement, the Pricing Disclosure Package or the Prospectus, and except as could not, individually or in the aggregate, have or may reasonably be expected to have a Material Adverse Change, the Company and its subsidiaries are, and at all time since inception have been, in compliance with all applicable Health Care Laws, and have not engaged in activities which are, as applicable, cause for false claims liability, civil penalties, or mandatory or permissive exclusion from Medicare, Medicaid, or any other state health care program or federal health care program. For purposes of this Agreement, "**Health Care Laws**" means: the federal Food, Drug and Cosmetic Act (21 U.S.C. § 301 et seq.), the federal Anti-kickback Statute (42 U.S.C. § 1320a-7b(b)), the civil False Claims Act (31 U.S.C. § 3729 et seq.), the federal False Statements Law (42 U.S.C. § 1320a-7b(a)), the Civil Monetary Penalties Law (42 U.S.C. §1320a-7a), all criminal laws relating to health care fraud and abuse, including, but not limited, to 18 U.S.C. §§ 286 and 287, the exclusions law (42 U.S.C. § 1320a-7), the statutes, regulations and directives of Medicare (Title XVIII of the Social Security Act), Medicaid (Title XIX of the Social Security Act) and all other government funded or sponsored healthcare programs, the Health Insurance Portability and Accountability Act of 1996 (42 U.S.C. § 1320d et seq.), as amended by the Health Information Technology for Economic and Clinical Health Act of 2009 (42 U.S.C. §17921 et seq.), the regulations promulgated pursuant to such laws, and all other comparable local, state, federal, national, and foreign laws relating to the regulation of the Company. The Company is not a party to any corporate integrity agreements, monitoring agreements, consent decrees, settlement orders, or similar agreements with or imposed by any governmental authority regarding any alleged non-compliance with applicable Health Care Laws. In addition, none of the Company or its subsidiaries or, to the Company's knowledge, any of their respective directors, officers, employees or agents is or has been debarred, suspended or excluded, or has been convicted of any crime or, to the knowledge of the Company or its subsidiaries, engaged in any conduct that would result in a debarment, suspension or exclusion from any federal or state government health care program or human clinical research, or, to the knowledge of the Company, is subject to any inquiry, investigation, proceeding, or other similar action by a governmental authority that could reasonably be expected to result in any such debarment, suspension, or exclusion.

3. COVENANTS OF THE COMPANY.

The Company covenants and agrees as follows:

3.1. Amendments to Registration Statement. The Company shall deliver to the Representative, at least one (1) Business Day (or such shorter time mutually agreed by the parties hereto) prior to filing, any amendment or supplement to the Registration Statement, the ADS Registration Statement or Prospectus proposed to be filed after the Effective Date and not file any such amendment or supplement to which the Representative shall reasonably object in writing.

3.2. Federal Securities Laws.

3.2.1. Compliance. The Company, subject to Section 3.2.2, shall comply with the requirements of Rule 430A of the Securities Act Regulations, and will notify the Representative promptly, and confirm the notice in writing, (i) when any post-effective amendment to the Registration Statement shall become effective or any amendment or supplement to the Prospectus shall have been filed; (ii) of its receipt of any comments from the Commission; (iii) of any request by the Commission for any amendment to the Registration Statement, the ADS Registration Statement or any amendment or supplement to the Prospectus or for additional information; (iv) of the issuance by the Commission of any stop order suspending the effectiveness of the Registration Statement, the ADS Registration Statement or any post-effective amendment or of any order preventing or suspending the use of any Preliminary Prospectus or the Prospectus, or of the suspension of the qualification of the Public Securities and Representative's Securities for offering or sale in any jurisdiction, or of the initiation or threatening of any proceedings for any of such purposes or of any examination pursuant to Section 8(d) or 8(e) of the Securities Act concerning the Registration Statement; or (v) if the Company becomes the subject of a proceeding under Section 8A of the Securities Act in connection with the Offering of the Public Securities and Representative's Securities. The Company shall effect all filings required under Rule 424(b) of the Securities Act Regulations, in the manner and within the time period required by Rule 424(b) (without reliance on Rule 424(b)(8)), and shall take such steps as it deems necessary to ascertain promptly whether the form of prospectus transmitted for filing under Rule 424(b) was received for filing by the Commission and, in the event that it was not, it will promptly file such prospectus. The Company shall use its best efforts to prevent the issuance of any stop order, prevention or suspension and, if any such order is issued, to obtain the lifting thereof at the earliest possible moment.

3.2.2. Continued Compliance. The Company shall comply with the Securities Act, the Securities Act Regulations, the Exchange Act and the Exchange Act Regulations so as to permit the completion of the distribution of the Public Securities as contemplated in this Agreement and in the Registration Statement, the ADS Registration Statement, the Pricing Disclosure Package and the Prospectus. If at any time when a prospectus relating to the Public Securities is (or, but for the exception afforded by Rule 172 of the Securities Act Regulations ("**Rule 172**"), would be) required by the Securities Act to be delivered in connection with sales of the Public Securities, any event shall occur or condition shall exist as a result of which it is necessary, in the opinion of counsel to the Underwriters or Company Counsel, to (i) amend the Registration Statement or the ADS Registration Statement in order that the Registration Statement or the ADS Registration Statement will not include an untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary to make the statements therein not misleading; (ii) amend or supplement the Pricing Disclosure Package or the Prospectus in order that the Pricing Disclosure Package or the Prospectus, as the case may be, will not include any untrue statement of a material fact or omit to state a material fact necessary in order to make the statements therein not misleading in the light of the circumstances existing at the time it is delivered to a purchaser; or (iii) amend the Registration Statement or amend or supplement the Pricing Disclosure Package or the Prospectus, as the case may be, in order to comply with the requirements of the Securities Act or the Securities Act Regulations, the Company will promptly (A) give the Representative notice of such event; (B) prepare any amendment or supplement as may be necessary to correct such statement or omission or to make the Registration Statement, the ADS Registration Statement, the Pricing Disclosure Package or the Prospectus comply with such requirements and, a reasonable amount of time prior to any proposed filing or use, furnish the Representative with copies of any such amendment or supplement; and (C) file with the Commission any such amendment or supplement; provided that the Company shall not file or use any such amendment or supplement to which the Representative or counsel to the Underwriters shall reasonably object. The Company will furnish to the Underwriters such number of copies of such amendment or supplement as the Underwriters may reasonably request. The Company shall give the Representative notice of its intention to make any such filing from the Applicable Time until the later of the Closing Date and the exercise in full or expiration of the Over-allotment Option specified in Section 1.2 hereof and will furnish the Representative with copies of the related document(s) a reasonable amount of time prior to such proposed filing, as the case may be, and will not file or use any such document to which the Representative or counsel to the Underwriters shall reasonably object.

3.2.3. Exchange Act Registration. For a period of three (3) years after the date of this Agreement, the Company shall use its reasonable best efforts to maintain the registration of the Ordinary Shares under the Exchange Act. For a period of two (2) years after the date of this Agreement, the Company shall not deregister the Ordinary Shares under the Exchange Act without the prior written consent of the Representative.

3.2.4. Free Writing Prospectuses. The Company agrees that, unless it obtains the prior written consent of the Representative, it shall not make any offer relating to the Public Securities that would constitute an Issuer Free Writing Prospectus or that would otherwise constitute a "free writing prospectus," or a portion thereof, required to be filed by the Company with the Commission or retained by the Company under Rule 433; provided that the Representative shall be deemed to have consented to each Issuer General Use Free Writing Prospectus set forth in Schedule 2-B. The Company represents that it has treated or agrees that it will treat each such free writing prospectus consented to, or deemed consented to, by the Representative as an "issuer free writing prospectus," as defined in Rule 433, and that it has complied and will comply with the applicable requirements of Rule 433 with respect thereto, including timely filing with the Commission where required, legending and record keeping. If at any time following issuance of an Issuer Free Writing Prospectus there occurred or occurs an event or development as a result of which such Issuer Free Writing Prospectus conflicted or would conflict with the information contained in the Registration Statement or included or would include an untrue statement of a material fact or omitted or would omit to state a material fact necessary in order to make the statements therein, in the light of the circumstances existing at that subsequent time, not misleading, the Company will promptly notify the Representative and will promptly amend or supplement, at its own expense, such Issuer Free Writing Prospectus to eliminate or correct such conflict, untrue statement or omission.

3.2.5. Testing-the-Waters Communications. If at any time following the distribution of any Written Testing-the-Waters Communication there occurred or occurs an event or development as a result of which such Written Testing-the-Waters Communication included or would include an untrue statement of a material fact or omitted or would omit to state a material fact necessary in order to make the statements therein, in the light of the circumstances existing at that subsequent time, not misleading, the Company shall promptly notify the Representative and shall promptly amend or supplement, at its own expense, such Written Testing-the-Waters Communication to eliminate or correct such untrue statement or omission.

3.3. Delivery to the Underwriters of Registration Statements. The Company has delivered or made available or shall deliver or make available to the Representative and counsel to the Underwriters, without charge, conformed copies of the Registration Statement as originally filed and each amendment thereto (including exhibits filed therewith) and signed copies of all consents and certificates of experts, and will also deliver to each Underwriter, without charge, a conformed copy of the Registration Statement as originally filed and each amendment thereto (without exhibits) upon receipt of a written request therefor from such Underwriter. The copies of the Registration Statement and each amendment thereto furnished to the Underwriters will be identical to the electronically transmitted copies thereof filed with the Commission pursuant to EDGAR, except to the extent permitted by Regulation S-T.

3.4. Delivery to the Underwriters of Prospectuses. The Company has delivered or made available or will deliver or make available to each Underwriter, without charge, as many copies of each Preliminary Prospectus as such Underwriter reasonably requested, and the Company hereby consents to the use of such copies for purposes permitted by the Securities Act. The Company will furnish to each Underwriter, without charge, during the period when a prospectus relating to the Public Securities is (or, but for the exception afforded by Rule 172 of the Securities Act Regulations, would be) required to be delivered under the Securities Act, such number of copies of the Prospectus (as amended or supplemented) as such Underwriter may reasonably request. The Prospectus and any amendments or supplements thereto furnished to the Underwriters will be identical to the electronically transmitted copies thereof filed with the Commission pursuant to EDGAR, except to the extent permitted by Regulation S-T.

3.5. Effectiveness and Events Requiring Notice to the Representative. The Company shall use its best efforts to cause the Registration Statement to remain effective with a current prospectus for at least nine (9) months after the Applicable Time, and shall notify the Representative promptly and confirm the notice in writing: (i) of the effectiveness of the Registration Statement and any amendment thereto; (ii) of the issuance by the Commission of any stop order or of the initiation, or the threatening, of any proceeding for that purpose; (iii) of the issuance by any state securities commission of any proceedings for the suspension of the qualification of the Public Securities for offering or sale in any jurisdiction or of the initiation, or the threatening, of any proceeding for that purpose; (iv) of the mailing and delivery to the Commission for filing of any amendment or supplement to the Registration Statement or Prospectus; (v) of the receipt of any comments or request for any additional information from the Commission; and (vi) of the happening of any event during the period described in this Section 3.5 that, in the judgment of the Company, makes any statement of a material fact made in the Registration Statement, the Pricing Disclosure Package or the Prospectus untrue or that requires the making of any changes in (a) the Registration Statement in order to make the statements therein not misleading, or (b) in the Pricing Disclosure Package or the Prospectus in order to make the statements therein, in light of the circumstances under which they were made, not misleading. If the Commission or any state securities commission shall enter a stop order or suspend such qualification at any time, the Company shall use its commercially reasonable efforts to obtain promptly the lifting of such order.

3.6. Review of Financial Statements. For a period of three (3) years after the date of this Agreement, the Company, at its expense, shall cause its regularly engaged independent registered public accounting firm to review (but not audit) the Company's financial statements for each of the three fiscal quarters immediately preceding the announcement of any quarterly financial information.

3.7. Listing. The Company shall use its reasonable best efforts to maintain the listing of the Securities on the Exchange until at least three (3) years after the date of this Agreement.

3.8. Financial Public Relations. Within six (6) months from the Effective Date, the Company shall have retained a financial public relations firm reasonably acceptable to the Representative and the Company, which firm shall be experienced in assisting issuers in initial public offerings of securities and in their relations with their security holders, and shall retain such firm or another firm reasonably acceptable to the Representative for a period of not less than two (2) years after the Effective Date.

3.9. Reports to the Representative.

3.9.1. Periodic Reports, etc. For a period of three (3) years after the date of this Agreement, the Company shall furnish or make available to the Representative copies of such financial statements and other periodic and special reports as the Company from time to time furnishes generally to holders of any class of its securities and also promptly furnish to the Representative: (i) a copy of each periodic report the Company shall be required to file with the Commission under the Exchange Act and the Exchange Act Regulations; (ii) a copy of every press release and every news item and article with respect to the Company or its affairs which was released by the Company; (iii) a copy of each Form 6-K prepared and filed by the Company; (iv) a copy of each registration statement filed by the Company under the Securities Act; (v) a copy of each report or other communication furnished to stockholders and (vi) such additional documents and information with respect to the Company and the affairs of any future subsidiaries of the Company as the Representative may from time to time reasonably request. Documents filed with the Commission pursuant to its EDGAR system or press releases shall be deemed to have been delivered to the Representative pursuant to this Section 3.9.1. Any documents not filed with the Commission pursuant to its EDGAR system shall be delivered to jrallo@efhuttongroup.com, with a copy to dboral@efhuttongroup.com.

3.9.2. Transfer Agent; Transfer Sheets. For a period of three (3) years after the date of this Agreement, the Company shall retain a transfer agent and registrar acceptable to the Representative (the "**Transfer Agent**") and shall furnish to the Representative at the Company's sole cost and expense such transfer sheets of the Company's securities as the Representative may reasonably request, including the daily and monthly consolidated transfer sheets of the Transfer Agent and DTC. Computershare Investor Services plc is acceptable to the Representative to act as Transfer Agent for the Ordinary Shares.

3.9.3. Depositary. For a period of three (3) years after the date of this Agreement, the Company shall retain a depositary for the ADSs acceptable to the Representative. The Bank of New York Mellon is acceptable to the Representative to act as depositary.

3.9.4. Trading Reports. For a period of three (3) years after the date of this Agreement, during such time as any of the Public Securities are listed on the Exchange, the Company shall provide to the Representative, at the Company's expense, such reports published by the Exchange relating to price trading of the Public Securities, as the Representative shall reasonably request.

3.10. Payment of Expenses

3.10.1. General Expenses Related to the Offering. The Company hereby agrees to pay on each of the Closing Date and the Option Closing Date, if any, to the extent not paid at the Closing Date, all expenses related to the Offering or otherwise incident to the performance of the obligations of the Company under this Agreement, including, but not limited to: (a) all filing fees and communication expenses relating to the registration of the Public Securities and Representative's Securities with the Commission; (b) all Public Filing System filing fees associated with the review of the Offering by FINRA; (c) all fees and expenses relating to the listing of such Public Securities and Representative's Securities on the Exchange and such other stock exchanges as the Company and the Representative together determine, including any fees charged by DTC; (d) all fees, expenses and disbursements relating to background checks of the Company's officers and directors; (e) all fees, expenses and disbursements relating to the registration or qualification of the Public Securities under the "blue sky" securities laws of such states and other jurisdictions as the Representative may reasonably designate; (f) all fees, expenses and disbursements relating to the registration, qualification or exemption of the Public Securities under the securities laws of such foreign jurisdictions as the Representative may reasonably designate; (g) the costs of all mailing and printing of the underwriting documents (including, without limitation, the Underwriting Agreement, any Blue Sky Surveys and, if appropriate, any Agreement Among Underwriters, Selected Dealers' Agreement, Underwriters' Questionnaire and Power of Attorney), Registration Statements, Prospectuses and all amendments, supplements and exhibits thereto and as many preliminary and final Prospectuses as the Representative may reasonably deem necessary; (h) the costs and expenses of a public relations firm; (i) the costs of preparing, printing and delivering certificates representing the Public Securities; (j) fees and expenses of the transfer agent for the Ordinary Shares; (k) fees and expenses of the warrant agent under the Warrant Agent Agreement and the fees and expenses of the Depositary under the Deposit Agreement; (l) stock transfer and/or stamp taxes, if any, payable upon the transfer of securities from the Company to the Underwriters; (m) the fees and expenses of the Company's accountants; (n) the fees and expenses of the Company's legal counsel and other agents and representatives; (o) the fees and expenses of counsel to the Underwriters; (p) the cost associated with the Underwriters' use of Ipreo's book-building, prospectus tracking and compliance software for the Offering; (q) to the extent approved by the Company in writing, the costs associated with post-Closing advertising the Offering in the national editions of the Wall Street Journal and New York Times; and (r) the Underwriters' actual accountable expenses for the Offering, including, without limitation related to the "road show." Notwithstanding the foregoing, the Company's obligations to reimburse the Representative for any out-of-pocket expenses actually incurred as set forth in the preceding sentence shall not exceed $150,000 in the aggregate for legal fees and related expenses. The Representative may deduct from the net proceeds of the Offering payable to the Company on the Closing Date, or the Option Closing Date, if any, the expenses set forth herein to be paid by the Company to the Underwriters, less the Advance (as such term is defined in Section 8.3 hereof).

3.11. Application of Net Proceeds. The Company shall apply the net proceeds from the Offering received by it in a manner consistent with the application thereof described under the caption "Use of Proceeds" in the Registration Statement, the Pricing Disclosure Package and the Prospectus.

3.12. Delivery of Earnings Statements to Security Holders. The Company shall make generally available to its security holders as soon as practicable, but not later than the first day of the sixteenth (16th) full calendar month following the date of this Agreement, an earnings statement (which need not be certified by an independent registered public accounting firm unless required by the Securities Act or the Securities Act Regulations, but which shall satisfy the provisions of Rule 158(a) under Section 11(a) of the Securities Act) covering a period of at least twelve (12) consecutive months beginning after the date of this Agreement.

3.13. Stabilization. Neither the Company nor, to its knowledge, any of its employees, directors or stockholders has taken or shall take, directly or indirectly, any action designed to or that has constituted or that might reasonably be expected to cause or result in, under Regulation M under the Exchange Act, or otherwise, stabilization or manipulation of the price of any security of the Company to facilitate the sale or resale of the Public Securities.

3.14. Internal Controls. For a period of one (1) year after the date of this Agreement, the Company shall maintain a system of internal accounting controls sufficient to provide reasonable assurances that: (i) transactions are executed in accordance with management's general or specific authorization; (ii) transactions are recorded as necessary in order to permit preparation of financial statements in accordance with GAAP and to maintain accountability for assets; (iii) access to assets is permitted only in accordance with management's general or specific authorization; and (iv) the recorded accountability for assets is compared with existing assets at reasonable intervals and appropriate action is taken with respect to any differences.

3.15. Accountants. As of the date of this Agreement, the Company has retained an independent registered public accounting firm, as required by the Securities Act and the Securities Act Regulations and the Public Company Accounting Oversight Board, reasonably acceptable to the Representative, and the Company shall continue to retain a nationally recognized independent registered public accounting firm for a period of at least three (3) years after the date of this Agreement. The Representative acknowledges that Ernst & Young LLP, Edinburgh, Scotland, United Kingdom is acceptable to the Representative.

3.16. FINRA. For a period of 90 days from the later of the Closing Date or the Option Closing Date, the Company shall advise the Representative (who shall make an appropriate filing with FINRA) if it is or becomes aware that (i) any officer or director of the Company, (ii) any beneficial owner of 5% or more of any class of the Company's securities or (iii) any beneficial owner of the Company's unregistered equity securities which were acquired during the 180 days immediately preceding the filing of the Registration Statement is or becomes an affiliate or associated person of a FINRA member participating in the Offering (as determined in accordance with the rules and regulations of FINRA).

3.17. No Fiduciary Duties. The Company acknowledges and agrees that the Underwriters' responsibility to the Company is solely contractual in nature and that none of the Underwriters or their affiliates or any selling agent shall be deemed to be acting in a fiduciary capacity, or otherwise owes any fiduciary duty to the Company or any of its affiliates in connection with the Offering and the other transactions contemplated by this Agreement.

3.18. Company Lock-Up Agreement. The Company, on behalf of itself and any successor entity, agrees that without the prior written consent of the Representative, it will not, for a period of one hundred fifty (150) days after the date of this Agreement (the "**Lock-Up Period**"), (i) offer, pledge, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract act to sell, grant any option, right or warrant to purchase, lend, or otherwise transfer or dispose of, directly or indirectly, any shares of capital stock of the Company or any securities convertible into or exercisable or exchangeable for shares of capital stock of the Company; (ii) file or cause to be filed any registration statement with the Commission relating to the offering of any shares of capital stock of the Company or any securities convertible into or exercisable or exchangeable for shares of capital stock of the Company other than a registration statement on Form S-4 or S-8 or any analogous form for foreign private issuers for so long as the Company qualifies as such; (iii) complete any offering of debt securities of the Company, other than entering into a line of credit or senior credit facility with a traditional bank or other lending institution; or (iv) enter into any swap or other arrangement that transfers to another, in whole or in part, any of the economic consequences of ownership of capital stock of the Company, whether any such transaction described in clause (i), (ii), (iii), or (iv) above is to be settled by delivery of shares of capital stock of the Company or such other securities, in cash or otherwise.

The restrictions contained in this Section 3.18 shall not apply to (i) the Primary Securities to be sold hereunder, as well as the Representative's Warrants and any Ordinary Shares represented by ADSs into which the Warrants and Representative's Warrants are exercisable; (ii) the issuance by the Company of Ordinary Shares upon the exercise of a stock option or warrant, the conversion of a security, or pursuant to a contractual obligation, in each case outstanding on the date hereof, provided that such options, warrants, securities or contracts are disclosed in the Registration Statement, the Pricing Disclosure Package or the Prospectus and have not been amended since the date of this Agreement to increase the number of such securities or to decrease the exercise price, exchange price or conversion price of such securities or to extend the term of such securities, (iii) the issuance of Ordinary Shares issued as part of the purchase price in connection with the acquisitions or strategic transactions, provided certain conditions are met, or (iv) the issuance by the Company of any Ordinary Shares or standard options to purchase Ordinary Shares to directors, officers, employees or consultants of the Company or its Subsidiaries in their capacity as such pursuant to an Approved Stock Plan (as defined below). "**Approved Stock Plan**" means any employee benefit plan which has been approved by the board of directors of the Company prior to or subsequent to the date hereof pursuant to which Ordinary Shares and standard options to purchase Ordinary Shares may be issued to any employee, officer, director or consultant for services provided to the Company in their capacity as such.

3.19. Release of D&O Lock-up Period. If the Representative, in its sole discretion, agrees to release or waive the restrictions set forth in the Lock-Up Agreements described in Section 2.24 hereof for an officer or director or 5% or greater shareholder of the Company and provides the Company with notice of the impending release or waiver at least three (3) Business Days before the effective date of the release or waiver, the Company agrees to announce the impending release or waiver by a press release substantially in the form of Exhibit C hereto through a major news service at least two (2) Business Days before the effective date of the release or waiver.

3.20. Blue Sky Qualifications. The Company shall use its best efforts, in cooperation with the Underwriters, if necessary, to qualify the Public Securities for offering and sale under the applicable securities laws of such states and other jurisdictions (domestic or foreign) as the Representative may designate and to maintain such qualifications in effect so long as required to complete the distribution of the Public Securities; provided, however, that the Company shall not be obligated to file any general consent to service of process or to qualify as a foreign corporation or as a dealer in securities in any jurisdiction in which it is not so qualified or to subject itself to taxation in respect of doing business in any jurisdiction in which it is not otherwise so subject.

3.21. Reporting Requirements. The Company, during the period when a prospectus relating to the Public Securities is (or, but for the exception afforded by Rule 172, would be) required to be delivered under the Securities Act, will file all documents required to be filed with the Commission pursuant to the Exchange Act within the time periods required by the Exchange Act and Exchange Act Regulations. Additionally, the Company shall report the use of proceeds from the issuance of the Public Securities as may be required under Rule 463 under the Securities Act Regulations.

3.22. Emerging Growth Company Status. The Company shall promptly notify the Representative if the Company ceases to be an "emerging growth company" within the meaning of Section 2(a) of the Securities Act at any time prior to the later of (i) completion of the distribution of the Public Securities and (ii) fifteen (15) days following the completion of the Lock-Up Period.

3.23. Foreign Private Issuer Status. The Company shall promptly notify the Representative if the Company ceases to be a "foreign private issuer" within the meaning of Rule 405 under the Securities Act and Rule 3b-4 under the Exchange Act at any time prior to the later of (i) completion of the distribution of the Public Securities and (ii) fifteen (15) days following the completion of the Lock-Up Period.

3.24. Press Releases. Prior to the Closing Date and any Option Closing Date, the Company shall not issue any press release or other communication directly or indirectly or hold any press conference with respect to the Company, its condition, financial or otherwise, or earnings, business affairs or business prospects (except for routine oral marketing communications in the ordinary course of business and consistent with the past practices of the Company and of which the Representative is notified), without the prior written consent of the Representative, which consent shall not be unreasonably withheld, unless in the judgment of the Company and its counsel, and after notification to the Representative, such press release or communication is required by law.

3.25. Sarbanes-Oxley. For a period of one (1) year after the date of this Agreement, the Company shall at all times comply in all material respects with all applicable provisions of the Sarbanes-Oxley Act in effect from time to time.

3.26. IRS Forms. If requested by the Representative, the Company shall deliver to each Underwriter (or its agent), prior to or at the Closing Date, a properly completed and executed Internal Revenue Service ("**IRS**") Form W-9 or an IRS Form W-8, as appropriate, together with all required attachments to such form.

3.27. Warrant Agent. For so long as the Warrants are outstanding, the Company will maintain the Warrant Agent Agreement in full force and effect with the Warrant Agent or a warrant agent of similar competence and quality. The Firm Warrants, and, if applicable, Option Warrants, will be issued in accordance with the Warrant Agent Agreement.

4. CONDITIONS OF UNDERWRITERS' OBLIGATIONS.

The obligations of the Underwriters to purchase and pay for the Public Securities, as provided herein, shall be subject to (i) the continuing accuracy of the representations and warranties of the Company as of the date hereof and as of each of the Closing Date and the Option Closing Date, if any; (ii) the accuracy of the statements of officers of the Company made pursuant to the provisions hereof; (iii) the performance by the Company of its obligations hereunder; and (iv) the following conditions:

4.1. Regulatory Matters.

4.1.1. Effectiveness of Registration Statement; Rule 430A Information. The Registration Statement and the ADS Registration Statement have each become effective not later than 5:30 p.m., New York City time, on the date of this Agreement or such later date and time as shall be consented to in writing by the Representative, and, at each of the Closing Date and any Option Closing Date, no stop order suspending the effectiveness of the Registration Statement or any post-effective amendment thereto shall have been issued under the Securities Act, no order preventing or suspending the use of any Preliminary Prospectus or the Prospectus shall have been issued and no proceedings for any of those purposes shall have been instituted or are pending or, to the Company's knowledge, contemplated by the Commission. The Company has complied with each request (if any) from the Commission for additional information. A prospectus containing the Rule 430A Information shall have been filed with the Commission in the manner and within the time frame required by Rule 424(b) under the Securities Act Regulations or a post-effective amendment providing such information shall have been filed with, and declared effective by, the Commission in accordance with the requirements of Rule 430A under the Securities Act Regulations.

4.1.2. FINRA Clearance. On or before the date of this Agreement, the Representative shall have received clearance from FINRA as to the amount of compensation allowable or payable to the Underwriters as described in the Registration Statement.

4.1.3. Exchange Clearance. On the Closing Date, ADSs shall have been approved for listing on the Exchange, subject only to official notice of issuance.

4.2. Company Counsel Matters.

4.2.1. Closing Date Opinions of Counsel for the Company. On the Closing Date, the Representative shall have received (i) the favorable opinion and negative assurance letter of Golenbock Eiseman Assor Bell & Peskoe LLP ("**Company Counsel**"), counsel to the Company as to law of the United States and of the State of New York, dated the Closing Date and addressed to the Representative as representative of the Underwriters, in the substantially the form of Exhibits D and E hereto, respectively and (ii) the opinion and negative assurance letter of Addleshaw Goddard ('**Scottish Counsel**"), counsel for the Company as to the law of Scotland, dated the Closing Date and addressed to the Representative as representative of the Underwriters, substantially in the form of Exhibits E and F hereto.

4.2.2. Option Closing Date Opinions of Counsel for the Company. On the Option Closing Date, if any, the Representative shall have received (i) the favorable opinion and negative assurance letter of Company Counsel, dated the Option Closing Date, addressed to the Representative and in form and substance satisfactory to the Representative, confirming as of the Option Closing Date, the statements made by such counsel in its opinion and negative assurance letter delivered on the Closing Date and (ii) the favorable opinion and negative assurance letter of Scottish Counsel dated the Option Closing Date, addressed to the Representative and in form and substance satisfactory to the Representative, confirming as of the Option Closing Date, the statements made by such counsel in its opinion delivered on the Closing Date.

4.2.3. Opinions of Patent Counsel for the Company. On each of the Closing Date and the Option Closing Date, if any, the Representative shall have received the opinion of Murgitroyd & Company Limited, patent counsel for the Company, dated as of such dates, addressed to the Representative and in form and substance satisfactory to the Representative.

4.3. Comfort Letters.

4.3.1. Comfort Letter. At the time this Agreement is executed the Representative shall have received a "cold comfort letter" from the Auditor containing statements and information of the type customarily included in accountants' comfort letters with respect to the financial statements and certain financial information contained in the Registration Statement, the Pricing Disclosure Package and the Prospectus, addressed to the Representative and in form and substance satisfactory in all respects to the Representative and to counsel to the Underwriters, dated as of the date of this Agreement.

4.3.2. Bring-down Comfort Letters. At each of the Closing Date and the Option Closing Date, if any, the Representative shall have received from the Auditor a letter, dated as of the Closing Date or the Option Closing Date, as applicable, to the effect that the Auditors reaffirms the statements made in the letter furnished pursuant to Section 4.3.1.

4.4. Officers' Certificates.

4.4.1. Officers' Certificate. The Company shall have furnished to the Representative a certificate, dated the Closing Date and any Option Closing Date (if such date is other than the Closing Date), of its Chief Executive Officer or President, and its Chief Financial Officer stating that on behalf of the Company and not in an individual capacity that (i) such officers have examined the Registration Statement, the ADS Registration Statement, the Pricing Disclosure Package, any Issuer Free Writing Prospectus and the Prospectus and, in their opinion, the Registration Statement and each amendment thereto after the Effective Date, as of the Applicable Time and as of the Closing Date (or any Option Closing Date if such date is other than the Closing Date) did not include any untrue statement of a material fact and did not omit to state a material fact required to be stated therein or necessary to make the statements therein not misleading, and the Pricing Disclosure Package, as of the Applicable Time and as of the Closing Date (or any Option Closing Date if such date is other than the Closing Date), any Issuer Free Writing Prospectus as of its date and as of the Closing Date (or any Option Closing Date if such date is other than the Closing Date), the Prospectus and each amendment or supplement thereto after the Effective Date, as of the respective date thereof and as of the Closing Date, did not include any untrue statement of a material fact and did not omit to state a material fact necessary in order to make the statements therein, in the light of the circumstances in which they were made, not misleading, (ii) to their knowledge after reasonable investigation, as of the Closing Date (or any Option Closing Date if such date is other than the Closing Date), the representations and warranties of the Company in this Agreement are true and correct and the Company has complied with all agreements and satisfied all conditions on its part to be performed or satisfied hereunder at or prior to the Closing Date (or any Option Closing Date if such date is other than the Closing Date), and (iii) there has not been, subsequent to the date of the most recent audited financial statements included in the Pricing Disclosure Package, a Material Adverse Change.

4.4.2. Secretary's Certificate. At each of the Closing Date and the Option Closing Date, if any, the Representative shall have received a certificate of the Company signed by the Secretary of the Company, dated the Closing Date and any Option Closing Date (if such date is other than the Closing Date), certifying on behalf of the Company and not in an individual capacity: (i) that each of the Memorandum and Articles of the Company is true and complete, has not been modified and is in full force and effect; (ii) that the resolutions of the Company's Board of Directors relating to the Offering are in full force and effect and have not been modified; (iii) as to the accuracy and completeness of all correspondence between the Company or its counsel and the Commission; and (iv) as to the incumbency of the officers of the Company. The documents referred to in such certificate shall be attached to such certificate.

4.5. Depositary Matters.

4.5.1. Opinions of Counsel to the Depositary. On each of the Closing Date and the Option Closing Date, if any, the Representative shall have received an opinion, dated as of such dates, of Emmet, Marvin & Martin, LLP, counsel for the Depositary, reasonably satisfactory in form and substance to the Representative;

4.5.2. Depositary Certificate. The Depositary shall have furnished or caused to be furnished to the Representative a certificate of one of its authorized officers reasonably satisfactory to the Representative with respect to the deposit with the Depositary of the Ordinary Shares and the issuance of the ADSs representing the Ordinary Shares pursuant to the Deposit Agreement to the DTC Participant Account and such other matters related thereto as the Representative may reasonably request;

4.6. No Material Changes. Prior to and on each of the Closing Date and each Option Closing Date, if any: (i) there shall have been no Material Adverse Change in the condition (financial or otherwise), results of operations, business, assets or prospects of the Company from the latest dates as of which such condition is set forth in the Registration Statement, the Pricing Disclosure Package and the Prospectus; (ii) no action, suit or proceeding, at law or in equity, shall have been pending or threatened against the Company or any Insider before or by any court or federal or state commission, board or other administrative agency wherein an unfavorable decision, ruling or finding may reasonably be expected to result in a Material Adverse Change, except as set forth in the Registration Statement, the Pricing Disclosure Package and the Prospectus; (iii) no stop order shall have been issued under the Securities Act and no proceedings therefor shall have been initiated or threatened by the Commission; and (iv) the Registration Statement, the Pricing Disclosure Package and the Prospectus and any amendments or supplements thereto shall contain all material statements which are required to be stated therein in accordance with the Securities Act and the Securities Act Regulations and shall conform in all material respects to the requirements of the Securities Act and the Securities Act Regulations, and neither the Registration Statement, the Pricing Disclosure Package nor the Prospectus nor any amendment or supplement thereto shall contain any untrue statement of a material fact or omit to state any material fact required to be stated therein or necessary to make the statements therein, in light of the circumstances under which they were made, not misleading.

4.7. No Material Misstatement or Omission. The Underwriters shall not have discovered and disclosed to the Company on or prior to the Closing Date and any Option Closing Date that the Registration Statement or any amendment or supplement thereto contains an untrue statement of a fact which, in the opinion of counsel to the Underwriters, is material or omits to state any fact which, in the opinion of such counsel, is material and is required to be stated therein or is necessary to make the statements therein not misleading, or that the Registration Statement, the Pricing Disclosure Package, any Issuer Free Writing Prospectus or the Prospectus or any amendment or supplement thereto contains an untrue statement of fact which, in the opinion of counsel to the Underwriters, is material or omits to state any fact which, in the opinion of counsel to the Underwriters, is material and is necessary in order to make the statements, in the light of the circumstances under which they were made, not misleading.

4.8. Corporate Proceedings. All corporate proceedings and other legal matters incident to the authorization, form and validity of each of this Agreement, the Public Securities, the Registration Statement, the Pricing Disclosure Package, each Issuer Free Writing Prospectus, if any, and the Prospectus and all other legal matters relating to this Agreement, the Representative's Warrant Agreement, the Warrant Agent Agreement, the Depositary Agreement and the transactions contemplated hereby and thereby shall be reasonably satisfactory in all material respects to counsel to the Underwriters, and the Company shall have furnished to such counsel all documents and information that they may reasonably request to enable them to pass upon such matters.

4.9. Delivery of Agreements.

4.9.1. Lock-Up Agreements. On or before the date of this Agreement, the Company shall have delivered to the Representative executed copies of the Lock-Up Agreements from each of the persons listed in Schedule 3 hereto.

4.9.2. Other Agreements. On the Closing Date, the Company shall have delivered to the Representative executed copies of Representative's Warrant Agreement, the Warrant Agent Agreement and the Deposit Agreement.

4.10. Additional Documents. At the Closing Date and at each Option Closing Date (if any) counsel to the Underwriters shall have been furnished with such documents and opinions as they may require for the purpose of enabling counsel to the Underwriters to deliver an opinion to the Underwriters, or in order to evidence the accuracy of any of the representations or warranties, or the fulfillment of any of the conditions, herein contained; and all proceedings taken by the Company in connection with the issuance and sale of the Public Securities and Representative's Securities as herein contemplated shall be satisfactory in form and substance to the Representative and counsel to the Underwriters.

5. INDEMNIFICATION.

5.1. Indemnification of the Underwriters.

5.1.1. General. The Company shall indemnify and hold harmless each Underwriter, its affiliates and each of its and their respective directors, officers, members, employees, representatives, partners, shareholders, affiliates, counsel and agents and each person, if any, who controls any such Underwriter within the meaning of Section 15 of the Securities Act or Section 20 of the Exchange Act (collectively the "**Underwriter Indemnified Parties**," and each an "**Underwriter Indemnified Party**"), against any and all loss, liability, claim, damage and expense whatsoever (including but not limited to any and all legal or other expenses reasonably incurred in investigating, preparing or defending against any litigation, commenced or threatened, or any claim whatsoever, whether arising out of any action between any of the Underwriter Indemnified Parties and the Company or between any of the Underwriter Indemnified Parties and any third party, or otherwise) to which they or any of them may become subject under the Securities Act, the Exchange Act or any other statute or at common law or otherwise or under the laws of foreign countries, arising out of or based upon any untrue statement or alleged untrue statement of a material fact contained in (i) the Registration Statement, the Pricing Disclosure Package, the Preliminary Prospectus, the Prospectus or any Issuer Free Writing Prospectus (as from time to time each may be amended and supplemented); (ii) any materials or information provided to investors by, or with the approval of, the Company in connection with the marketing of the Offering, including any "road show" or investor presentations made to investors by the Company (whether in person or electronically); or (iii) any application or other document or written communication (in this Section 5, collectively called "**application**") executed by the Company or based upon written information furnished by the Company in any jurisdiction in order to qualify the Public Securities and the Representative's Warrant and the Ordinary Shares represented by ADSs for which the Representative's Warrant is exercisable under the securities laws thereof or filed with the Commission, any state securities commission or agency, the Exchange or any other national securities exchange; or the omission or alleged omission therefrom of a material fact required to be stated therein or necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading, unless such statement or omission was made in reliance upon, and in conformity with, the Underwriters' Information. With respect to any untrue statement or omission or alleged untrue statement or omission made in the Pricing Disclosure Package, the indemnity agreement contained in this Section 5.1.1 shall not inure to the benefit of any Underwriter Indemnified Party to the extent that any loss, liability, claim, damage or expense of such Underwriter Indemnified Party (a) is based on the Underwriters' Information, (b) results from the fact that a copy of the Prospectus was not given or sent to the person asserting any such loss, liability, claim or damage at or prior to the written confirmation of sale of the Public Securities to such person as required by the Securities Act and the Securities Act Regulations, and if the untrue statement or omission has been corrected in the Prospectus, unless such failure to deliver the Prospectus was a result of non-compliance by the Company with its obligations under Section 3.3 hereof, or (c) is found in a final, non-appealable judgment of a court of competent jurisdiction to have resulted primarily from the willful misconduct or gross negligence of such Underwriter Indemnified Party.

5.1.2. Procedure. If any action is brought against an Underwriter Indemnified Party in respect of which indemnity may be sought against the Company pursuant to Section 5.1.1, such Underwriter Indemnified Party shall promptly notify the Company in writing of the institution of such action and the Company shall be entitled to participate therein and, to the extent that it wishes, jointly with any other similarly notified indemnifying party, to assume the defense of such action, including the employment and fees of counsel (subject to the reasonable approval of such Underwriter Indemnified Party) and payment of actual expenses. Such Underwriter Indemnified Party shall have the right to employ its or their own counsel in any such case, but the fees and expenses of such counsel shall be at the expense of such Underwriter Indemnified Party unless (i) the employment of such counsel at the expense of the Company shall have been authorized in writing by the Company in connection with the defense of such action, or (ii) the Company shall not have employed counsel to have charge of the defense of such action, or (iii) the action includes both the Company and the indemnified party as defendants and such indemnified party or parties shall have been advised by its counsel in writing that there may be defenses available to it or them which are different from or additional to those available to the Company which makes it impossible or inadvisable for the Company and such indemnified party to be represented in the action by the same counsel (in which case the Company shall not have the right to direct the defense of such action on behalf of the indemnified party), in any of which events the reasonable fees and expenses of not more than one additional firm of attorneys selected by the Underwriter Indemnified Parties who are party to such action (in addition to local counsel) shall be borne by the Company. Notwithstanding anything to the contrary contained herein, if any Underwriter Indemnified Party shall assume the defense of such action as provided above, the Company shall have the right to approve the terms of any settlement of such action, which approval shall not be unreasonably withheld.

5.2. Indemnification of the Company. Each Underwriter, severally and not jointly, shall indemnify and hold harmless the Company, its directors, its officers who signed the Registration Statement and persons who control the Company within the meaning of Section 15 of the Securities Act or Section 20 of the Exchange Act against any and all loss, liability, claim, damage and expense described in the foregoing indemnity from the Company to the several Underwriters, as incurred, but only with respect to such losses, liabilities, claims, damages and expenses (or actions in respect thereof) which arise out of or are based upon untrue statements or omissions made in the Registration Statement, any Preliminary Prospectus, the Pricing Disclosure Package or Prospectus or any amendment or supplement thereto or in any application, in reliance upon, and in strict conformity with, the Underwriters' Information. In case any action shall be brought against the Company or any other person so indemnified based on any Preliminary Prospectus, the Registration Statement, the Pricing Disclosure Package or Prospectus or any amendment or supplement thereto or any application, and in respect of which indemnity may be sought against any Underwriter, such Underwriter shall have the rights and duties given to the Company, and the Company and each other person so indemnified shall have the rights and duties given to the several Underwriters by the provisions of Section 5.1.2. The Company agrees promptly to notify the Representative of the commencement of any litigation or proceedings against the Company or any of its officers, directors or any person, if any, who controls the Company within the meaning of Section 15 of the Securities Act or Section 20 of the Exchange Act, in connection with the issuance and sale of the Public Securities or in connection with the Registration Statement, the Pricing Disclosure Package, the Prospectus or any Issuer Free Writing Prospectus.

5.3. Contribution.

5.3.1. Contribution Rights. If the indemnification provided for in this Section 5 shall for any reason be unavailable to or insufficient to hold harmless an indemnified party under Section 5.1 or 5.2 in respect of any loss, claim, damage or liability, or any action in respect thereof, referred to therein, then each indemnifying party shall, in lieu of indemnifying such indemnified party, contribute to the amount paid or payable by such indemnified party as a result of such loss, claim, damage or liability, or action in respect thereof, (i) in such proportion as shall be appropriate to reflect the relative benefits received by the Company, on the one hand, and each of the Underwriters, on the other hand, from the Offering, or (ii) if the allocation provided by clause (i) above is not permitted by applicable law, in such proportion as is appropriate to reflect not only the relative benefits referred to in clause (i) above but also the relative fault of the Company, on the one hand, and the Underwriters, on the other, with respect to the statements or omissions that resulted in such loss, claim, damage or liability, or action in respect thereof, as well as any other relevant equitable considerations. The relative benefits received by the Company, on the one hand, and the Underwriters, on the other, with respect to such Offering shall be deemed to be in the same proportion as the total proceeds from the Offering purchased under this Agreement (before deducting expenses) received by the Company bear to the total underwriting discount and commissions received by the Underwriters in connection with the Offering, in each case as set forth in the table on the cover page of the Prospectus. The relative fault of the Company, on the one hand, and the Underwriters, on the other, shall be determined by reference to, among other things, whether the untrue or alleged untrue statement of a material fact or the omission or alleged omission to state a material fact relates to information supplied by the Company, on the one hand, or the Underwriters, on the other, the intent of the parties and their relative knowledge, access to information and opportunity to correct or prevent such untrue statement, omission, act or failure to act; provided that the parties hereto agree that the written information furnished to the Company through the Representative by or on behalf of any Underwriter for use in any Preliminary Prospectus, any Registration Statement or the Prospectus, or in any amendment or supplement thereto, consists solely of the Underwriters' Information. The Company and the Underwriters agree that it would not be just and equitable if contributions pursuant to this Section 5.3.1 were to be determined by pro rata allocation or by any other method of allocation that does not take into account the equitable considerations referred to herein. The amount paid or payable by an indemnified party as a result of the loss, claim, damage, expense, liability, action, investigation or proceeding referred to above in this Section 5.3.1 shall be deemed to include, for purposes of this Section 5.3.1, any legal or other expenses reasonably incurred by such indemnified party in connection with investigating, preparing to defend or defending against or appearing as a third party witness in respect of, or otherwise incurred in connection with, any such loss, claim, damage, expense, liability, action, investigation or proceeding. Notwithstanding the provisions of this Section 5.3.1 no Underwriter shall be required to contribute any amount in excess of the total discount and commission received by such Underwriter in connection with the Offering less the amount of any damages which such Underwriter has otherwise paid or becomes liable to pay by reason of any untrue or alleged untrue statement, omission or alleged omission, act or alleged act or failure to act or alleged failure to act. No person guilty of fraudulent misrepresentation (within the meaning of Section 11(f) of the Securities Act) shall be entitled to contribution from any person who was not guilty of such fraudulent misrepresentation.

5.3.2. Contribution Procedure. Within fifteen (15) days after receipt by any party to this Agreement (or its representative) of notice of the commencement of any action, suit or proceeding, such party will, if a claim for contribution in respect thereof is to be made against another party ("contributing party"), notify the contributing party of the commencement thereof, but the failure to so notify the contributing party will not relieve it from any liability which it may have to any other party other than for contribution hereunder. In case any such action, suit or proceeding is brought against any party, and such party notifies a contributing party or its representative of the commencement thereof within the aforesaid 15 days, the contributing party will be entitled to participate therein with the notifying party and any other contributing party similarly notified. Any such contributing party shall not be liable to any party seeking contribution on account of any settlement of any claim, action or proceeding affected by such party seeking contribution without the written consent of such contributing party. The contribution provisions contained in this Section 5.3.2 are intended to supersede, to the extent permitted by law, any right to contribution under the Securities Act, the Exchange Act or otherwise available. The Underwriters' obligations to contribute as provided in this Section 5.3 are several and in proportion to their respective underwriting obligation, and not joint.

6. DEFAULT BY AN UNDERWRITER.

6.1. Default Not Exceeding 10% of Firm Securities or Option Securities. If any Underwriter or Underwriters shall default in its or their obligations to purchase the Firm Securities or the Option Securities, if the Over-allotment Option is exercised hereunder, and if the number of the Firm Securities or Option Securities with respect to which such default relates does not exceed in the aggregate 10% of the number of Firm Shares and accompanying Firm Warrants or Option Shares and accompanying Option Warrants that all Underwriters have agreed to purchase hereunder, then such Firm Securities or Option Securities to which the default relates shall be purchased by the non-defaulting Underwriters in proportion to their respective commitments hereunder.

6.2. Default Exceeding 10% of Firm Securities or Option Securities. In the event that the default addressed in Section 6.1 relates to more than 10% of the number of Firm Shares and accompanying Firm Warrants or Option Shares and accompanying Option Warrants, the Representative may in its discretion arrange for itself or for another party or parties to purchase such Firm Securities or Option Securities to which such default relates on the terms contained herein. If, within one (1) Business Day after such default relating to more than 10% of the number of Firm Shares and accompanying Firm Warrants or Option Shares and accompanying Option Warrants, the Representative does not arrange for the purchase of such Firm Securities or Option Securities, then the Company shall be entitled to a further period of one (1) Business Day within which to procure another party or parties satisfactory to the Representative to purchase said Firm Securities or Option Securities on such terms. In the event that neither the Representative nor the Company arrange for the purchase of the Firm Securities or Option Securities to which a default relates as provided in this Section 6, this Agreement will automatically be terminated by the Representative or the Company without liability on the part of the Company (except as provided in Sections 3.10 and 5 hereof) or the several Underwriters (except as provided in Section 5 hereof); provided, however, that if such default occurs with respect to the Option Securities, this Agreement will not terminate as to the Firm Securities; and provided, further, that nothing herein shall relieve a defaulting Underwriter of its liability, if any, to the other Underwriters and to the Company for damages occasioned by its default hereunder.

6.3. Postponement of Closing Date. In the event that the Firm Securities or Option Securities to which the default relates are to be purchased by the non-defaulting Underwriters, or are to be purchased by another party or parties as aforesaid, you or the Company shall have the right to postpone the Closing Date or Option Closing Date for a reasonable period, but not in any event exceeding five (5) Business Days, in order to effect whatever changes may thereby be made necessary in the Registration Statement, the Pricing Disclosure Package or the Prospectus or in any other documents and arrangements, and the Company agrees to file promptly any amendment to the Registration Statement, the Pricing Disclosure Package or the Prospectus that in the opinion of counsel to the Underwriters may thereby be made necessary. The term "**Underwriter**" as used in this Agreement shall include any party substituted under this Section 6 with like effect as if it had originally been a party to this Agreement with respect to such Firm Securities or Option Securities.

7. ADDITIONAL COVENANTS.

7.1. Prohibition on Press Releases and Public Announcements. The Company shall not issue press releases or engage in any other publicity, without the Representative's prior written consent, for a period ending at 5:00 p.m., Eastern time, on the first (1st) Business Day following the fortieth (40th) day after the Closing Date, other than normal and customary releases issued in the ordinary course of the Company's business.

7.2. Board Composition and Board Designations. The Company shall ensure that: (i) the qualifications of the persons serving as members of the Board of Directors and the overall composition of the Board of Directors comply with (to as long as the Company is a "foreign private issuer" under Rule 405 under the Securities Act and Rule 3b-4 under the Exchange Act or as an "emerging growth company" as defined in Section 2(a) of the Securities Act, with such provisions as may be applicable to the Company as such) the Sarbanes-Oxley Act, the Exchange Act and the listing rules of the Exchange or any other national securities exchange, as the case may be, in the event the Company seeks to have its Public Securities listed on another exchange or quoted on an automated quotation system, and (ii) if applicable, at least one member of the Audit Committee of the Board of Directors qualifies as an "audit committee financial expert," as such term is defined under Regulation S-K and the listing rules of the Exchange.

8. EFFECTIVE DATE OF THIS AGREEMENT AND TERMINATION THEREOF.

8.1. Effective Date. This Agreement shall become effective when both the Company and the Representative have executed the same and delivered counterparts of such signatures to the other party.

8.2. Termination. The Representative shall have the right to terminate this Agreement at any time prior to any Closing Date, (i) if any domestic or international event or act or occurrence has materially disrupted, or in the Representative's opinion will in the immediate future materially disrupt, general securities markets in the United States; or (ii) if trading on the New York Stock Exchange or the Nasdaq Stock Market LLC shall have been suspended or materially limited, or minimum or maximum prices for trading shall have been fixed, or maximum ranges for prices for securities shall have been required by FINRA or by order of the Commission or any other government authority having jurisdiction; or (iii) if the United States shall have become involved in a new war or an increase in major hostilities; or (iv) if a banking moratorium has been declared by a New York State or federal authority; or (v) if a moratorium on foreign exchange trading has been declared which materially adversely impacts the United States securities markets; or (vi) if the Company shall have sustained a material loss by fire, flood, accident, hurricane, earthquake, theft, sabotage or other calamity or malicious act which, whether or not such loss shall have been insured, will, in your opinion, make it inadvisable to proceed with the delivery of the Firm Securities or Option Securities; or (vii) if the Company is in material breach of any of its representations, warranties or covenants hereunder; or (viii) if the Representative shall have become aware after the date hereof of a Material Adverse Change, or an adverse material change in general market conditions as in the Representative's judgment would make it impracticable to proceed with the offering, sale and/or delivery of the Public Securities or to enforce contracts made by the Underwriters for the sale of the Public Securities.

8.3. Expenses. Notwithstanding anything to the contrary in this Agreement, except in the case of a default by the Underwriters, pursuant to Section 6.2 above, in the event that this Agreement shall not be carried out for any reason whatsoever, within the time specified herein or any extensions thereof pursuant to the terms herein, the Company shall be obligated to pay to the Underwriters their actual and accountable out-of-pocket expenses related to the transactions contemplated herein then due and payable (including the fees and disbursements of counsel to the Underwriters) up to $150,000, inclusive of the $15,000 advance for accountable expenses previously paid by the Company to the Representative (the "**Advance**"), and upon demand the Company shall pay the full amount thereof to the Representative on behalf of the Underwriters; provided, however, that such expense cap in no way limits or impairs the indemnification and contribution provisions of this Agreement. Notwithstanding the foregoing, any advance received by the Representative will be reimbursed to the Company to the extent not actually incurred in compliance with FINRA Rule 5110(g)(4)(A).

8.4. Indemnification. Notwithstanding any contrary provision contained in this Agreement, any election hereunder or any termination of this Agreement, and whether or not this Agreement is otherwise carried out, the provisions of Section 5 shall remain in full force and effect and shall not be in any way affected by, such election or termination or failure to carry out the terms of this Agreement or any part hereof.

8.5. Representations, Warranties, Agreements to Survive. All representations, warranties and agreements contained in this Agreement or in certificates of officers of the Company submitted pursuant hereto, shall remain operative and in full force and effect regardless of (i) any investigation made by or on behalf of any Underwriter or its affiliates or selling agents, any person controlling any Underwriter, its officers or directors or any person controlling the Company or (ii) delivery of and payment for the Public Securities.

9. MISCELLANEOUS.

9.1. Notices. All communications hereunder, except as herein otherwise specifically provided, shall be in writing and shall be mailed (registered or certified mail, return receipt requested), personally delivered or sent by facsimile transmission and confirmed and shall be deemed given when so delivered or emailed and confirmed (which may be by email) or if mailed, two (2) days after such mailing.

If to the Representative:

EF Hutton, division of Benchmark Investments, LLC
590 Madison Avenue, 39th Floor

New York, NY 10022
Attn: Joseph T. Rallo, Head of Investment Banking
E-Mail: jrallo@efhuttongroupcm.com

with a copy (which shall not constitute notice) to:

Lucosky Brookman LLP
101 Wood Avenue South, 5th Floor
Woodbridge, NJ 08330
Attn: Joseph M. Lucosky, Esq.
Fax No.: (732) 395-4401
E-Mail: jlucosky@lucbro.com

If to the Company:

TC BioPharm (Holdings) plc
Maxim 1, 2 Parklands Way
Holytown, Motherwell ML1 4WR
Scotland, United Kingdom
+44 (0) 141 433 7557
Attn: Martin Thorp
E-Mail: m.thorp@tcbiopharm.com

with a copy (which shall not constitute notice) to:

Golenbock Eiseman Assor Bell & Peskoe LLP
711 Third Avenue – 17th Floor
New York, NY 10017
Attn: Andrew D. Hudders, Esq.
E-Mail: ahudders@golenbock.com

9.2. Headings. The headings contained herein are for the sole purpose of convenience of reference, and shall not in any way limit or affect the meaning or interpretation of any of the terms or provisions of this Agreement.

9.3. Amendment. This Agreement may only be amended by a written instrument executed by each of the parties hereto.

9.4. Entire Agreement. This Agreement (together with the other agreements and documents being delivered pursuant to or in connection with this Agreement) constitutes the entire agreement of the parties hereto with respect to the subject matter hereof and thereof, and supersedes all prior agreements and understandings of the parties, oral and written, with respect to the subject matter hereof.

9.5. Binding Effect. This Agreement shall inure solely to the benefit of and shall be binding upon the Representative, the Underwriters, the Company and the controlling persons, directors and officers referred to in Section 5 hereof, and their respective successors, legal representatives, heirs and assigns, and no other person shall have or be construed to have any legal or equitable right, remedy or claim under or in respect of or by virtue of this Agreement or any provisions herein contained. The term "successors and assigns" shall not include a purchaser, in its capacity as such, of securities from any of the Underwriters. For the avoidance of doubt, it is specifically intended and the parties agree (including the Underwriters) that the Underwriters shall have all the rights and benefits of this Agreement and shall be able to rely upon and enforce this Agreement as if each was separately a signatory to it.

9.6. Governing Law; Consent to Jurisdiction; Trial by Jury. This Agreement shall be governed by and construed in accordance with the law of the State of New York. The Company hereby agrees that any action, proceeding or claim against it arising out of, or relating in any way to this Agreement shall be brought and enforced in the Supreme Court of the State of New York sitting in the County of New York, or in the United States District Court for the Southern District of New York, and irrevocably submits to such jurisdiction, which jurisdiction shall be exclusive. The Company hereby waives any objection to such exclusive jurisdiction and that such courts represent an inconvenient forum. Any such process or summons to be served upon the Company may be served by transmitting a copy thereof by registered or certified mail, return receipt requested, postage prepaid, addressed to it at the address set forth in Section 9.1 hereof. Such mailing shall be deemed personal service and shall be legal and binding upon the Company in any action, proceeding or claim. The Company agrees that the prevailing party(ies) in any such action shall be entitled to recover from the other party(ies) all of its reasonable attorneys' fees and expenses relating to such action or proceeding and/or incurred in connection with the preparation therefor. The Company (on its behalf and, to the extent permitted by applicable law, on behalf of its stockholders and affiliates) and each of the Underwriters hereby irrevocably waives, to the fullest extent permitted by applicable law, any and all right to trial by jury in any legal proceeding arising out of or relating to this Agreement or the transactions contemplated hereby.

9.7. Execution in Counterparts. This Agreement may be executed in one or more counterparts, and by the different parties hereto in separate counterparts, each of which shall be deemed to be an original, but all of which taken together shall constitute one and the same agreement, and shall become effective when one or more counterparts has been signed by each of the parties hereto and delivered to each of the other parties hereto. Delivery of a signed counterpart of this Agreement by facsimile or email/pdf transmission shall constitute valid and sufficient delivery thereof.

9.8. Waiver, etc. The failure of any of the parties hereto to at any time enforce any of the provisions of this Agreement shall not be deemed or construed to be a waiver of any such provision, nor to in any way effect the validity of this Agreement or any provision hereof or the right of any of the parties hereto to thereafter enforce each and every provision of this Agreement. No waiver of any breach, non-compliance or non-fulfillment of any of the provisions of this Agreement shall be effective unless set forth in a written instrument executed by the party or parties against whom or which enforcement of such waiver is sought; and no waiver of any such breach, non-compliance or non-fulfillment shall be construed or deemed to be a waiver of any other or subsequent breach, non-compliance or non-fulfillment.

[*Signature Page Follows*]

If the foregoing correctly sets forth the understanding between the Underwriters and the Company, please so indicate in the space provided below for that purpose, whereupon this letter shall constitute a binding agreement between us as of the date first above written.

Very truly yours,

TC BIOPHARM (HOLDINGS) PLC

By:
Name:
Title:

Confirmed as of the date first written above mentioned, on behalf of itself and as Representative of the several Underwriters named on Schedule 1 hereto:

EF HUTTON,
division of Benchmark Investments, LLC

By:
Name:
Title:

SCHEDULE 1

Underwriter	Total Number of Firm Shares and Firm Warrants to be Purchased	Number of Additional Option Shares and Option Warrants to be Purchased if the Over-Allotment Option is Fully Exercised
EF Hutton, division of Benchmark Investments, LLC	[●]	[●]
TOTAL	**[●]**	**[●]**

SCHEDULE 2-A

Pricing Information

Number of Firm Shares: 5,176,468
Number of Firm Warrants: 6,470,585
Number of Option Shares: 776,470
Number of Option Warrants: 970,587
Public Offering Price per Firm Security: $4.25
Public Offering Price per Option Security: $4.25
Underwriting Discount per Firm Security: $0.34
Underwriting Discount per Option Security: $0.34
Proceeds to Company per Firm Security (before expenses): $3.91
Proceeds to Company per Option Security (before expenses): $3.91

SCHEDULE 2-B

Issuer General Use Free Writing Prospectuses

None.

SCHEDULE 3

List of Lock-Up Parties

1. Scottish Enterprise
2. MEDINET Co., Ltd
3. NIPRO Corporation
4. Dr. Michael Leek
5. Angela Scott
6. Neil Fell
7. Athol Haas
8. Entities affiliated with Renaissance Capital Partners Limited
9. Bryan Kobel
10. Martin Thorp
11. Dr. Mark Bonyhadi
12. James Culverwell
13. Arlene Morris
14. Edward Niemczyk

EXHIBIT A

Form of Representative's Warrant Agreement

THE REGISTERED HOLDER OF THIS PURCHASE WARRANT BY ITS ACCEPTANCE HEREOF, AGREES THAT IT WILL NOT SELL, TRANSFER OR ASSIGN THIS PURCHASE WARRANT EXCEPT AS HEREIN PROVIDED AND THE REGISTERED HOLDER OF THIS PURCHASE WARRANT AGREES THAT IT WILL NOT SELL, TRANSFER, ASSIGN, PLEDGE OR HYPOTHECATE THIS PURCHASE WARRANT FOR A PERIOD OF ONE HUNDRED EIGHTY DAYS FOLLOWING THE EFFECTIVE DATE (DEFINED BELOW) TO ANYONE OTHER THAN (I) EF HUTTON, DIVISION OF BENCHMARK INVESTMENTS, LLC OR AN UNDERWRITER OR A SELECTED DEALER IN CONNECTION WITH THE OFFERING, OR (II) A BONA FIDE OFFICER OR PARTNER OF EF HUTTON, DIVISION OF BENCHMARK INVESTMENTS, LLC OR OF ANY SUCH UNDERWRITER OR SELECTED DEALER.

THIS PURCHASE WARRANT IS NOT EXERCISABLE PRIOR TO [_______________] [**DATE THAT IS SIX MONTHS FROM THE EFFECTIVE DATE OF THE OFFERING**]. VOID AFTER 5:00 P.M., EASTERN TIME, [_________________] [**DATE THAT IS FIVE YEARS FROM THE EFFECTIVE DATE OF THE OFFERING**].

ORDINARY SHARES PURCHASE WARRANT

For the Purchase of [__] Ordinary Shares
of
TC BioPharm (Holdings) plc

1. Purchase Warrant. THIS CERTIFIES THAT, in consideration of funds duly paid by or on behalf of EF Hutton, division of Benchmark Investments, LLC ("**Holder**"), as registered owner of this Purchase Warrant, TC BioPharm (Holdings) plc, a public limited company incorporated in the United Kingdom of Great Britain and Northern Ireland (the "**United Kingdom**") pursuant to the Companies Act 2006, as amended (the "**Companies Act**"), with registered number [*] (collectively with its subsidiaries and affiliates, including, without limitation, all entities disclosed or described in the Registration Statement as being subsidiaries (the "**Company**"), Holder is entitled, at any time or from time to time from [___________], 2022 [**DATE THAT IS SIX MONTHS FROM THE EFFECTIVE DATE OF THE OFFERING**] (the "**Commencement Date**"), and at or before 5:00 p.m., Eastern time, [__________], 2027 [**DATE THAT IS FIVE YEARS FROM THE EFFECTIVE DATE OF THE OFFERING**] (the "**Expiration Date**"), but not thereafter, to subscribe for, purchase and receive, in whole or in part, up to [__] an aggregate of [__] ordinary shares of the Company, £0.01 par value per ordinary share (the "**Shares**"), subject to adjustment as provided in Section 6 hereof. If the Expiration Date is a day on which banking institutions are authorized by law to close, then this Purchase Warrant may be exercised on the next succeeding day which is not such a day in accordance with the terms herein. During the period ending on the Expiration Date, the Company agrees not to take any action that would terminate this Purchase Warrant. This Purchase Warrant is initially exercisable at a price of $[__] per Share; provided, however, that upon the occurrence of any of the events specified in Section 6 hereof, the rights granted by this Purchase Warrant, including the exercise price per Share and the number of Shares to be received upon such exercise, shall be adjusted as therein specified. Shares issuable upon exercise of this Purchase Warrant shall be deposited with the Depositary in exchange for the issuance by the depositary to the holder of the Purchase Warrant such number of American Depositary Shares (ADSs) representing such number of Shares. The term "**Exercise Price**" shall mean the initial exercise price of $4.25 per Share (equal to 100% of the initial public offering price) or the adjusted exercise price, depending on the context. The term "**Effective Date**" shall mean [ ], 2022, the date on which the Registration Statement on Form F-1 (File No. 333-260492) of the Company was declared effective by the Securities and Exchange Commission (the "**Commission**").

2. Exercise.

2.1 Exercise Form. In order to exercise this Purchase Warrant, the exercise form attached hereto must be duly executed and completed and delivered to the Company, together with this Purchase Warrant and payment of the Exercise Price for the Shares being purchased payable in cash by wire transfer of immediately available funds to an account designated by the Company or by certified check or official bank check. If the subscription rights represented hereby shall not have been exercised in full at or before 5:00 p.m., New York City time, on the Expiration Date, the remaining unexercised rights represented by this Purchase Warrant shall expire and become and be void without further force or effect, and all rights represented hereby shall cease and expire.

2.2 Cashless Exercise. If at any time after the Commencement Date there is no effective registration statement registering, or no current prospectus available for, the resale of the ADSs by the Holder, then in lieu of exercising this Purchase Warrant by payment of cash or check payable to the order of the Company pursuant to Section 2.1 above, Holder may elect to receive the number of Shares (eligible for deposit with the Depositary against issuance of an ADS therefor) equal to the value of this Purchase Warrant (or the portion thereof being exercised), by surrender of this Purchase Warrant to the Company, together with the exercise form attached hereto, in which event the Company shall issue to Holder, Shares in accordance with the following formula:

$$X = \frac{Y(A-B)}{A}$$

Where,

X = The number of Shares to be issued to Holder;
Y = The number of Shares for which the Purchase Warrant is being exercised;
A = The fair market value of one Share; and
B = The Exercise Price.

For purposes of this Section 2.2, the fair market value of a Share is defined as follows:

(i) if the Company's Shares are traded on a securities exchange, the value shall be deemed to be the closing price on such exchange prior to the exercise form being submitted in connection with the exercise of the Purchase Warrant; or
(ii) if the Company's Shares are actively traded over-the-counter, the value shall be deemed to be the closing bid price prior to the exercise form being submitted in connection with the exercise of the Purchase Warrant; if there is no active public market, the value shall be the fair market value thereof, as determined in good faith by the Company's Board of Directors.

As of the date of this agreement, the Representative has paid to the Company an amount, to be held in constructive trust until such time as the Representative's Warrant shall have been exercised pursuant to this Section 2.2, equal to the aggregate nominal value of the Shares issuable upon exercise in full of the Representative's Warrant. In the event that the Representative's Warrant is exercised upon payment of the Exercise Price pursuant to Section 2.1, such amounts shall be credited toward the Exercise Price payable upon such exercise.

2.3 Legend. Each certificate for the securities purchased under this Purchase Warrant shall bear a legend as follows unless such securities have been registered under the Securities Act of 1933, as amended (the "**Securities Act**"):

"THE SECURITIES REPRESENTED BY THIS CERTIFICATE HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "SECURITIES ACT"), OR APPLICABLE STATE LAW. NEITHER THE SECURITIES NOR ANY INTEREST THEREIN MAY BE OFFERED FOR SALE, SOLD OR OTHERWISE TRANSFERRED EXCEPT PURSUANT TO AN EFFECTIVE REGISTRATION STATEMENT UNDER THE SECURITIES ACT, OR PURSUANT TO AN EXEMPTION FROM REGISTRATION UNDER THE SECURITIES ACT AND APPLICABLE STATE LAW WHICH, IN THE OPINION OF COUNSEL TO THE COMPANY, IS AVAILABLE."

3. Transfer.

3.1 General Restrictions. The registered Holder of this Purchase Warrant agrees by his, her or its acceptance hereof, that such Holder will not: (a) sell, transfer, assign, pledge or hypothecate this Purchase Warrant or the securities issuable hereunder for a period of one hundred eighty (180) days following the Effective Date to anyone other than: (i) EF Hutton, division of Benchmark Investments, LLC ("**EF Hutton**") or an underwriter or a selected dealer participating in the Offering, or (ii) a bona fide officer or partner of EF Hutton or of any such underwriter or selected dealer, in each case in accordance with FINRA Conduct Rule 5110(e)(1), or (b) for a period of one hundred eighty (180) days following the Effective Date, cause this Purchase Warrant or the securities issuable hereunder to be the subject of any hedging, short sale, derivative, put or call transaction that would result in the effective economic disposition of this Purchase Warrant or the securities hereunder, except as provided for in FINRA Rule 5110(e)(2). On and after one hundred eighty (180) days after the Effective Date, transfers to others may be made subject to compliance with or exemptions from applicable securities laws. In order to make any permitted assignment, the Holder must deliver to the Company the assignment form attached hereto duly executed and completed, together with the Purchase Warrant and payment of all transfer taxes, if any, payable in connection therewith. The Company shall within five (5) business days transfer this Purchase Warrant on the books of the Company and shall execute and deliver a new Purchase Warrant or Purchase Warrants of like tenor to the appropriate assignee(s) expressly evidencing the right to purchase the aggregate number of ADSs purchasable hereunder or such portion of such number as shall be contemplated by any such assignment.

3.2 Restrictions Imposed by the Securities Act. The securities evidenced by this Purchase Warrant shall not be transferred unless and until: (i) the Company has received the opinion of counsel for the Holder that the securities may be transferred pursuant to an exemption from registration under the Securities Act and applicable state securities laws, the availability of which is established to the reasonable satisfaction of the Company (the Company hereby agreeing that the opinion of Lucosky Brookman LLP shall be deemed satisfactory evidence of the availability of an exemption), or (ii) a registration statement or a post-effective amendment to the Registration Statement relating to the offer and sale of such securities has been filed by the Company and declared effective by the Commission and compliance with applicable state securities law has been established.

4 Registration Rights.

4.1 Demand Registration.

4.1.1 Grant of Right. The Company, upon written demand (a "**Demand Notice**") of the Holders of at least 51% of the Purchase Warrants and/or the underlying Shares, agrees to register, on one (1) occasion, all or any portion of the ADSs and the underlying Shares for which the Purchase Warrant is exercisable (collectively, the "**Registrable Securities**"). On such occasion, the Company will file such registration statements with the Commission covering the Registrable Securities within sixty (60) days after receipt of a Demand Notice and use its reasonable best efforts to have the registration statements declared effective promptly thereafter, subject to compliance with review by the Commission; provided, however, that the Company shall not be required to comply with a Demand Notice if the Company has filed a registration statement with respect to which the Holder is entitled to piggyback registration rights pursuant to Section 4.2 hereof and either: (i) the Holder has elected to participate in the offering covered by such registration statement or (ii) if such registration statement relates to an underwritten primary offering of securities of the Company, until the offering covered by such registration statement has been withdrawn or until thirty (30) days after such offering is consummated. The Company covenants and agrees to give written notice of its receipt of any Demand Notice by any Holders to all other registered Holders of the Purchase Warrants and/or the Registrable Securities within ten (10) days after the date of the receipt of any such Demand Notice.

4.1.2 Terms. The Company shall bear all fees and expenses attendant to the registration of the Registrable Securities pursuant to Section 4.1.1, but the Holders shall pay any and all underwriting commissions and the expenses of any legal counsel selected by the Holders to represent them in connection with the sale of the Registrable Securities. The Company agrees to use its reasonable best efforts to cause the filings required herein to become effective promptly and to qualify or register the Registrable Securities in such states as are reasonably requested by the Holders; provided, however, that in no event shall the Company be required to register the Registrable Securities in a State in which such registration would cause: (i) the Company to be obligated to register or license to do business in such State or submit to general service of process in such State, or (ii) the principal stockholders of the Company to be obligated to escrow their shares of capital stock of the Company. The Company shall cause any registration statements filed pursuant to the demand right granted under Section 4.1.1 to remain effective for a period of at least twelve (12) consecutive months after the date that the Holders of the Registrable Securities covered by such registration statement are first given the opportunity to sell all of such securities. The Holders shall only use the prospectuses provided by the Company to sell the shares covered by such registration statement, and will immediately cease to use any prospectus furnished by the Company if the Company advises the Holder that such prospectus may no longer be used due to a material misstatement or omission. Notwithstanding the provisions of this Section 4.1.2, the Holder shall be entitled to a demand registration under this Section 4.1.2 on only one (1) occasion and such demand registration right shall terminate on the fifth anniversary of the Effective Date in accordance with FINRA Rule 5110(g)(8)(C).

4.2 "Piggy-Back" Registration.

4.2.1 Grant of Right. In addition to the demand right of registration described in Section 4.1 hereof, the Holder shall have the right, for a period of no more than seven (7) years from the Effective Date in accordance with FINRA Rule 5110(g)(8)(D), to include the Registrable Securities as part of any other registration of securities filed by the Company (other than in connection with a transaction contemplated by Rule 145(a) promulgated under the Securities Act or pursuant to Form S-8 or Form S-4, any successors to such forms or any form equivalent or analogous to the foregoing as long as the Company is a foreign private issuer); provided, however, that if, solely in connection with any primary underwritten public offering for the account of the Company, the managing underwriter(s) thereof shall, in its reasonable discretion, impose a limitation on the number of Shares and ADSs which may be included in the Registration Statement because, in such underwriter(s)' judgment, marketing or other factors dictate such limitation is necessary to facilitate public distribution, then the Company shall be obligated to include in such Registration Statement only such limited portion of the Registrable Securities with respect to which the Holder requested inclusion hereunder as the underwriter shall reasonably permit. Any exclusion of Registrable Securities shall be made pro rata among the Holders seeking to include Registrable Securities in proportion to the number of Registrable Securities sought to be included by such Holders; provided, however, that the Company shall not exclude any Registrable Securities unless the Company has first excluded all outstanding securities, the holders of which are not entitled to inclusion of such securities in such Registration Statement or are not entitled to pro rata inclusion with the Registrable Securities.

4.2.2 Terms. The Company shall bear all fees and expenses attendant to registering the Registrable Securities pursuant to Section 4.2.1 hereof, but the Holders shall pay any and all underwriting commissions and the expenses of any legal counsel selected by the Holders to represent them in connection with the sale of the Registrable Securities. In the event of such a proposed registration, the Company shall furnish the then Holders of outstanding Registrable Securities with not less than thirty (30) days' written notice prior to the proposed date of filing of such registration statement. Such notice to the Holders shall continue to be given for each registration statement filed by the Company until such time as all of the Registrable Securities have been sold by the Holder. The holders of the Registrable Securities shall exercise the "piggy-back" rights provided for herein by giving written notice within ten (10) days of the receipt of the Company's notice of its intention to file a registration statement. Except as otherwise provided in this Purchase Warrant, there shall be no limit on the number of times the Holder may request registration under this Section 4.2.2; provided, however, that such registration rights shall terminate on the fifth anniversary of the Commencement Date.

4.3 General Terms.

4.3.1 Indemnification. The Company shall indemnify the Holders of the Registrable Securities to be sold pursuant to any registration statement hereunder and each person, if any, who controls such Holders within the meaning of Section 15 of the Securities Act or Section 20(a) of the Securities Exchange Act of 1934, as amended ("**Exchange Act**"), against all loss, claim, damage, expense or liability (including all reasonable attorneys' fees and other expenses reasonably incurred in investigating, preparing or defending against any claim whatsoever) to which any of them may become subject under the Securities Act, the Exchange Act or otherwise, arising from such registration statement but only to the same extent and with the same effect as the provisions pursuant to which the Company has agreed to indemnify the Underwriters contained in Section 5.1 of the Underwriting Agreement between the Underwriters (as defined therein) and the Company, dated as of [____________], 2022 with respect to the Company's initial public offering of the ADSs. The Holders of the Registrable Securities to be sold pursuant to such registration statement, and their successors and assigns, shall severally, and not jointly, indemnify the Company, against all loss, claim, damage, expense or liability (including all reasonable attorneys' fees and other expenses reasonably incurred in investigating, preparing or defending against any claim whatsoever) to which they may become subject under the Securities Act, the Exchange Act or otherwise, arising from information furnished by or on behalf of such Holders, or their successors or assigns, in writing, for specific inclusion in such registration statement to the same extent and with the same effect as the provisions contained in Section 5.2 of the Underwriting Agreement pursuant to which the Underwriters have agreed to indemnify the Company.

4.3.2 Exercise of Purchase Warrants. Nothing contained in this Purchase Warrant shall be construed as requiring the Holders to exercise their Purchase Warrants prior to or after the initial filing of any registration statement or the effectiveness thereof.

4.3.3 Documents Delivered to Holders. The Company shall furnish to each Holder participating in any of the foregoing offerings and to each underwriter of any such offering, if any, a signed counterpart, addressed to such Holder or underwriter, of: (i) an opinion of counsel to the Company, dated the effective date of such registration statement (and, if such registration includes an underwritten public offering, an opinion dated the date of the closing under any underwriting agreement related thereto), and (ii) a "cold comfort" letter dated the effective date of such registration statement (and, if such registration includes an underwritten public offering, a letter dated the date of the closing under the underwriting agreement) signed by the independent registered public accounting firm which has issued a report on the Company's financial statements included in such registration statement, in each case covering substantially the same matters with respect to such registration statement (and the prospectus included therein) and, in the case of such accountants' letter, with respect to events subsequent to the date of such financial statements, as are customarily covered in opinions of issuer's counsel and in accountants' letters delivered to underwriters in underwritten public offerings of securities. The Company shall also deliver promptly to each Holder participating in the offering requesting the correspondence and memoranda described below and to the managing underwriter, if any, copies of all correspondence between the Commission and the Company, its counsel or auditors and all memoranda relating to discussions with the Commission or its staff with respect to the registration statement and permit each Holder and underwriter to do such investigation, upon reasonable advance notice, with respect to information contained in or omitted from the registration statement as it deems reasonably necessary to comply with applicable securities laws or rules of FINRA. Such investigation shall include access to books, records and properties and opportunities to discuss the business of the Company with its officers and independent auditors, all to such reasonable extent and at such reasonable times as any such Holder shall reasonably request.

4.3.4 Underwriting Agreement. The Company shall enter into an underwriting agreement with the managing underwriter(s), if any, selected by any Holders whose Registrable Securities are being registered pursuant to this Section 4, which managing underwriter shall be reasonably satisfactory to the Company. Such agreement shall be reasonably satisfactory in form and substance to the Company, each Holder and such managing underwriters, and shall contain such representations, warranties and covenants by the Company and such other terms as are customarily contained in agreements of that type used by the managing underwriter. The Holders shall be parties to any underwriting agreement relating to an underwritten sale of their Registrable Securities and may, at their option, require that any or all the representations, warranties and covenants of the Company to or for the benefit of such underwriters shall also be made to and for the benefit of such Holders. Such Holders shall not be required to make any representations or warranties to or agreements with the Company or the underwriters except as they may relate to such Holders, their Shares and their intended methods of distribution.

4.3.5 Documents to be Delivered by Holders. Each of the Holders participating in any of the foregoing offerings shall furnish to the Company a completed and executed questionnaire provided by the Company requesting information customarily sought of selling security holders.

4.3.6 Damages. Should the registration or the effectiveness thereof required by Sections 4.1 and 4.2 hereof be delayed by the Company or the Company otherwise fails to comply with such provisions, the Holders shall, in addition to any other legal or other relief available to the Holders, be entitled to obtain specific performance or other equitable (including injunctive) relief against the threatened breach of such provisions or the continuation of any such breach, without the necessity of proving actual damages and without the necessity of posting bond or other security.

4.4 Termination of Registration Rights. The registration rights afforded to the Holders under this Section 4 shall terminate on the earliest date when all Registrable Securities of such Holder either: (i) have been publicly sold by such Holder pursuant to a Registration Statement, (ii) have been covered by an effective Registration Statement on Form S-1 or Form S-3 (or successor form), which may be kept effective as an evergreen Registration Statement, or (iii) may be sold by the Holder within a 90-day period without registration pursuant to Rule 144 or consistent with applicable SEC interpretive guidance (including CD&I no. 201.04 (April 2, 2007) or similar interpretive guidance).

5. New Purchase Warrants to be Issued.

5.1 Partial Exercise or Transfer. Subject to the restrictions in Section 3 hereof, this Purchase Warrant may be exercised or assigned in whole or in part. In the event of the exercise or assignment hereof in part only, upon surrender of this Purchase Warrant for cancellation, together with the duly executed exercise or assignment form and funds sufficient to pay any Exercise Price and/or transfer tax if exercised pursuant to Section 2.1 hereto, the Company shall cause to be delivered to the Holder without charge a new Purchase Warrant of like tenor to this Purchase Warrant in the name of the Holder evidencing the right of the Holder to purchase the number of Shares purchasable hereunder as to which this Purchase Warrant has not been exercised or assigned.

5.2 Lost Certificate. Upon receipt by the Company of evidence satisfactory to it of the loss, theft, destruction or mutilation of this Purchase Warrant and of reasonably satisfactory indemnification or the posting of a bond, the Company shall execute and deliver a new Purchase Warrant of like tenor and date. Any such new Purchase Warrant executed and delivered as a result of such loss, theft, mutilation or destruction shall constitute a substitute contractual obligation on the part of the Company.

6. Adjustments.

6.1 Adjustments to Exercise Price and Number of Securities. The Exercise Price and the number of Shares for which the Purchase Warrant may be exercised shall be subject to adjustment from time to time as hereinafter set forth:

6.1.1 Share Dividends; Split Ups. If, after the date hereof, and subject to the provisions of Section 6.3 below, the number of outstanding Shares is increased by a stock dividend payable in Shares or by a split up of Shares or other similar event, then, on the effective day thereof, the number of Shares purchasable hereunder shall be increased in proportion to such increase in outstanding Shares, and the Exercise Price shall be proportionately decreased.

6.1.2 Aggregation of Shares. If, after the date hereof, and subject to the provisions of Section 6.3 below, the number of outstanding Shares is decreased by a consolidation, combination or reclassification of Shares or other similar event, then, on the effective date thereof, the number of Shares purchasable hereunder shall be decreased in proportion to such decrease in outstanding Shares, and the Exercise Price shall be proportionately increased.

6.1.3 Replacement of Securities upon Reorganization, etc. In case of any reclassification or reorganization of the outstanding Shares or a variation of share capital of the Company, other than a change covered by Section 6.1.1 or 6.1.2 hereof or that solely affects the par value of such Shares, or in the case of any share reconstruction or amalgamation or consolidation of the Company with or into another corporation (other than a consolidation or share reconstruction or amalgamation in which the Company is the continuing corporation and that does not result in any reclassification or reorganization of the outstanding Shares), or in the case of any sale or conveyance to another corporation or entity of the property of the Company as an entirety or substantially as an entirety in connection with which the Company is dissolved, the Holder of this Purchase Warrant shall have the right thereafter (until the expiration of the right of exercise of this Purchase Warrant) to receive upon the exercise hereof, for the same aggregate Exercise Price payable hereunder immediately prior to such event, the kind and amount of shares of stock or other securities or property (including cash) receivable upon such reclassification, reorganization, share reconstruction or amalgamation, or consolidation, or upon a dissolution following any such sale or transfer, by a Holder of the number of Shares (including those represented by ADSs) for which such Purchase Warrant might have been exercised immediately prior to such event; and if any reclassification also results in a change in Shares covered by Section 6.1.1 or 6.1.2, then such adjustment shall be made pursuant to Sections 6.1.1, 6.1.2 and this Section 6.1.3. The provisions of this Section 6.1.3 shall similarly apply to successive reclassifications, reorganizations, share reconstructions or amalgamations, or consolidations, sales or other transfers.

6.1.4 Changes in Form of Purchase Warrant. This form of Purchase Warrant need not be changed because of any change pursuant to this Section 6.1, and Purchase Warrants issued after such change may state the same Exercise Price and the same number of Shares as are stated in the Purchase Warrants initially issued pursuant to this Agreement. The acceptance by any Holder of the issuance of new Purchase Warrants reflecting a required or permissive change shall not be deemed to waive any rights to an adjustment occurring after the Commencement Date or the computation thereof.

6.2 Substitute Purchase Warrant. In case of any consolidation of the Company with, or share reconstruction or amalgamation of the Company with or into, another corporation (other than a consolidation or share reconstruction or amalgamation which does not result in any reclassification or change of the outstanding Shares), the corporation formed by such consolidation or share reconstruction or amalgamation shall execute and deliver to the Holder a supplemental Purchase Warrant providing that the holder of each Purchase Warrant then outstanding or to be outstanding shall have the right thereafter (until the stated expiration of such Purchase Warrant) to receive, upon exercise of such Purchase Warrant, the kind and amount of shares of stock and other securities and property receivable upon such consolidation or share reconstruction or amalgamation, by a holder of the number of Shares (including those represented by ADSs) for which such Purchase Warrant might have been exercised immediately prior to such consolidation, share reconstruction or amalgamation, sale or transfer. Such supplemental Purchase Warrant shall provide for adjustments which shall be identical to the adjustments provided for in this Section 6. The above provision of this Section shall similarly apply to successive consolidations or share reconstructions or amalgamations.

6.3 Elimination of Fractional Interests. The Company shall not be required to issue fractions of Shares upon the exercise of the Purchase Warrant, nor shall it be required to issue scrip or pay cash in lieu of any fractional interests, it being the intent of the parties that all fractional interests shall be eliminated by rounding any fraction up or down, as the case may be, to the nearest whole number of Shares or other securities, properties or rights.

7. Reservation and Listing. The Company shall at all times reserve and keep available out of its authorized Shares, solely for the purpose of issuance upon exercise of the Purchase Warrants, such number of Shares or other securities, properties or rights as shall be issuable upon the exercise thereof. The Company covenants and agrees that, upon exercise of the Purchase Warrants and payment of the Exercise Price therefor, in accordance with the terms hereby, all Shares and other securities issuable upon such exercise shall be duly and validly issued, fully paid and non-assessable and not subject to preemptive rights of any stockholder. As long as the Purchase Warrants shall be outstanding, the Company shall use its commercially reasonable efforts to (a) cause all Shares issuable upon exercise of the Purchase Warrants to be deposited with the Depositary and for the issuance to the holder of the Purchase Warrant such number of ADSs to which such Holder is entitled hereunder and (b) list (subject to official notice of issuance) on all national securities exchanges (or, if applicable, on the OTC Bulletin Board or any successor trading market) on which the ADSs issued to the public in the Offering may then be listed and/or quoted.

8. Certain Notice Requirements.

8.1 Holder's Right to Receive Notice. Nothing herein shall be construed as conferring upon the Holders the right to vote or consent or to receive notice as a stockholder for the election of directors or any other matter, or as having any rights whatsoever as a stockholder of the Company. If, however, at any time prior to the expiration of the Purchase Warrants and their exercise, any of the events described in Section 8.2 shall occur, then, in one or more of said events, the Company shall give written notice of such event at least fifteen (15) days prior to the date fixed as a record date or the date of closing the transfer books for the determination of the stockholders entitled to such dividend, distribution, conversion or exchange of securities or subscription rights, or entitled to vote on such proposed dissolution, liquidation, winding up or sale. Such notice shall specify such record date or the date of the closing of the transfer books, as the case may be. Notwithstanding the foregoing, the Company shall deliver to each Holder a copy of each notice given to the other stockholders of the Company at the same time and in the same manner that such notice is given to the stockholders.

8.2 Events Requiring Notice. The Company shall be required to give the notice described in this Section 8 upon one or more of the following events: (i) if the Company shall take a record of the holders of its Shares for the purpose of entitling them to receive a dividend or distribution payable otherwise than in cash, or a cash dividend or distribution payable otherwise than out of retained earnings, as indicated by the accounting treatment of such dividend or distribution on the books of the Company; (ii) the Company shall offer to all the holders of its Shares any additional shares of capital stock of the Company or securities convertible into or exchangeable for shares of capital stock of the Company, or any option, right or warrant to subscribe therefor; or (iii) a dissolution, liquidation or winding up of the Company (other than in connection with a consolidation or share reconstruction or amalgamation) or a sale of all or substantially all of its property, assets and business shall be proposed.

8.3 Notice of Change in Exercise Price. The Company shall, promptly after an event requiring a change in the Exercise Price pursuant to Section 6 hereof, send notice to the Holders of such event and change ("**Price Notice**"). The Price Notice shall describe the event causing the change and the method of calculating same and shall be certified as being true and accurate by the Company's Chief Financial Officer.

8.4 Transmittal of Notices. All notices, requests, consents and other communications under this Purchase Warrant shall be in writing and shall be deemed to have been duly made when hand delivered or mailed by express mail or private courier service: (i) if to the registered Holder of the Purchase Warrant, to the address of such Holder as shown on the books of the Company, or (ii) if to the Company, to following address or to such other address as the Company may designate by notice to the Holders:

If to the Holder:

EF Hutton, division of Benchmark Investments, LLC
590 Madison Avenue, 39th Floor
New York, New York 10022
Attn: Joseph T. Rallo

with a copy (which shall not constitute notice) to:

Lucosky Brookman LLP
101 Wood Avenue South, 5th Floor

Woodbridge, NJ 08330
Attn: Joseph M. Lucosky, Esq.
Fax No.: (732) 395-4401
Email: jlucosky@lucbro.com

If to the Company:

TC BioPharm (Holdings) plc
Maxim 1, 2 Parklands Way
Holytown, Motherwell, ML1 4WR
Scotland, United Kingdom
+44 (0) 141 433 7557
Attn: Martin Thorp
E-Mail: m.thorp@tcbiopharm.com

with a copy (which shall not constitute notice) to:

Andrew D. Hudders, Esq.
Golenbock Eiseman Assor Bell & Peskoe LLP
711 Third Avenue – 17th Floor
New York, NY 10017
Email: ahudders@golenbock.com

9. Miscellaneous.

9.1 Amendments. The Company and EF Hutton may from time to time supplement or amend this Purchase Warrant without the approval of any of the Holders in order to cure any ambiguity, to correct or supplement any provision contained herein that may be defective or inconsistent with any other provisions herein, or to make any other provisions in regard to matters or questions arising hereunder that the Company and EF Hutton may deem necessary or desirable and that the Company and EF Hutton deem shall not adversely affect the interest of the Holders. All other modifications or amendments shall require the written consent of and be signed by the party against whom enforcement of the modification or amendment is sought.

9.2 Headings. The headings contained herein are for the sole purpose of convenience of reference, and shall not in any way limit or affect the meaning or interpretation of any of the terms or provisions of this Purchase Warrant.

9.3 Entire Agreement. This Purchase Warrant (together with the other agreements and documents being delivered pursuant to or in connection with this Purchase Warrant) constitutes the entire agreement of the parties hereto with respect to the subject matter hereof, and supersedes all prior agreements and understandings of the parties, oral and written, with respect to the subject matter hereof.

9.4 Binding Effect. This Purchase Warrant shall inure solely to the benefit of and shall be binding upon, the Holder and the Company and their permitted assignees, respective successors, legal representative and assigns, and no other person shall have or be construed to have any legal or equitable right, remedy or claim under or in respect of or by virtue of this Purchase Warrant or any provisions herein contained.

9.5 Governing Law; Submission to Jurisdiction; Trial by Jury. This Purchase Warrant shall be governed by and construed in accordance with the law of the State of New York. The Company hereby agrees that any action, proceeding or claim against it arising out of, or relating in any way to this Purchase Warrant shall be brought and enforced in the Supreme Court of the State of New York sitting in the County of New York, or in the United States District Court for the Southern District of New York, and irrevocably submits to such jurisdiction, which jurisdiction shall be exclusive. The Company hereby waives any objection to such exclusive jurisdiction and that such courts represent an inconvenient forum. Any process or summons to be served upon the Company may be served by transmitting a copy thereof by registered or certified mail, return receipt requested, postage prepaid, addressed to it at the address set forth in Section 8 hereof. Such mailing shall be deemed personal service and shall be legal and binding upon the Company in any action, proceeding or claim. The Company and the Holder agree that the prevailing party(ies) in any such action shall be entitled to recover from the other party(ies) all of its reasonable attorneys' fees and expenses relating to such action or proceeding and/or incurred in connection with the preparation therefor. The Company (on its behalf and, to the extent permitted by applicable law, on behalf of its stockholders and affiliates) and the Holder hereby irrevocably waive, to the fullest extent permitted by applicable law, any and all right to trial by jury in any legal proceeding arising out of or relating to this Agreement or the transactions contemplated hereby.

9.6 Waiver, etc. The failure of the Company or the Holder to at any time enforce any of the provisions of this Purchase Warrant shall not be deemed or construed to be a waiver of any such provision, nor to in any way affect the validity of this Purchase Warrant or any provision hereof or the right of the Company or any Holder to thereafter enforce each and every provision of this Purchase Warrant. No waiver of any breach, non-compliance or non-fulfillment of any of the provisions of this Purchase Warrant shall be effective unless set forth in a written instrument executed by the party or parties against whom or which enforcement of such waiver is sought; and no waiver of any such breach, non-compliance or non-fulfillment shall be construed or deemed to be a waiver of any other or subsequent breach, non-compliance or non-fulfillment.

9.7 Execution in Counterparts. This Purchase Warrant may be executed in one or more counterparts, and by the different parties hereto in separate counterparts, each of which shall be deemed to be an original, but all of which taken together shall constitute one and the same agreement, and shall become effective when one or more counterparts has been signed by each of the parties hereto and delivered to each of the other parties hereto. Such counterparts may be delivered by facsimile transmission or other electronic transmission.

9.8 Exchange Agreement. As a condition of the Holder's receipt and acceptance of this Purchase Warrant, Holder agrees that, at any time prior to the complete exercise of this Purchase Warrant by Holder, if the Company and EF Hutton enter into an agreement ("**Exchange Agreement**") pursuant to which they agree that all outstanding Purchase Warrants will be exchanged for securities or cash or a combination of both, then Holder shall agree to such exchange and become a party to the Exchange Agreement.

[*Signature Page Follows*]

IN WITNESS WHEREOF, the Company has caused this Purchase Warrant to be signed by its duly authorized officer as of the ____ day of _______, 2022.

[_________]

By: ______________________________
Name:
Title:

[*Form to be used to exercise Purchase Warrant*]

Date: __________, 20___

The undersigned hereby elects irrevocably to exercise the Purchase Warrant for ______ American Depositary Shares (the "**ADSs**") representing _____ ordinary shares, £1.00 par value per ordinary share (the "**Shares**"), of TC BioPharm (Holdings) plc, a public limited company incorporated in the United Kingdom of Great Britain and Northern Ireland (the "**United Kingdom**") pursuant to the Companies Act 2006, as amended, with company number SC713098
(collectively with its subsidiaries and affiliates, including, without limitation, all entities disclosed or described in the Registration Statement as being subsidiaries (the "**Company**"), and hereby makes payment of $____ (at the rate of $____ per Share) in payment of the Exercise Price pursuant thereto. Please issue the Shares as to which this Purchase Warrant is exercised in accordance with the instructions given below and, if applicable, a new Purchase Warrant representing the number of Shares for which this Purchase Warrant has not been exercised.

or

The undersigned hereby elects irrevocably to convert its right to purchase Shares of the Company under the Purchase Warrant for ______ Shares, as determined in accordance with the following formula:

$$X = \frac{Y(A-B)}{A}$$

Where,

X	=	The number of Shares to be issued to Holder;
Y	=	The number of Shares for which the Purchase Warrant is being exercised;
A	=	The fair market value of one Share which is equal to $_____; and
B	=	The Exercise Price which is equal to $______ per share

The undersigned agrees and acknowledges that the calculation set forth above is subject to confirmation by the Company and any disagreement with respect to the calculation shall be resolved by the Company in its sole discretion.

Please issue the Shares as to which this Purchase Warrant is exercised in accordance with the instructions given below and, if applicable, a new Purchase Warrant representing the number of Shares for which this Purchase Warrant has not been exercised.

Signature ____

Signature Guaranteed ______________________________

INSTRUCTIONS FOR REGISTRATION OF SECURITIES

Name: ____
(Print in Block Letters)

Address: ____

____

____

NOTICE: The signature to this form must correspond with the name as written upon the face of the Purchase Warrant without alteration or enlargement or any change whatsoever, and must be guaranteed by a bank, other than a savings bank, or by a trust company or by a firm having membership on a registered national securities exchange.

[*Form to be used to assign Purchase Warrant*]

ASSIGNMENT

(To be executed by the registered Holder to effect a transfer of the within Purchase Warrant):

FOR VALUE RECEIVED, __________________ does hereby sell, assign and transfer unto______________ the right to purchase ______ ordinary shares, par value £1.00 per ordinary share (the "**Shares**"), of TC BioPharm (Holdings) plc, a public limited company in the United Kingdom of Great Britain and Northern Ireland (the "**United Kingdom**") pursuant to the Companies Act 2006, as amended, with company number SC713098 (collectively with its subsidiaries and affiliates, including, without limitation, all entities disclosed or described in the Registration Statement as being subsidiaries (the "**Company**"), evidenced by the Purchase Warrant and does hereby authorize the Company to transfer such right on the books of the Company.

Dated: __________, 20__

Signature____

Signature Guaranteed____

NOTICE: The signature to this form must correspond with the name as written upon the face of the within Purchase Warrant without alteration or enlargement or any change whatsoever, and must be guaranteed by a bank, other than a savings bank, or by a trust company or by a firm having membership on a registered national securities exchange.

EXHIBIT B-1

Form of Lock-Up Agreement

EXHIBIT B-2

Form of Lock Up Agreement

EXHIBIT B-3

Form of Lock Up Agreement

EXHIBIT C

Form of Press Release

TC BioPharm (Holdings) plc

[Date]

TC BioPharm (Holdings) plc (the "Company") announced today that EF Hutton, division of Benchmark Investments, LLC, acting as representative for the underwriters in the Company's recent public offering of _______ ADSs of the Company, is [waiving] [releasing] a lock-up restriction with respect to _______ ordinary shares held by [certain officers or directors] [an officer or director] of the Company. The [waiver] [release] will take effect on _______, 20___, and such ordinary shares may be sold on or after such date.

This press release is not an offer or sale of the securities in the United States or in any other jurisdiction where such offer or sale is prohibited, and such securities may not be offered or sold in the United States absent registration or an exemption from registration under the Securities Act of 1933, as amended.

EXHIBIT D

Form of Opinion of Golenbock Eiseman Assor Bell & Peskoe LLP

EXHIBIT E

Form of "10b-5" Statements of Golenbock Eiseman Assor Bell & Peskoe LLP and Addelshaw Goddard

EXHIBIT F

Form of Opinion of Addleshaw Goddard, Scottish and UK counsel for the Company

Exhibit 4.4

WARRANT AGENT AGREEMENT

WARRANT AGENT AGREEMENT (this " Warrant Agreement") dated as of ______, 2022 (the "Issuance Date") between TC BioPharm (Holdings) plc, a company incorporated in Scotland, under the law of the United Kingdom (the "Company"), and Computershare Inc., a Delaware corporation ("Computershare"), and its wholly owned subsidiary, Computershare Trust Company, N.A., a federally chartered trust company (the "Warrant Agent").

WHEREAS, pursuant to the terms of that certain Underwriting Agreement ("Underwriting Agreement"), dated _______, 2022, between the Company and EF Hutton, division of Benchmark Investments, LLC, as representative of the underwriters set forth therein, the Company is engaged in a public offering (the "Offering") of up to _________ American Depositary Shares ("ADSs"), each ADS representing one ordinary share of the Company, par value £0.01 per share ("Ordinary Shares"), and up to ________ Warrants (the "Warrants"), with each Warrant representing the right of the holder thereof to purchase 1.25 ADSs (each, a "Warrant ADS") for $_____ ***[NTD: 125% of IPO price]*** per ADS, subject to adjustment as described herein, plus applicable fees, charges and taxes;

WHEREAS, the ADSs are issuable under the Deposit Agreement dated as of January __, 2022 (the "Deposit Agreement") among the Company, The Bank of New York Mellon, as depositary (the "Depositary"), and all Owners and Holders (each as defined in the Deposit Agreement) from time to time of the ADSs issued thereunder;

WHEREAS, the Company has filed with the Securities and Exchange Commission (the "Commission") a registration statement on Form F-1, File No. 333-260492 (as the same may be amended from time to time, the "Registration Statement") for the registration, under the Securities Act of 1933, as amended (the "Securities Act"), of, among other securities, the Ordinary Shares, the Warrants and the Ordinary Shares underlying the Warrant ADSs issuable upon exercise of the Warrants (the " Warrant Shares"), and the Registration Statement was declared effective on ________, 2022;

WHEREAS, the Depositary has filed with the Commission a Registration Statement on Form F-6, File No. 333-262149 (the "ADS Registration Statement") for the registration under the Securities Act of the ADSs that may be issued in exchange for Ordinary Shares and the Warrant Shares, and the Registration Statement was declared effective on _____, 2022.

WHEREAS, the Company desires the Warrant Agent to act on behalf of the Company, and the Warrant Agent is willing to so act, in accordance with the terms set forth in this Warrant Agreement in connection with the issuance, registration, registration of transfer and exercise of the Warrants;

WHEREAS, the Company desires to provide for the provisions of the Warrants, the terms upon which they shall be issued and exercised, and the respective rights, limitation of rights, and immunities of the Company, the Warrant Agent, and the holders of the Warrants; and

WHEREAS, the Company has duly authorized the execution and delivery of this Warrant Agreement and all other acts and things necessary to make the Warrants the legal, valid and binding obligations of the Company have been done and performed.

NOW, THEREFORE, in consideration of the mutual agreements herein contained, the parties hereto agree as follows:

1. Appointment of Warrant Agent . The Company hereby appoints the Warrant Agent to act as agent for the Company with respect to the Warrants, and the Warrant Agent hereby accepts such appointment and agrees to perform the same in accordance with the express terms and conditions set forth in this Warrant Agreement (and no implied terms or conditions).

2. Warrants.

2.1 Form of Warrants. The Warrants shall be registered securities in book entry form and shall be evidenced by a global certificate ("Global Certificate") in the form of Annex C to this Warrant Agreement, which shall be deposited on behalf of the Company with a custodian for The Depository Trust Company ("DTC") and registered in the name of Cede & Co., as nominee of DTC or as otherwise directed by DTC. If DTC subsequently ceases to make its book-entry settlement system available for the Warrants, the Company may instruct the Warrant Agent regarding making other arrangements for book-entry settlement. In the event that the Warrants are not eligible for, or it is no longer necessary to have the Warrants available in, book-entry form, the Company may instruct the Warrant Agent to provide written instructions to DTC to deliver to the Warrant Agent for cancellation the Global Certificate, and the Company shall instruct the Warrant Agent to deliver each holder of the Warrants separate certificates in the form of Annex A evidencing Warrants ("Definitive Certificates" and, together with the Global Certificate, "Warrant Certificates") registered as requested through the DTC system. In the event Definitive Certificates are delivered to the holders, the transfer, exchange or exercise of the Warrants shall be conducted in accordance with the customary procedures of the Warrant Agent. The Company shall use its best efforts to enable the Warrants be "DTC eligible" so that the interests in the Warrants may be held in book-entry through DTC for the term of the Warrants.

2.1.1 Exchange of Interest in Global Certificate for Definitive Certificate. Notwithstanding Section 2.1 above, a holder of a security entitlement in Warrants evidenced by the Global Certificate has the right to elect at any time to exchange it for a Definitive Certificate evidencing the same number of Warrants. Upon written notice by a Participant having Warrants credited to its DTC account for the exchange of some or all that entitlement for a Definitive Certificate evidencing the same number of Warrants, which request shall be in the form attached hereto as Annex B (a "Warrant Certificate Request Notice" and the date of delivery of such Warrant Certificate Request Notice by the Holder, the "Warrant Certificate Request Notice Date" and the exchange made pursuant to the Warrant Certificate Request Notice, a "Warrant Exchange"), and upon surrender by that Participant of the Warrants to be exchanged to the Warrant Agent through DTC's system, the Warrant Agent shall, without unreasonable delay, effect the Warrant Exchange by issuing and delivering a Definitive Certificate for such number of Warrants in the name and mailed to the address set forth in the Warrant Certificate Request Notice. Such Definitive Certificate shall be dated the original issue date of the Warrants, shall be manually executed by an authorized signatory of the Company and shall be in the form attached hereto as Annex A In connection with a Warrant Exchange, the Company agrees to deliver, or to direct the Warrant Agent to deliver, the Definitive Certificate to the specified holder within ten (10) Business Days of the Warrant Certificate Request Notice pursuant to the delivery instructions in the Warrant Certificate Request Notice (the "Warrant Certificate Delivery Date"). "Business Day" means any day other than a Saturday, Sunday, or a day on which banking institutions in the State of New York are authorized or obligated by law or executive order to close.

2.1.2 The Company shall provide to the Warrant Agent an opinion of counsel on or prior to the issuance of Warrants to set up a reserve of Warrant Shares for the outstanding Warrants. The opinion shall state that all Warrants or Warrant Shares, as applicable, are (i) registered under the Securities Act of 1933, as amended, and (ii) validly issued, fully paid and non-assessable.

2.2 Issuance and Registration of Warrants.

2.2.1 Warrant Register. Upon the receipt of all relevant information from the Company or its agents, the Warrant Agent shall maintain books ("Warrant Register") for the registration of original issuance and the registration of transfer of the Warrants.

2.2.2 Issuance of Warrants. Upon the initial issuance of the Warrants, the Warrant Agent shall issue the Global Certificate and deliver the Warrants in the DTC book-entry settlement system in accordance with written instructions delivered to the Warrant Agent by the Company. Ownership of beneficial interests in the Warrants shall be shown on, and the transfer of such ownership shall be effected through, records maintained (i) by DTC and (ii) by institutions that have accounts with DTC (each, with respect to a Warrant in its account, a "Participant").

2.2.3 Beneficial Owner; Holder. Prior to due presentment for registration of transfer of any Warrant, the Company and the Warrant Agent may deem and treat the person in whose name that Warrant shall be registered on the Warrant Register (the "Holder", which shall include, if the Warrants are held in "street name," a Participant or a designee appointed by such Participant) as the absolute owner of such Warrant for purposes of any exercise thereof, and for all other purposes, and neither the Company nor the Warrant Agent shall be affected by any notice to the contrary. Notwithstanding the foregoing, nothing herein shall prevent the Company, the Warrant Agent or any agent of the Company or the Warrant Agent from giving effect to any written certification, proxy or other authorization furnished by DTC governing the exercise of the rights of a holder of a beneficial interest in any Warrant. The rights of beneficial owners in a Warrant evidenced by the Global Certificate shall be exercised by the Holder through the DTC system.

2.2.4 Execution. The Warrant Certificates shall be executed on behalf of the Company by any authorized officer of the Company (an "Authorized Officer"), which need not be the same authorized signatory for all of the Warrant Certificates, either manually or by facsimile signature. The Warrant Certificates shall be countersigned by an authorized signatory of the Warrant Agent either by manual, electronic or facsimile signature, which need not be the same signatory for all of the Warrant Certificates, and no Warrant Certificate shall be valid for any purpose unless so countersigned. In case any Authorized Officer of the Company that signed any of the Warrant Certificates ceases to be an Authorized Officer of the Company before countersignature by the Warrant Agent and issuance and delivery by the Company, such Warrant Certificates, nevertheless, may be countersigned by the Warrant Agent, issued and delivered with the same force and effect as though the person who signed such Warrant Certificates had not ceased to be such officer of the Company; and any Warrant Certificate may be signed on behalf of the Company by any person who, at the actual date of the execution of such Warrant Certificate, shall be an Authorized Officer of the Company authorized to sign such Warrant Certificate, although at the date of the execution of this Warrant Agreement any such person was not such an Authorized Officer. The rights of holders of Warrant Certificates shall be identical regardless of the Authorized Officer signing for and on behalf of the Company and of the authorized signatory of the Warrant Agent signing such certificates.

2.2.5 Registration of Transfer. At any time at or prior to the Expiration Date (as defined below), a transfer of any Warrants may be registered and any Warrant Certificate or Warrant Certificates may be split up, combined or exchanged for another Warrant Certificate or Warrant Certificates evidencing the same number of Warrants as the Warrant Certificate or Warrant Certificates surrendered. Any Holder desiring to register the transfer of Warrants or to split up, combine or exchange any Warrant Certificate shall make such request in writing delivered to the Warrant Agent, and shall surrender to the Warrant Agent the Warrant Certificate or Warrant Certificates evidencing the Warrants the transfer of which is to be registered or that is or are to be split up, combined or exchanged and, in the case of registration of transfer, shall provide a signature guarantee by an "eligible guarantor institution" that is a member or participant in the Securities Transfer Agents Medallion Program or other comparable "signature guarantee program." Thereupon, the Warrant Agent shall countersign and deliver to the person entitled thereto a Warrant Certificate or Warrant Certificates, as the case may be, as so requested. The Company and the Warrant Agent may require payment by the Holder requesting a registration of transfer of Warrants or a split-up, combination or exchange of a Warrant Certificate (but, for purposes of clarity, not upon the exercise of the Warrants and issuance of Warrant ADS to the Holder) of a sum sufficient to cover any tax or governmental charge that may be imposed in connection with such registration of transfer, split-up, combination or exchange, together with reimbursement to the Company and the Warrant Agent of all reasonable expenses incidental thereto. The Warrant Agent shall not have any duty or obligation to take any action under any section of this Warrant Agreement that requires the payment of taxes and/or charges unless and until it is satisfied that all such payments have been made.

2.2.6 Loss, Theft and Mutilation of Warrant Certificates. Upon receipt by the Company and the Warrant Agent of evidence reasonably satisfactory to them of the loss, theft, destruction or mutilation of a Warrant Certificate, and, in case of loss, theft or destruction, of indemnity or security acceptable to the Warrant Agent, and reimbursement to the Company and the Warrant Agent of all reasonable expenses incidental thereto, and upon surrender to the Warrant Agent and cancellation of the Warrant Certificate if mutilated, the Warrant Agent shall, on behalf of the Company, countersign and deliver a new Warrant Certificate of like tenor to the Holder in lieu of the Warrant Certificate so lost, stolen, destroyed or mutilated. The Warrant Agent may charge the Holder an administrative fee for processing the replacement of lost Warrant Certificates, which shall be charged only once in instances where a single surety bond obtained covers multiple certificates. The Warrant Agent may receive compensation from the surety companies or surety agents for administrative services provided to them. Notwithstanding anything herein to the contrary, in connection with a Warrant in book-entry form through DTC, no posting of a bond shall be required under this Section 2.2.6.

2.2.7 Proxies. The Holder of a Warrant may grant proxies or otherwise authorize any person, including Participants and beneficial holders that may own interests through Participants, to take any action that a Holder is entitled to take under this Warrant Agreement or the Warrants; provided, however, that at all times that Warrants are evidenced by a Global Certificate, exercise of those Warrants shall be effected on their behalf by Participants through DTC in accordance with the procedures administered by DTC.

3. Terms and Exercise of Warrants.

3.1 Exercise Price. Each Warrant shall entitle the Holder, subject to the provisions of the applicable Warrant Certificate and of this Warrant Agreement, to purchase from the Company the number of ADSs stated therein, at the price of US$______ ***[NTD: 125% of IPO share price]*** per ADS, subject to the subsequent adjustments provided in Section 4 hereof. The term "Exercise Price" as used in this Warrant Agreement refers to the price per ADS at which ADSs may be purchased at the time a Warrant is exercised.

3.2 Duration of Warrants. Warrants may be exercised only during the period ("Exercise Period") commencing on the Issuance Date and terminating at 5:00 P.M., New York City time (the "close of business") on _________, 2027 ***[NTD: Five years after IPO effective date]*** ("Expiration Date"). Each Warrant not exercised on or before the Expiration Date shall become void, and all rights thereunder and all rights in respect thereof under this Warrant Agreement shall cease at the close of business on the Expiration Date.

3.3 Exercise of Warrants.

3.3.1 Exercise and Payment. (a) Subject to the provisions of this Warrant Agreement, a Holder (or a Participant acting on behalf of a Holder in accordance with DTC procedures) may exercise Warrants by delivering to the Warrant Agent, not later than 5:00 P.M., New York City time, on any Business Day during the Exercise Period an election to purchase the Warrant ADSs to be exercised (A) in the form included in Exhibit A to the Warrant or (B) via an electronic warrant exercise through the DTC system (each, an "Election to Purchase"). Within one Trading Day following the delivery of the Election to Purchase, the Holder shall deliver (i) the Warrants to be exercised by (A) surrender of the Warrant Certificate evidencing the Warrants to the Warrant Agent at its office designated for such purpose or (B) delivery of the Warrants to an account of the Warrant Agent at DTC designated for such purpose in writing by the Warrant Agent to DTC from time to time, and (ii) the Exercise Price for each Warrant to be exercised (and, if applicable, any taxes or charges due in connection with the exercise of such Warrants), in lawful money of the United States of America by (A) certified or official bank check or wire transfer from a United States bank payable to the Warrant Agent or (B) payment to the Warrant Agent through the DTC system.

(b) If any of (i) the Warrants, (ii) the Election to Purchase, or (iii) the Exercise Price therefor (and, if applicable, any taxes or charges due in connection with the exercise of such Warrants), is received by the Warrant Agent on any date after 5:00 P.M., New York City time, or on a date that is not a Trading Day, the Warrants with respect thereto will be deemed to have been received and exercised on the Trading Day next succeeding such date. The "Exercise Date" will be the date on which the Election to Purchase is delivered to the Warrant Agent; however, the Warrants shall not be deemed to be exercised if the Warrants and the Exercise Price therefor are not received by the Warrant Agent on or prior to the Trading Day following the delivery of the Election to Purchase. If the Warrants are received or deemed to be received after the Expiration Date, the exercise thereof will be null and void and any funds delivered to the Warrant Agent will be returned to the Holder or Participant, as the case may be, as soon as practicable. "Trading Day" means any day on which the ADSs are traded on the Trading Market, or, if the Trading Market is not the principal trading market for the ADSs, then on the principal securities exchange or securities market in the United States on which the ADSs are then traded. "Trading Market" means NYSE American, the

Nasdaq Capital Market, the Nasdaq Global Market, the Nasdaq Global Select Market or the New York Stock Exchange.

(c) The Warrant Agent shall deposit all funds received by it in payment of the Exercise Price in the account maintained by the Warrant Agent in its name as agent for the Company. The Warrant Agent shall remit to the Company funds received for warrant exercises in a given month by the fifth Business Day of the following month by wire transfer to an account designated by the Company, or as otherwise from time to time as reasonably requested by the Company. All funds received by Computershare under this Agreement that are to be distributed or applied by Computershare in the performance of services hereunder (the "Funds") shall be held by Computershare as agent for the Company and deposited in one or more bank accounts to be maintained by Computershare in its name as agent for the Company. Until paid pursuant to the terms of this Warrant Agreement, Computershare will hold the Funds in deposit accounts with U.S. commercial banks with Tier 1 capital exceeding $1 billion or with ratings above investment grade by S&P Global Ratings (LT Local Issuer Credit Rating), Moody's Investors Service (Long Term Rating) and Fitch Ratings, Inc. (LT Issuer Default Rating) (each as reported by Bloomberg L.P.). Computershare shall have no responsibility or liability for any diminution of the Funds that may result from any deposit made by Computershare in accordance with this Section 3.3.1(c), including any losses resulting from a default by any bank, financial institution or other third party. Computershare may from time to time receive interest, dividends or other earnings in connection with such deposits. Computershare shall not be obligated to pay such interest, dividends or earnings to the Company, any holder or any other party.

(d) If less than all the Warrants evidenced by a surrendered Warrant Certificate are exercised, the Warrant Agent shall split up the surrendered Warrant Certificate and return to the Holder a Warrant Certificate evidencing the Warrants that were not exercised.

3.3.2 Issuance of Warrant Shares. (a) The Warrant Agent shall, by 11:00 a.m., New York City time, on the Trading Day following the Exercise Date of any Warrant, advise the Company, the transfer agent and registrar for Ordinary Shares and the Depositary, in respect of (i) the number of Warrant Shares indicated on the Election to Purchase as issuable upon such exercise with respect to such exercised Warrants, (ii) the instructions of the Holder or Participant, as the case may be, provided to the Warrant Agent with respect to the delivery of the Warrant ADSs and the number of Warrants that remain outstanding after such exercise and (iii) such other information as the Company or the Depositary shall reasonably request.

(b) The Company shall, by no later than 5:00 P.M., New York City time, on the fourth Trading Day following the Exercise Date of any Warrant, provided the funds in payment of the Exercise Price for each Warrant to be exercised have cleared on the Trading Day following the Exercise Date, cause its registrar to deliver the Warrant Shares issuable upon that exercise to the Depositary's custodian for deposit under the Deposit Agreement and instruct the Depositary to deliver the Warrant ADSs issuable upon that deposit of Warrant Shares as requested in the Election to Purchase.

(c) The Company shall, by no later than 5:00 P.M., New York City time, on the fifth Trading Day following the Exercise Date of any Warrant, provided the funds in payment of the Exercise Price for each Warrant to be exercised have cleared on the Trading Day following the Exercise Date, cause the Depositary to deliver the Warrant ADSs to the Holder pursuant to the Election to Purchase (the "Warrant ADS Delivery Date").

3.3.3 Valid Issuance. All Warrant Shares and Warrant ADSs issuable by the Company upon the proper exercise of a Warrant in conformity with this Warrant Agreement shall be validly issued, fully paid and non-assessable.

3.3.4 No Fractional Exercise. No fractional Warrant ADSs will be issued upon the exercise of the Warrant, but rather the Company shall adjust the number of Warrant Shares issued up or down to the nearest integral multiple of the number of Ordinary Shares at the time represented by one ADS.

3.3.5 No Transfer Taxes. The Company shall not be required to pay any stamp or other tax or charge required to be paid in connection with the exercise of Warrants; and the Company shall not be required to issue or deliver any Warrant ADSs until such tax or other charge shall have been paid or it has been established to the satisfaction of the Company and the Warrant Agent that no such tax or other charge is due. For purposes of clarity, the Company shall pay any stamp or other tax or charge required to be paid in connection with any issuance to the Holder of the Warrant ADSs upon the exercise of Warrants.

3.3.6 Date of Issuance. (a) The Holder shall be deemed for all corporate purposes to have become the holder of record of the Warrant ADSs only on the Warrant ADS Delivery Date, except that, if the Exercise Date is a date when the stock transfer books of the Company are closed, such person shall be deemed to have become the holder of such shares at the open of business on the next succeeding date on which the stock transfer books are open; provided, however, Warrant ADSs will not be registered or issued until the Depositary receives notice from its custodian that the Warrant Shares have been deposited under the Deposit Agreement; provided further, however, that the Company shall take all reasonable steps to ensure the Warrant ADSs are delivered to the Holder on or prior to the Warrant ADS Delivery Date in accordance with Section 3.3.2(c) hereof and, if the Warrant ADSs are not delivered to the Holder on or prior to the Warrant ADS Delivery Date, the provisions of Section 3.3.9 shall apply.

(b) No exercising Holder, which Holder effected a Warrant Exchange pursuant to Section 2.1.1 prior to the Exercise Date, shall be required to surrender its Warrant to the Warrant Agent, unless such exercise is for the remaining numbers of ADSs issuable upon exercise of such Warrant, in which case the Holder shall deliver the Warrant Certificate to the Warrant Agent within three (3) Business Days.

3.3.7 Restrictive Legend Events. The Company shall use its commercially reasonable efforts to maintain the effectiveness of the Registration Statement and the ADS Registration Statement and the current status of the prospectuses included therein or to file and maintain the effectiveness of another registration statement and another current prospectus covering the Warrants and the Warrant Shares at any time that the Warrants are exercisable. The Company shall provide to the Warrant Agent and each Holder prompt written notice of any time that the Company is unable to deliver the Warrant ADSs via DTC transfer or otherwise without restrictive legend because (A) the Commission has issued a stop order with respect to the Registration Statement or the ADS Registration Statement, (B) the Commission otherwise has suspended or withdrawn the effectiveness of the Registration Statement or the ADS Registration Statement, either temporarily or permanently, (C) the Company has suspended or withdrawn the effectiveness of the Registration Statement or the ADS Registration Statement, either temporarily or permanently, (D) the prospectuses contained in the Registration Statement and the ADS Registration Statement are not available for the issuance of the Warrant ADSs to the Holder, (E) the Registration Statement or the ADS Registration Statement or the prospectuses contained therein are not current and do not conform to the requirements of the applicable rules and regulations, or the SEC has not declared effective a post-effective amendment to the Registration Statement or the ADS Registration Statement if one is required to be filed to update the disclosures therein, or (F) otherwise (each a "Restrictive Legend Event"). To the extent that the Warrants cannot be exercised as a result of a Restrictive Legend Event or a Restrictive Legend Event occurs after a Holder has exercised Warrants in accordance with the terms of the Warrants but prior to the delivery of the Warrant ADSs, the Company shall, at the election of the Holder, which shall be given within five (5) days of receipt of such notice of the Restrictive Legend Event, either rescind the previously submitted Election to Purchase and the Company shall return all consideration paid by registered holder for such shares upon such.

3.3.8 Disputes. In the case of a dispute as to the determination of the Exercise Price or the arithmetic calculation of the number of Warrant ADSs issuable in connection with any exercise, the Company shall promptly deliver to the Holder the number of Warrant ADSs that are not disputed.

3.3.9 Compensation for Buy-In on Failure to Timely Deliver Warrant ADSs Upon Exercise. In addition to any other rights available to the Holder, if the Company fails to cause the Depositary to deliver the Warrant ADSs to the Holder pursuant to Section 3.3.2, and if after such date the beneficial owner is required by its broker to purchase (in an open market transaction or otherwise) or the beneficial owner's brokerage firm otherwise purchases, ADSs or Ordinary Shares to deliver in satisfaction of a sale by the beneficial owner of the Warrant ADSs, which the beneficial owner anticipated receiving upon such exercise (a "Buy-In"), then the Company shall (A) pay in cash to the Holder the amount, if any, by which (x) the beneficial owner's total purchase price (including brokerage commissions, if any) for the Warrant ADSs or Warrant Shares so purchased exceeds (y) the amount obtained by multiplying (i) the number of Warrant ADSs or Warrant Shares, as applicable, that the Company was required to deliver to the Holder in connection with the exercise at issue times (ii) the price at which the sell order giving rise to such purchase obligation was executed, and (B) at the option of the Holder, either reinstate the portion of the Warrant and equivalent number of Warrant ADSs or Warrant Shares, as applicable, for which such exercise was not honored (in which case such exercise shall be deemed rescinded) or deliver to the Holder the number of Warrant ADSs or Warrant Shares, as applicable, that would have been issued had the Company timely complied with its delivery obligations. For example, if the beneficial owner purchases ADSs or Ordinary Shares having a total purchase price (including brokerage commissions) of $11,000 to cover a Buy-In with respect to an attempted exercise of Warrant ADSs with an aggregate sale price giving rise to such purchase obligation of $10,000, under clause (A) of the immediately preceding sentence, the Company shall be required to pay the Holder $1,000 for the benefit of the beneficial owner. The Holder shall provide the Company written notice indicating the amounts payable to the Holder in respect of the Buy-In and, upon request of the Company, evidence of the amount of such loss. Nothing herein shall limit right of a Holder to pursue any other remedies available to it hereunder, at law or in equity including, without limitation, a decree of specific performance and/or injunctive relief with respect to the Company's failure to timely deliver Warrant ADSs upon exercise of Warrants as required pursuant to the terms of this Warrant Agreement. The Warrant Agent shall have no liability for the Company's failure to deliver to the Holders the Warrant ADSs as set forth in this Section 3.3.9.

In addition, if the Company fails for any reason to deliver to the Holder the Warrant ADSs subject to an Election to Purchase by the Warrant ADS Delivery Date, the Company shall pay to the Holder, in cash, as liquidated damages and not as a penalty, for each $1,000 of Warrant ADSs subject to such exercise (based on the VWAP of the ADSs on the date of the applicable Election to Purchase), $10 per Trading Day for each Trading Day after such Warrant ADS Delivery Date until such Warrant ADSs are delivered or Holder rescinds such exercise. The Company agrees to maintain a transfer agent that is a participant in the FAST program so long as this Warrant remains outstanding and exercisable. In addition, if the Company fails to cause the Depository to transmit to the Holder the Warrant ADSs by the Warrant ADS Delivery Date, then the Holder will have the right to rescind such exercise.

For purposes of this Warrant Agreement the term "VWAP" shall mean, for any date, the price determined by the first of the following clauses that applies: (a) if the ADSs are then listed or quoted on a Trading Market, the daily volume weighted average price of the ADSs for such date (or the nearest preceding date) on the Trading Market on which the ADSs are then listed or quoted as reported by Bloomberg L.P. (based on a Trading Day from 9:30 a.m. (New York City time) to 4:02 p.m. (New York City time)), (b) the volume weighted average price of the ADSs for such date (or the nearest preceding date) on the OTC Bulletin Board, (c) if the ADSs are not then listed or quoted for trading on the OTC Bulletin Board and if prices for the ADSs are then reported in the OTCQB maintained by OTC Markets Group, Inc. (or a similar organization or agency succeeding to its functions of reporting prices), the most recent Bid Price per ADS so reported, or (d) in all other cases, the fair market value of an ADS as determined by an independent appraiser selected in good faith by the Company, the fees and expenses of which shall be paid by the Company.

"Bid Price" means, for any date, the price determined by the first of the following clauses that applies: (a) if the ADSs are then listed or quoted on a Trading Market, the Bid Price of the ADSs for the time in question (or the nearest preceding date) on the Trading Market on which the ADSs is then listed or quoted as reported by Bloomberg L.P. (based on a Trading Day from 9:30 a.m. (New York City time) to 4:02 p.m. (New York City time)), (b) if OTCQB or OTCQX is not a Trading Market, the volume weighted average price of the ADSs for such date (or the nearest preceding date) on OTCQB or OTCQX as applicable, (c) if the ADSs are not then listed or quoted for trading on OTCQB or OTCQX and if prices for the ADSs are then reported on the Pink Open Market (or a similar organization or agency succeeding to its functions of reporting prices), the most recent Bid Price per share of the ADSs so reported, or (d) in all other cases, the fair market value of an ADS as determined by an independent appraiser selected in good faith by the Holders of a majority in interest of the Warrants then outstanding and reasonably acceptable to the Company, the fees and expenses of which shall be paid by the Company.

3.3.10 The Company shall pay all Warrant Agent and Depositary fees required for timely processing of any Election to Purchase and all fees to DTC (or another established clearing corporation performing similar functions) required for electronic issuance and delivery of the Warrant ADSs for timely delivery of Warrant ADSs on or prior to the Warrant ADSs Delivery Date. The Company shall pay all applicable fees and expenses of the Depositary in connection with the issuance of the Warrants ADSs hereunder.

4. Adjustments.

The Exercise Price, the number of Warrant ADSs covered by each Warrant and the number of Warrants outstanding are subject to adjustment from time to time as provided in Section 5 of the Warrant Certificate. In the event that at any time, as a result of an adjustment made pursuant to Section 5 of the Warrant Certificate, the Holder of any Warrant thereafter exercised shall become entitled to receive any shares of capital stock of the Company other than Warrant ADSs, thereafter the number of such other shares so receivable upon exercise of any Warrant shall be subject to adjustment from time to time in a manner and on terms as nearly equivalent as practicable to the provisions with respect to the shares contained in Section 5 of the Warrant Certificate with respect to the Warrant ADSs shall apply on like terms to any such other shares. All Warrants originally issued by the Company subsequent to any adjustment made to the Exercise Price pursuant to the Warrant Certificate shall evidence the right to purchase, at the adjusted Exercise Price, the number of Warrant ADSs purchasable from time to time hereunder upon exercise of the Warrants, all subject to further adjustment as provided herein.

5. Restrictive Legends; Fractional Warrants.

In the event that a Warrant Certificate surrendered for transfer bears a restrictive legend, the Warrant Agent shall not register that transfer until the Warrant Agent has received an opinion of counsel for the Company stating that such transfer may be made and indicating whether the Warrants must also bear a restrictive legend upon that transfer. The Warrant Agent shall not be required to effect any registration of transfer or exchange which will result in the transfer of or delivery of a Warrant Certificate for a fraction of a Warrant.

6. Expense Reimbursement.

The Company shall reimburse the Holder, upon the Holder's request, for any reasonable fees charged to the Holder by the Depositary in connection with the issuance or holding or sale of ADSs, Warrant ADSs and/or Ordinary Shares.

7. Other Provisions Relating to Rights of Holders of Warrants.

7.1 No Rights as Stockholder. Except as otherwise specifically provided herein, a Holder, solely in its capacity as a holder of Warrants, shall not be entitled to vote or receive dividends or be deemed the holder of share capital of the Company for any purpose, nor shall anything contained in this Warrant Agreement be construed to confer upon a Holder, solely in its capacity as the registered holder of Warrants, any of the rights of a stockholder of the Company or any right to vote, give or withhold consent to any corporate action (whether any reorganization, issue of stock, reclassification of share capital, consolidation, merger, conveyance or otherwise), receive notice of meetings, receive dividends or subscription rights or rights to participate in new issues of shares, or otherwise, prior to the issuance to the Holder of the Warrant ADSs which it is then entitled to receive upon the due exercise of Warrants.

7.2 Reservation of Ordinary Shares. The Company shall at all times reserve and keep available a number of its authorized but unissued Ordinary Shares that will be sufficient to permit the exercise in full of all outstanding Warrants issued pursuant to this Warrant Agreement and which are available to be issued for that purpose without restriction (including without prejudice to the generality) by restriction of pre-emption or offer round or other consent rights).

8. Concerning the Warrant Agent and Other Matters.

8.1 (a) Whether or not any Warrants are exercised, the Company agrees to pay to the Warrant Agent reasonable compensation for all services rendered by it hereunder in accordance with a fee schedule to be mutually agreed upon and, from time to time, on demand of the Warrant Agent , to reimburse the Warrant Agent for all of its reasonable expenses and counsel fees and other disbursements incurred in the preparation, delivery, negotiation, amendment, administration and execution of this Warrant Agreement and the exercise and performance of its duties hereunder.

(b) All amounts owed by the Company to the Warrant Agent under this Warrant Agreement are due within 30 days of the invoice date. Delinquent payments are subject to a late payment charge of one and one-half percent (1.5%) per month commencing 45 days from the invoice date. The Company agrees to reimburse the Warrant Agent for any attorney's fees and any other costs associated with collecting delinquent payments.

(c) No provision of this Warrant Agreement shall require Warrant Agent to expend or risk its own funds or otherwise incur any financial liability in the performance of any of its duties under this Warrant Agreement or in the exercise of its rights.

8.2 As agent for the Company hereunder the Warrant Agent:

(a) shall have no duties or obligations other than those specifically set forth in this Warrant Agreement or as may subsequently be agreed to in writing by the Warrant Agent and the Company, subject to the Section 8.11(c);

(b) shall have no obligation to effect any delivery of Warrant ADSs other than to instruct the Depositary with respect to that delivery;

(c) shall be regarded as making no representations and having no responsibilities as to the validity, sufficiency, value, or genuineness of the Warrants or any Warrant Shares or Warrant ADSs;

(d) shall not be obligated to take any legal action under this Warrant Agreement; if, however, the Warrant Agent determines, in its sole and absolute discretion, to take any legal action under this Warrant Agreement, and where the taking of such action might, in its judgment, subject or expose it to any expense or liability it shall not be required to act unless it has been furnished with an indemnity satisfactory to it;

(e) may rely on and shall be fully authorized and protected in acting or failing to act upon any certificate, instrument, opinion, notice, letter, telegram, telex, facsimile transmission or other document or security delivered to the Warrant Agent and believed by it to be genuine and to have been signed by the proper party or parties;

(f) shall not be liable or responsible for any recital or statement contained in the Registration Statement or any other documents relating thereto, this Warrant Agreement or any Warrant Certificate except as to its countersignature thereof, or be required to verify the same, but all such statements and recitals are and shall be deemed to have been made by the Company only;

(g) shall not have any liability for or be under any responsibility in respect of the validity of this Warrant Agreement or the execution and delivery hereof (except the due execution hereof by the Warrant Agent) or in respect of the legality or validity or execution of any Warrant Certificate (including in the case of book entry shares, by notation in book entry accounts reflecting ownership), except its countersignature thereof; nor shall it be responsible for any breach by the Company of any covenant or failure by the Company to satisfy any condition contained in this Warrant Agreement or in any Warrant Certificate; nor shall it be liable or responsible for modification by or order of any court, tribunal, or governmental authority in connection with the foregoing, any change in the exercisability of the Warrant ADSs or any adjustment required under this Warrant Agreement or responsible for the manner, method or amount of any such adjustment or the ascertaining of the existence of facts that would require any such adjustment;

(h) shall not be liable or responsible for any failure on the part of the Company to comply with any of its covenants and obligations relating to the Warrants, including without limitation obligations under this Warrant Agreement and applicable securities laws;

(i) may rely on and shall be fully authorized and protected in acting or failing to act upon the written, telephonic or oral instructions with respect to any matter relating to its duties as Warrant Agent covered by this Warrant Agreement (or supplementing or qualifying any such actions) of officers of the Company, and is hereby authorized and directed to accept instructions with respect to the performance of its duties hereunder from the Company or counsel to the Company, and may apply to the Company, for advice or instructions in connection with the Warrant Agent's duties hereunder, and the Warrant Agent shall not be liable for any delay in acting while waiting for those instructions; any applications by the Warrant Agent for written instructions from the Company may, at the option of the Warrant Agent , set forth in writing any action proposed to be taken or omitted by the Warrant Agent under this Warrant Agreement and the date on or after which such action shall be taken or such omission shall be effective; the Warrant Agent shall not be liable for any action taken by, or omission of, the Warrant Agent in accordance with a proposal included in such application on or after the date specified in such application (which date shall not be less than five Business Days after the date such application is sent to the Company, unless the Company shall have consented in writing to any earlier date) unless prior to taking any such action, the Warrant Agent shall have received written instructions in response to such application specifying the action to be taken or omitted;

(j) may consult with counsel satisfactory to the Warrant Agent and the advice or opinion of such counsel shall be full and complete authorization and protection in respect of any action taken, suffered, or omitted by it hereunder in accordance with the advice or opinion of such counsel;

(k) may execute and exercise any of the rights or powers hereby vested in it or perform any duty hereunder either itself or by or through its attorneys or agents, and the Warrant Agent shall not be answerable or accountable for any act, omission, default, neglect or misconduct of any such attorneys or agents or for any loss to the Company, to Holders or any other person resulting from any such act, omission, default, neglect or misconduct, absent gross negligence or willful misconduct in the selection and continued employment thereof (which gross negligence or willful misconduct must be determined by a final, non-appealable judgment of a court of competent jurisdiction);

(l) is not authorized, and shall have no obligation, to pay any brokers, dealers, or soliciting fees to any person;

(m) shall not be required hereunder to comply with the laws or regulations of any country other than the United States of America or any political subdivision thereof; and Warrant Agent may, after consulting with the Company to the extent practical, consult with foreign counsel, the fees and expenses of which shall be at the Company's expense, to resolve any foreign law issues that may arise as a result of the Company or any other party being subject to the laws or regulations of any foreign jurisdiction;

(n) any stockholder, affiliate, member, director, officer, agent, representative or employee of the Warrant Agent may buy, sell or deal in any of the Warrant ADSs or other securities of the Company or may become pecuniarily interested in any transaction in which the Company may be interested, or contract with or lend money to the Company or otherwise act as fully and freely as though it were not the Warrant Agent under this Warrant Agreement. Nothing herein shall preclude the Warrant Agent or any such stockholder, affiliate, director, member, officer, agent, representative or employee from acting in any other capacity for the Company or for any other person; and

(o) shall not be required to take notice or be deemed to have notice of any event or condition hereunder, including any event or condition that may require action by the Warrant Agent , unless the Warrant Agent shall be specifically notified in writing of such event or condition by the Company, and all notices or other instruments required by this Warrant Agreement to be delivered to the Warrant Agent must, in order to be effective, be received by the Warrant Agent as specified in Section 8.10 hereof, and in the absence of such notice so delivered, the Warrant Agent may conclusively assume no such event or condition exists.

8.3 (a) In the absence of gross negligence or willful misconduct on its part (which gross negligence or willful misconduct must be determined by a final, non-appealable judgment of a court of competent jurisdiction), the Warrant Agent shall not be liable for any action taken, suffered, or omitted by it or for any error of judgment made by it in the performance of its duties under this Warrant Agreement. Anything in this Warrant Agreement to the contrary notwithstanding, in no event shall Warrant Agent be liable for special, indirect, incidental, consequential or punitive losses or damages of any kind whatsoever (including but not limited to lost profits), even if the Warrant Agent has been advised of the possibility of such losses or damages and regardless of the form of action. Any liability of the Warrant Agent will be limited in the aggregate to the amount of fees (but not reimbursed costs, charges or expenses) paid by the Company hereunder for the twelve months preceding the event for which recovery from the Warrant Agent is being sought. The Warrant Agent shall not be liable for any failures, delays or losses, arising directly or indirectly out of conditions beyond its reasonable control including, but not limited to, acts of government, exchange or market ruling, suspension of trading, work stoppages or labor disputes, fires, civil disobedience, riots, rebellions, storms, electrical or mechanical failure, computer hardware or software failure, communications facilities failures including telephone failure, war, terrorism, insurrection, earthquakes, floods, epidemics, pandemics, acts of God or similar occurrences.

(b) In the event any question or dispute arises with respect to the proper interpretation of the Warrants or the Warrant Agent's duties under this Warrant Agreement or the rights of the Company or of any Holder, the Warrant Agent shall not be required to act and shall not be held liable or responsible for its refusal to act until the question or dispute has been judicially settled (and, if appropriate, it may, but shall not be required to, file a suit in interpleader or for a declaratory judgment for such purpose) by final judgment rendered by a court of competent jurisdiction, binding on all persons interested in the matter which is no longer subject to review or appeal, or settled by a written document in form and substance satisfactory to Warrant Agent and executed by the Company and each such Holder. In addition, the Warrant Agent may require for such purpose, but shall not be obligated to require, the execution of such written settlement by all the Holders and all other persons that may have an interest in the settlement.

(c) The Warrant Agent shall not have any duty or responsibility in the case of the receipt of any written demand from any Holder with respect to any action or default by the Company, including, without limiting the generality of the foregoing, any duty or responsibility to initiate or attempt to initiate any proceedings at law or otherwise or to make any demand upon the Company on behalf of any Holder.

8.4 The Company covenants to indemnify the Warrant Agent and hold it harmless from and against loss, liability, damage, judgment, fine, penalty, claim, demand, settlement, cost or expense (including, without limitation, the reasonable fees and expenses of legal counsel) that may be paid to any third party, incurred or suffered by it, or which it may become subject, without gross negligence or illegal or willful misconduct on the part of the Warrant Agent (which gross negligence or willful misconduct must be determined by a final, non-appealable judgment of a court of competent jurisdiction), for any action taken, suffered, or omitted to be taken by the Warrant Agent in connection with the execution, acceptance, administration, exercise and performance of its duties under this Warrant Agreement, including the costs and expenses of defending against any claim of liability arising therefrom, directly or indirectly, or enforcing its rights hereunder against any third party. The provisions under Sections 8.1, 8.2, 8.3 and this Section 8.4 shall survive the expiration of the Warrant ADSs and the termination of this Warrant Agreement and the resignation, replacement or removal of the Warrant Agent. The costs and expenses incurred in enforcing this right of indemnification shall be borne by the Company.

8.5 Unless terminated earlier by the parties hereto, this Warrant Agreement shall terminate 90 days after the earlier of the Expiration Date and the date on which no Warrants remain outstanding (the "Termination Date"). On the Business Day following the Termination Date, the Agent shall deliver to the Company any entitlements, if any, held by the Warrant Agent under this Warrant Agreement. The Agent's right to be indemnified and held harmless and to be reimbursed for fees, charges and out-of-pocket expenses as provided in this Section 8 shall survive the termination of this Warrant Agreement.

8.6 If any provision of this Warrant Agreement shall be held illegal, invalid, or unenforceable by any court, this Warrant Agreement shall be construed and enforced as if such provision had not been contained herein and shall be deemed an agreement among the parties to it to the full extent permitted by applicable law; provided, however, that if such excluded provision shall adversely affect the rights, immunities, liabilities, duties or obligations of the Warrant Agent, the Warrant Agent shall be entitled to resign immediately upon written notice to the Company.

8.7 The Company represents and warrants that (a) it is duly incorporated and validly existing under the laws of its jurisdiction of incorporation, (b) the offer and sale of the Warrants and the execution, delivery and performance of all transactions contemplated thereby (including this Warrant Agreement) have been duly authorized by all necessary corporate action and will not result in a breach of or constitute a default under the articles of association, bylaws or any similar document of the Company or any indenture, agreement or instrument to which it is a party or is bound, (c) this Warrant Agreement has been duly executed and delivered by the Company and constitutes the legal, valid, binding and enforceable obligation of the Company, (d) the Warrants will comply in all material respects with all applicable requirements of law and (e) to the best of its knowledge, there is no litigation pending or threatened as of the date hereof in connection with the offering of the Warrants.

8.8 In the event of inconsistency between this Warrant Agreement and the descriptions in the Registration Statement and the ADS Registration Statement, as they may from time to time be amended, the terms of this Warrant Agreement shall control.

8.9 Set forth in Annex C hereto is a list of the names and specimen signatures of the persons authorized to act for the Company under this Warrant Agreement. The Company shall, from time to time, certify to the Warrant Agent the names and signatures of any other persons authorized to act for the Company under this Warrant Agreement (collectively, the "Authorized Representatives"). The Warrant Agent shall be fully authorized and protected in relying upon the advice or instructions received from any such Authorized Representatives.

8.10 Except as expressly set forth elsewhere in this Warrant Agreement, all notices, instructions and communications under this Warrant Agreement shall be in writing, by overnight delivery service, first-class mail, postage prepaid, properly addressed shall be effective upon receipt and shall be addressed, if to the Company, to its address set forth beneath its signature to this Warrant Agreement, or, if to the Warrant Agent, to:

Computershare Inc.
Computershare Trust Company, N.A.
150 Royall Street
Canton, MA 02021
Attention: Client Services

or to such other address of which a party hereto has notified the other party; and, if to a Holder made if sent by first-class mail, postage prepaid, or overnight delivery service, addressed to such Holder at the last address of such Holder set forth for such holder in the Warrant Register.

8.11 (a) This Warrant Agreement shall be governed by and construed in accordance with the law of the State of New York. All actions and proceedings relating to or arising from, directly or indirectly, this Warrant Agreement may be brought in courts of the State of New York or of the United States of America sitting within the Borough of

Manhattan in the City and State of New York. The Company hereby submits to the personal jurisdiction of such courts and consents that any service of process may be made by certified or registered mail, return receipt requested, directed to the Company at its address last specified for notices hereunder. Each of the parties hereto hereby waives the right to a trial by jury in any action or proceeding arising out of or relating to this Warrant Agreement.

(b) This Warrant Agreement shall inure to the benefit of and be binding upon the successors and assigns of the parties hereto. This Warrant Agreement may not be assigned, or otherwise transferred, in whole or in part, by either party without the prior written consent of the other party, which the other party will not unreasonably withhold, condition or delay; except that (i) consent is not required for an assignment or delegation of duties by Warrant Agent to any affiliate of Warrant Agent and (ii) any reorganization, merger, consolidation, sale of assets or other form of business combination by Warrant Agent or the Company shall not be deemed to constitute an assignment of this Warrant Agreement.

(c) No provision of this Warrant Agreement may be amended, modified or waived, except in a written document signed by both parties. The Company and the Warrant Agent may amend or supplement this Warrant Agreement without the consent of any Holder for the purpose of curing any ambiguity, or curing, correcting or supplementing any defective provision contained herein or adding or changing any other provisions with respect to matters or questions arising under this Warrant Agreement as the parties may deem necessary or desirable and that the parties determine, in good faith, shall not adversely affect the interest of the Holders in any material respect. All other amendments and supplements shall require the vote or written consent of Holders of a majority of the then outstanding Warrants, provided, however, that no modification of the terms (including but not limited to the adjustments described in Section 4 herein) upon which the Warrants are exercisable or the rights of the holders of Warrants to receive payments in cash from the Company, or no reduction of the percentage required for consent to modification of this Warrant Agreement or no requirement for a holder of Warrants in book entry or electronic form held through DTC to deliver any ink-original Election to Purchase or any medallion guarantee (or other type of guarantee or notarization) of an Election to Purchase or reimbursement to the Holder pursuant to Section 6 may be made without the consent of the Holder of each outstanding Warrant affected thereby. As a condition precedent to the Warrant Agent executing any amendment or supplement, the Company shall deliver a certificate from an Authorized Representative which states that the proposed supplement or amendment is in compliance with the terms of this Section 8.11(c). Notwithstanding anything in this Warrant Agreement to the contrary, the Warrant Agent shall not be required to execute any supplement or amendment to this Warrant Agreement that it has determined would adversely affect its own rights, duties, obligations or immunities under this Warrant Agreement.

8.12 Payment of Taxes. The Company will from time to time promptly pay all taxes and charges that may be imposed upon the Company or the Warrant Agent in respect of the issuance or delivery of Warrant Shares or Warrant ADSs upon the exercise of Warrants, but the Company may require the Holders to pay any transfer taxes in respect of the Warrants or such shares. The Warrant Agent may refrain from registering any transfer of Warrants or any delivery of any Warrant ADSs unless or until the persons requesting the registration or issuance shall have paid to the Warrant Agent for the account of the Company the amount of such tax or charge, if any, or shall have established to the reasonable satisfaction of the Company and the Warrant Agent that such tax or charge, if any, has been paid.

8.13 Resignation of Warrant Agent.

8.13.1 Appointment of Successor Warrant Agent. The Warrant Agent, or any successor to it hereafter appointed, may resign its duties and be discharged from all further duties and liabilities hereunder after giving thirty (30) days' notice in writing to the Company, or such shorter period of time agreed to by the Company. The Company may terminate the services of the Warrant Agent, or any successor Warrant Agent, after giving thirty (30) days' notice in writing to the Warrant Agent or successor Warrant Agent. In the event any transfer agency relationship in effect between the Company and the Warrant Agent terminates, the Warrant Agent will be deemed to have resigned automatically and be discharged from its duties under this Warrant Agreement as of the effective date of such termination, If the office of the Warrant Agent becomes vacant by resignation, termination or incapacity to act or otherwise, the Company shall appoint in writing a successor Warrant Agent in place of the Warrant Agent. If the Company shall fail to make such appointment within a period of 30 days after it has been notified in writing of such resignation or incapacity by the Warrant Agent, then the Warrant Agent or any Holder may apply to any court of competent jurisdiction for the appointment of a successor Warrant Agent at the Company's cost. Pending appointment of a successor to such Warrant Agent, either by the Company or by such a court, the duties of the Warrant Agent shall be carried out by the Company. Any successor Warrant Agent (but not including the initial Warrant Agent), whether appointed by the Company or by such court, shall be a person organized and existing under the laws of any state of the United States of America, in good standing, and authorized under such laws to exercise corporate trust powers and subject to supervision or examination by federal or state authority. After appointment, any successor Warrant Agent shall be vested with all the authority, powers, rights, immunities, duties, and obligations of its predecessor Warrant Agent with like effect as if originally named as Warrant Agent hereunder, without any further act or deed, and except for executing and delivering documents as provided in the sentence that follows, the predecessor Warrant Agent shall have no further duties, obligations, responsibilities or liabilities hereunder, but shall be entitled to all rights that survive the termination of this Warrant Agreement and the resignation or removal of the Warrant Agent , including but not limited to its right to indemnity hereunder. If for any reason it becomes necessary or appropriate or at the request of the Company, the predecessor Warrant Agent shall execute and deliver, at the expense of the Company, an instrument transferring to such successor Warrant Agent all the authority, powers, and rights of such predecessor Warrant Agent hereunder, except the rights and immunities retained by the predecessor Warrant Agent under the terms hereof; and upon request of any successor Warrant Agent the Company shall make, execute, acknowledge, and deliver at the expense of the Company any and all instruments in writing for more fully and effectually vesting in and confirming to such successor Warrant Agent all such authority, powers, rights, immunities, duties, and obligations.

8.13.2 Notice of Successor Warrant Agent. In the event a successor Warrant Agent shall be appointed, the Company shall give notice thereof to the predecessor Warrant Agent and the transfer agent for the ADSs not later than the effective date of any such appointment.

8.13.3 Merger or Consolidation of Warrant Agent. Any person into which the Warrant Agent may be merged or converted or with which it may be consolidated or any person resulting from any merger, conversion or consolidation to which the Warrant Agent shall be a party or any person succeeding to the shareowner services business of the Warrant Agent or any successor Warrant Agent shall be the successor Warrant Agent under this Warrant Agreement, without any further act or deed. For purposes of this Warrant Agreement, "person" shall mean any individual, firm, corporation, partnership, limited liability company, joint venture, association, trust or other entity, and shall include any successor (by merger or otherwise) thereof or thereto.

9. Miscellaneous Provisions.

9.1 Persons Having Rights under this Warrant Agreement. Nothing in this Warrant Agreement expressed and nothing that may be implied from any of the provisions hereof is intended, or shall be construed, to confer upon, or give to, any person or corporation other than the parties hereto and the Holders any right, remedy, or claim under or by reason of this Warrant Agreement or of any covenant, condition, stipulation, promise, or agreement hereof.

9.2 Examination of the Warrant Agreement. A copy of this Warrant Agreement shall be available at all reasonable times at the office of the Warrant Agent designated for such purpose for inspection by any Holder. Prior to such inspection, the Warrant Agent may require any such holder to provide reasonable evidence of its interest in the Warrants.

9.3 Counterparts. This Warrant Agreement may be executed in any number of original, facsimile or electronic counterparts and each of such counterparts shall for all purposes be deemed to be an original, and all such counterparts shall together constitute but one and the same instrument.

9.4 Effect of Headings. The Section headings herein are for convenience only and are not part of this Warrant Agreement and shall not affect the interpretation thereof.

9.5 Further Assurance. The Company agrees that it will perform, execute, acknowledge and deliver or cause to be performed, executed, acknowledged and delivered all such further and other acts, instruments and assurances as may reasonably be required or requested by the Warrant Agent for the carrying out or performing by the Warrant Agent of the provisions of this Warrant Agreement.

IN WITNESS WHEREOF, this Warrant Agreement has been duly executed by the parties hereto as of the day and year first above written.

TC BIOPHARM (HOLDINGS) PLC

By: ____________________
Name:
Title:

Address for notices:
Maxim 1, 2 Parklands Way
Holytown, Motherwell, ML1 4WR
Scotland, United Kingdom
Attention: Chief Financial Officer
Telephone: +44 (0) 141 433 7557
Facsimile:
E-mail:

Computershare Inc.,
Computershare Trust Company, N.A.,
As Warrant Agent

By: ____________________
Name:
Title:

Annex A Form of Warrant Certificate
Exhibit A – Notice of Exercise
Exhibit B – Assignment Form
Annex B – Warrant Certificate Request Notice
Annex C – Global Warrant Request Notice
Annex C Authorized Representatives
Annex D Form of Warrant Certificate Request Notice

ANNEX A

Warrant Certificate

PURCHASE WARRANT FOR ADSs (ORDINARY SHARE)

TC BIOPHARM (HOLDINGS) PLC

Number of ADSs: [_______]

Initial Exercise Date: [_______], 2022

This certifies that the person whose name and address appears below, or registered assigns, is the registered owner of the number of Warrants set forth herein. Each Warrant entitles its registered holder to purchase from TC BioPharm (Holdings) plc, a company incorporated in Scotland at any time prior to 5:00 P.M. (New York City time) on _________, 2025, at the designated office of Computershare Inc. and Computershare Trust Company, N.A., as warrant agent, one American Depositary Share, each ADS representing one (1) ordinary share, par value £0.01, of the Company, upon payment of the exercise price set forth below in Section 4(a), subject to possible adjustments as provided herein. The Company will pay the issuance fee for each ADS issued pursuant to the Warrants to the Depositary under the Deposit Agreement.

This Warrant Certificate, with or without other Warrant Certificates, upon surrender at the designated office of the Warrant Agent, may be exchanged for another Warrant Certificate or Warrant Certificates evidencing the same number of Warrants as the Warrant Certificate or Warrant Certificates surrendered. A transfer of the Warrants evidenced hereby may be registered upon surrender of this Warrant Certificate at the designated office of the Warrant Agent by the registered holder in person or by a duly authorized attorney, properly endorsed or accompanied by proper instruments of transfer, a signature guarantee, and such other and further documentation as the Warrant Agent may reasonably request and duly stamped as may be required by the law of the State of New York and of the United States of America.

The terms and conditions of the Warrants and the rights and obligations of the holder of this Warrant Certificate are set forth in the Warrant Agency Agreement dated as of __________,.

Section 1. Definitions. In addition to the terms defined elsewhere in this Warrant, the following terms have the meanings indicated in this Section 1:

"Affiliate" means any Person that, directly or indirectly through one or more intermediaries, controls or is controlled by or is under common control with a Person, as such terms are used in and construed under Rule 405 under the Securities Act.

"ADS" means an American Depositary Share, and ADSs means American Depositary Shares.

"American Depositary Shares" means the ADSs issuable under the Deposit Agreement representing ordinary shares of the Company.

"Bid Price" means, for any date, the price determined by the first of the following clauses that applies: (a) if the ADSs are then listed or quoted on a Trading Market, the Bid Price of the ADSs for the time in question (or the nearest preceding date) on the Trading Market on which the ADSs is then listed or quoted as reported by Bloomberg L.P. (based on a Trading Day from 9:30 a.m. (New York City time) to 4:02 p.m. (New York City time)), (b) if OTCQB or OTCQX is not a Trading Market, the volume weighted average price of the ADSs for such date (or the nearest preceding date) on OTCQB or OTCQX as applicable, (c) if the ADSs are not then listed or quoted for trading on OTCQB or OTCQX and if prices for the ADSs are then reported on the Pink Open Market (or a similar organization or agency succeeding to its functions of reporting prices), the most recent Bid Price per share of the ADSs so reported, or (d) in all other cases, the fair market value of an ADS as determined by an independent appraiser selected in good faith by the Holders of a majority in interest of the Warrants then outstanding and reasonably acceptable to the Company, the fees and expenses of which shall be paid by the Company.

"Board of Directors" means the board of directors of the Company.

"Business Day" means any day other than Saturday, Sunday or other day on which commercial banks in The City of New York are authorized or required by law to remain closed; provided, however, for clarification, commercial banks shall not be deemed to be authorized or required by law to remain closed due to "stay at home", "shelter-in-place", "non-essential employee" or any other similar orders or restrictions or the closure of any physical branch locations at the direction of any governmental authority so long as the electronic funds transfer systems (including for wire transfers) of commercial banks in The City of New York generally are open for use by customers on such day.

"Commission" means the United States Securities and Exchange Commission.

"Company" means TC BioPharm (Holdings) plc.

"Deposit Agreement" means the deposit agreement between the Company and Bank of New York Mellon, dated January __, 2022.

"Equivalent Securities" means any securities of the Company or the Subsidiaries which would entitle the holder thereof to acquire at any time Ordinary Shares, including, without limitation, any debt, preferred stock, right, option, warrant or other instrument that is at any time convertible into or exercisable or exchangeable for, or otherwise entitles the holder thereof to receive, Ordinary Shares.

"Exempt Issuance" means the issuance of

(i) Ordinary Shares or options to employees, officers or directors of the Company or consultants to the Company pursuant to any stock or option plan or other written agreement duly adopted for such purpose, by a majority of the non-employee members of the Board of Directors or a majority of the members of a committee of non-employee directors established for such purpose for services rendered to the Company, provided, however, until the expiration of the lock-up agreements entered into in connection with the IPO offering in which this warrant was issued, such issuance excluding options disclosed in the prospectus for the offering in which this warrant was issued (A) shall not exceed fifteen percent (15%) of the Ordinary Shares issued and outstanding as of the date hereof, (B) shall be at no less than fair market value (as measured by the closing price of the Ordinary Shares on the Trading Market on the date of issuance) and (C) in the first year from the date hereof shall be issued as restricted securities;

(ii) securities upon the exercise or exchange of or conversion of any securities exercisable or exchangeable for or convertible into Ordinary Shares issued and outstanding on the date of the Warrant Agent Agreement, provided that such securities have not been amended since the date thereof to increase the number of such securities or to decrease the exercise price, exchange price or conversion price of such securities (other than in connection with stock splits or combinations) or to extend the term of such securities;

(iii) securities issued pursuant to acquisitions or strategic transactions approved by a majority of the disinterested directors of the Company or securities issued in financing transactions, the primary purpose of which is to finance acquisitions or strategic transactions approved by a majority of the disinterested directors of the Company, provided that such securities are issued as "restricted securities" (as defined in Rule 144 under the Securities Act) and carry no registration rights that require or permit the filing of any registration statement in connection therewith, and provided that any such issuance shall only be to a person (or to the equity holders of a person) which is, itself or through its subsidiaries, an operating company or an owner of an asset in a business synergistic with the business of the Company and shall provide to the Company additional benefits in addition to the investment of funds, but shall not include a transaction in which the Company is issuing securities primarily for the purpose of raising capital or to a person or an entity whose primary business is investing in securities;

(iv) Ordinary Shares, options or convertible securities issued to banks, equipment lessors or other financial institutions, or to real property lessors, pursuant to a debt financing, equipment leasing or real property leasing transaction approved by a majority of the disinterested directors of the Company but shall not include a transaction in which the company is primarily issuing Ordinary Shares or Equivalent Securities primarily for the purpose of raising capital or to a person or an entity whose primary business is investing in securities;

(v) Ordinary Shares, options or convertible securities issued in connection with the provision of goods or services pursuant to transactions approved by a majority of the disinterested directors of the Company but shall not include a transaction in which the Company is issuing Ordinary Shares or Equivalent Securities primarily for the purpose of raising capital or to a person or an entity whose primary business is investing in securities; and

(vi) Ordinary Shares, options or convertible securities issued in connection with sponsored research, collaboration, technology license, development, investor or public relations, marketing or other similar agreements or strategic partnerships approved by a majority of the disinterested directors of the Company but shall not include a transaction in which the Company is primarily issuing Ordinary Shares or Equivalent Securities primarily for the purpose of raising capital or to a person or an entity whose primary business is investing in securities.

"Exercise Price" means the price per ADS at which the ADSs may be purchased at the time a Warrant is exercised, which price is set forth in Section 4(a).

"Expiration Date" is as defined in Section 4(b).

"Ordinary Shares" means the ordinary shares, par value £0.01 per share of the Company, which may be represented as American Depositary Shares, or ADSs.

"Person" means an individual or corporation, partnership, trust, incorporated or unincorporated association, joint venture, limited liability company, joint stock company, government (or an agency or subdivision thereof) or other entity of any kind.

"Registration Statement" means the Company's registration statement on Form F-1, as amended (File No.333- 260492), relating to the Warrants and the ordinary shares, and the registration statement filed by the Bank of New York Mellon, on Form F-6 (File No. 333-262149 relating to the ADSs.

"Securities Act" means the Securities Act of 1933, as amended, and the rules and regulations promulgated thereunder.

"Trading Day" means any day on which the ADSs are traded on the Trading Market, or, if the Trading Market is not the principal trading market for the ADSs, then on the principal securities exchange or securities market in the United States on which the ADSs are then traded.

"Trading Market" means NYSE American, the Nasdaq Capital Market, the Nasdaq Global Market, the Nasdaq Global Select Market or the New York Stock Exchange on the date in question (or any successors to any of the foregoing).

"Transfer Agent" means Computershare Investor Services plc, the current transfer agent of the Company, with a mailing address of The Pavilions Bridgwater Road, Bristol BS99 6ZZ United Kingdom and any successor transfer agent of the Company.

"VWAP" means, for any date, the price determined by the first of the following clauses that applies: (a) if the ADSs are then listed or quoted on a Trading Market, the daily volume weighted average price of the ADSs for such date (or the nearest preceding date) on the Trading Market on which the ADSs are then listed or quoted as reported by Bloomberg L.P. (based on a Trading Day from 9:30 a.m. (New York City time) to 4:02 p.m. (New York City time)), (b) the volume weighted average price of the ADSs for such date (or the nearest preceding date) on the OTC Bulletin Board, (c) if the ADSs are not then listed or quoted for trading on the OTC Bulletin Board and if prices for the ADSs are then reported in the OTCQB maintained by OTC Markets Group, Inc. (or a similar organization or agency succeeding to its functions of reporting prices), the most recent Bid Price per ADS so reported, or (d) in all other cases, the fair market value of an ADS as determined by an independent appraiser selected in good faith by the Company, the fees and expenses of which shall be paid by the Company.

"Warrant Agency Agreement" means that certain warrant agency agreement, dated on or about the Initial Exercise Date, between the Company and the Warrant Agent.

"Warrant Agent" means Computershare Inc., a Delaware corporation, and its wholly owned subsidiary, Computershare Trust Company, N.A., a federally chartered trust company and any successor warrant agent of the Company.

"Warrants" means this Warrant and other warrants of like tenor issued by the Company pursuant to the Registration Statement.

Section 2. Warrants.

a) Form of Warrants. The Warrants shall be registered securities in book entry form and shall be evidenced by a global certificate ("Global Certificate") in the form of this Annex A to the Warrant Agreement, which shall be deposited on behalf of the Company with a custodian for The Depository Trust Company ("DTC") and registered in the name of Cede & Co., as nominee of DTC. If DTC subsequently ceases to make its book-entry settlement system available for the Warrants, the Company may instruct the Warrant Agent regarding making other arrangements for book-entry settlement. In the event that the Warrants are not eligible for, or it is no longer necessary to have the Warrants available in, book-entry form, the Company may instruct the Warrant Agent to provide written instructions to DTC to deliver to the Warrant Agent for cancellation the Global Certificate, and the Company shall instruct the Warrant Agent to deliver each holder of the Warrants separate certificates in the form of Annex A evidencing Warrants ("Definitive Certificates" and, together with the Global Certificate, "Warrant Certificates") registered as requested through the DTC system. In the event Definitive Certificates are delivered to the holders, the transfer, exchange or exercise of the Warrants shall be conducted in accordance with the customary procedures of the Warrant Agent. The Company shall use its best efforts to enable the Warrants be "DTC eligible" so that the interests in the Warrants may be held in book-entry through DTC for the term of the Warrants.

b) Exchange of Interest in Global Certificate for Definitive Certificate. Notwithstanding Section 2(a) above, a holder of a security entitlement in Warrants evidenced by the Global Certificate has the right to elect at any time to exchange it for a Definitive Certificate evidencing the same number of Warrants. Upon written notice by a participant having Warrants credited to its DTC account for the exchange of some or all that entitlement for a Definitive Certificate evidencing the same number of Warrants, which request shall be in the form attached to the Warrant Agreement in the form of Annex B (a "Warrant Certificate Request Notice" and the date of delivery of such Warrant Certificate Request Notice by the Holder, the "Warrant Certificate Request Notice Date" and the exchange made pursuant to the Warrant Certificate Request Notice, a "Warrant Exchange"), and upon surrender by that Participant of the Warrants to be exchanged to the Warrant Agent through DTC's system, the Warrant Agent shall, without unreasonable delay, effect the Warrant Exchange by issuing and delivering a Definitive Certificate for such number of Warrants in the name and mailed to the address set forth in the Warrant Certificate Request Notice. Such Definitive Certificate shall be dated the original issue date of the Warrants, shall be manually executed by an authorized signatory of the Company and shall be in the form attached to the Warrant Agreement as Annex A In connection with a Warrant Exchange, the Company agrees to deliver, or to direct the Warrant Agent to deliver, the Definitive Certificate to the specified holder within ten (10) Business Days of the Warrant Certificate Request Notice pursuant to the delivery instructions in the Warrant Certificate Request Notice (the "Warrant Certificate Delivery Date").

Section 3. Issuance and Registration of Warrants.

a) Warrant Register. Upon the receipt of all relevant information from the Company or its agents, the Warrant Agent shall maintain books ("Warrant Register") for the registration of original issuance and the registration of transfer of the Warrants.

b) Issuance of Warrants. Upon the initial issuance of the Warrants, the Warrant Agent shall issue the Global Certificate and deliver the Warrants in the DTC book-entry settlement system in accordance with written instructions delivered to the Warrant Agent by the Company. Ownership of beneficial interests in the Warrants shall be shown on, and the transfer of such ownership shall be effected through, records maintained (i) by DTC and (ii) by institutions that have accounts with DTC (each, with respect to a Warrant in its account, a "Participant").

c) Beneficial Owner; Holder. Prior to due presentment for registration of transfer of any Warrant, the Company and the Warrant Agent may deem and treat the person in whose name that Warrant shall be registered on the Warrant Register (the "Holder", which shall include, if the Warrants are held in "street name," a participant or a designee appointed by such participant) as the absolute owner of such Warrant for purposes of any exercise thereof, and for all other purposes, and neither the Company nor the Warrant Agent shall be affected by any notice to the contrary. Notwithstanding the foregoing, nothing herein shall prevent the Company, the Warrant Agent or any agent of the Company or the Warrant Agent from giving effect to any written certification, proxy or other authorization furnished by DTC governing the exercise of the rights of a holder of a beneficial interest in any Warrant. The rights of beneficial owners in a Warrant evidenced by the Global Certificate shall be exercised by the Holder through the DTC system.

d) Execution. The Warrant Certificates shall be executed on behalf of the Company by any authorized officer of the Company (an "Authorized Officer"), which need not be the same authorized signatory for all of the Warrant Certificates, either manually or by facsimile signature. The Warrant Certificates shall be countersigned by an authorized signatory of the Warrant Agent either by manual, electronic or facsimile signature, which need not be the same signatory for all of the Warrant Certificates, and no Warrant Certificate shall be valid for any purpose unless so countersigned. In case any Authorized Officer of the Company that signed any of the Warrant Certificates ceases to be an Authorized Officer of the Company before countersignature by the Warrant Agent and issuance and delivery by the Company, such Warrant Certificates, nevertheless, may be countersigned by the Warrant Agent, issued and delivered with the same force and effect as though the person who signed such Warrant Certificates had not ceased to be such officer of the Company; and any Warrant Certificate may be signed on behalf of the Company by any person who, at the actual date of the execution of such Warrant Certificate, shall be an Authorized Officer of the Company authorized to sign such Warrant Certificate, although at the date of the execution of this Warrant Agreement any such person was not such an Authorized Officer. The rights of holders of Warrant Certificates shall be identical regardless of the Authorized Officer signing for and on behalf of the Company and of the authorized signatory of the Warrant Agent signing such certificates.

e) Registration of Transfer. At any time at or prior to the Expiration Date (as defined below), a transfer of any Warrants may be registered and any Warrant Certificate or Warrant Certificates may be split up, combined or exchanged for another Warrant Certificate or Warrant Certificates evidencing the same number of Warrants as the Warrant Certificate or Warrant Certificates surrendered. Any Holder desiring to register the transfer of Warrants or to split up, combine or exchange any Warrant Certificate shall make such request in writing delivered to the Warrant Agent, and shall surrender to the Warrant Agent the Warrant Certificate or Warrant Certificates evidencing the Warrants the transfer of which is to be registered or that is or are to be split up, combined or exchanged and, in the case of registration of transfer, shall provide a signature guarantee by an "eligible guarantor institution" that is a member or participant in the Securities Transfer Agents Medallion Program or other comparable "signature guarantee program." Thereupon, the Warrant Agent shall countersign and deliver to the person entitled thereto a Warrant Certificate or Warrant Certificates, as the case may be, as so requested. The Company and the Warrant Agent may require payment by the Holder requesting a registration of transfer of Warrants or a split-up, combination or exchange of a Warrant Certificate (but, for purposes of clarity, not upon the exercise of the Warrants and issuance of Warrant ADS to the Holder) of a sum sufficient to cover any tax or governmental charge that may be imposed in connection with such registration of transfer, split-up, combination or exchange, together with reimbursement to the Company and the Warrant Agent of all reasonable expenses incidental thereto. The Warrant Agent shall not have any duty or obligation to take any action under any section of this Warrant that requires the payment of taxes and/or charges unless and until it is satisfied that all such payments have been made.

f) Loss, Theft and Mutilation of Warrant Certificates. Upon receipt by the Company and the Warrant Agent of evidence reasonably satisfactory to them of the loss, theft, destruction or mutilation of a Warrant Certificate, and, in case of loss, theft or destruction, of indemnity or security acceptable to the Warrant Agent, and reimbursement to the Company and the Warrant Agent of all reasonable expenses incidental thereto, and upon surrender to the Warrant Agent and cancellation of the Warrant Certificate if mutilated, the Warrant Agent shall, on behalf of the Company, countersign and deliver a new Warrant Certificate of like tenor to the Holder in lieu of the Warrant Certificate so lost, stolen, destroyed or mutilated. The Warrant Agent may charge the Holder an administrative fee for processing the replacement of lost Warrant Certificates, which shall be charged only once in instances where a single surety bond obtained covers multiple certificates. The Warrant Agent may receive compensation from the surety companies or surety agents for administrative services provided to them. Notwithstanding anything herein to the contrary, in connection with a Warrant in book-entry form through DTC, no posting of a bond shall be required under this Section 3(f).

g) Proxies. The Holder of a Warrant may grant proxies or otherwise authorize any person, including participants and beneficial holders that may own interests through participants, to take any action that a Holder is entitled to take under this Warrant; provided, however, that at all times that Warrants are evidenced by a Global Certificate, exercise of those Warrants shall be effected on their behalf by participants through DTC in accordance with the procedures administered by DTC.

Section 4. Exercise.

a) Exercise Price. Each Warrant shall entitle the Holder, subject to the provisions of the of this Warrant, to purchase from the Company the number of ADSs stated therein, at the price of $______[***NTD: 125% of IPO share price***] per ADS, subject to the subsequent adjustments provided in Section 5 hereof.

b) Duration of Warrants. Warrants may be exercised only during the period ('Exercise Period") commencing on the Issuance Date and terminating at 5:00 P.M., New York City time (the "close of business") on _________, 2025 ***[NTD: Three years after IPO effective date]*** ("Expiration Date"). Each Warrant not exercised on or before the Expiration Date shall become void, and all rights thereunder and all rights in respect thereof under this Warrant Agreement shall cease at the close of business on the Expiration Date.

c) Exercise. Subject to the provisions of this Warrant, a Holder (or a participant acting on behalf of a Holder in accordance with DTC procedures) may exercise Warrants by delivering to the Warrant Agent, not later than 5:00 P.M., New York City time, on any Business Day during the Exercise Period an election to purchase the Warrant ADSs to be exercised (A) in the form included in Exhibit A to this Warrant or (B) via an electronic warrant exercise through the DTC system (each, an "Election to Purchase"). Within one Trading Day following the delivery of the Election to Purchase, the Holder shall deliver (i) the Warrants to be exercised by (A) surrender of the Warrant Certificate evidencing the Warrants to the Warrant Agent at its office designated for such purpose or (B) delivery of the Warrants to an account of the Warrant Agent at DTC designated for such purpose in writing by the Warrant Agent to DTC from time to time, and (ii) the Exercise Price for each Warrant to be exercised (and, if applicable, any taxes or charges due in connection with the exercise of such Warrants), in lawful money of the United States of America by (A) certified or official bank check or wire transfer from a United States bank payable to the Warrant Agent or (B) payment to the Warrant Agent through the DTC system.

If any of (i) the Warrants, (ii) the Election to Purchase, or (iii) the Exercise Price therefor (and, if applicable, any taxes or charges due in connection with the exercise of such Warrants), is received by the Warrant Agent on any date after 5:00 P.M., New York City time, or on a date that is not a Trading Day, the Warrants with respect thereto will be deemed to have been received and exercised on the Trading Day next succeeding such date. The "Exercise Date" will be the date on which the Election to Purchase is delivered to the Warrant Agent; however, the Warrants shall not be deemed to be exercised if the Warrants and the Exercise Price therefor are not received by the Warrant Agent on or prior to the Trading Day following the delivery of the Election to Purchase. If the Warrants are received or deemed to be received after the Expiration Date, the exercise thereof will be null and void and any funds delivered to the Warrant Agent will be returned to the Holder or participant, as the case may be, as soon as practicable.

The Warrant Agent shall deposit all funds received by it in payment of the Exercise Price in the account maintained by the Warrant Agent in its name as agent for the Company. The Warrant Agent shall remit to the Company funds received for warrant exercises in a given month by the fifth Business Day of the following month by wire transfer to an account designated by the Company, or as otherwise from time to time as reasonably requested by the Company. All funds received by Computershare under this Agreement that are to be distributed or applied by Computershare in the performance of services hereunder (the "Funds") shall be held by Computershare as agent for the Company and deposited in one or more bank accounts to be maintained by Computershare in its name as agent for the Company. Until paid pursuant to the terms of this Warrant Agreement, Computershare will hold the Funds in deposit accounts with U.S. commercial banks with Tier 1 capital exceeding $1 billion or with ratings above investment grade by S&P Global Ratings (LT Local Issuer Credit Rating), Moody's Investors Service (Long Term Rating) and Fitch Ratings, Inc. (LT Issuer Default Rating) (each as reported by Bloomberg L.P.). Computershare shall have no responsibility or liability for any diminution of the Funds that may result from any deposit made by Computershare in accordance with this Section 4(c), including any losses resulting from a default by any bank, financial institution or other third party. Computershare may from time to time receive interest, dividends or other earnings in connection with such deposits. Computershare shall not be obligated to pay such interest, dividends or earnings to the Company, any holder or any other party.

If less than all the Warrants evidenced by a surrendered Warrant Certificate are exercised, the Warrant Agent shall split up the surrendered Warrant Certificate and return to the Holder a Warrant Certificate evidencing the Warrants that were not exercised.

d) Issuance of Warrant Securities. The Warrant Agent shall, by 11:00 a.m., New York City time, on the Trading Day following the Exercise Date of any Warrant, advise the Company, the transfer agent and registrar for ordinary shares and the Depositary, in respect of (i) the number of Warrant ADSs indicated on the Election to Purchase as issuable upon such exercise with respect to such exercised Warrants, (ii) the instructions of the Holder or Participant, as the case may be, provided to the Warrant Agent with respect to the delivery of the Warrant ADSs and the number of Warrants that remain outstanding after such exercise and (iii) such other information as the Company or the Depositary shall reasonably request.

The Company shall, by no later than 5:00 P.M., New York City time, on the fourth Trading Day following the Exercise Date of any Warrant, provided the funds in payment of the Exercise Price for each Warrant to be exercised have cleared on the Trading Day following the Exercise Date, cause its registrar to deliver the Warrant ADSs issuable upon that exercise to the Depositary's custodian for deposit under the Deposit Agreement and instruct the Depositary to deliver the Warrant ADSs issuable upon that deposit of ordinary shares as requested in the Election to Purchase Warrant ADSs.

The Company shall, by no later than 5:00 P.M., New York City time, on the fifth Trading Day following the Exercise Date of any Warrant, provided the funds in payment of the Exercise Price for each Warrant to be exercised have cleared on the Trading Day following the Exercise Date, cause the Depositary to deliver the Warrant ADSs to the Holder pursuant to the Election to Purchase (the "Warrant ADS Delivery Date").

e) Valid Issuance. All Warrant ADSs issuable by the Company upon the proper exercise of a Warrant in conformity with this Warrant Agreement shall be validly issued and fully paid.

f) No Fractional Exercise. No fractional Warrant ADSs will be issued upon the exercise of the Warrant, but rather the Company shall adjust the number of Warrant ADSs issued up or down to the nearest integral multiple of the number of ADSs representing the ordinary shares.

g) No Transfer Taxes. The Company shall not be required to pay any stamp or other tax or charge required to be paid in connection with the exercise of Warrants; and the Company shall not be required to issue or deliver any ADSs until such tax or other charge shall have been paid or it has been established to the satisfaction of the Company and the Warrant Agent that no such tax or other charge is due. For purposes of clarity, the Company shall pay any stamp or other tax or charge required to be paid in connection with any issuance to the Holder of the Warrant ADSs upon the exercise of Warrants.

h) Date of Issuance. (a) The Holder shall be deemed for all corporate purposes to have become the holder of record of the Warrant ADSs only on the Warrant ADS Delivery Date, except that, if the Exercise Date is a date when the stock transfer books of the Company are closed, such person shall be deemed to have become the holder of such shares at the open of business on the next succeeding date on which the stock transfer books are open; provided, however, Warrant ADSs will not be registered or issued until the Depositary receives notice from its custodian that the ordinary shares relating to the ADSs have been deposited under the Deposit Agreement; provided further, however, that the Company shall take all reasonable steps to ensure the Warrant ADSs are delivered to the Holder on or prior to the Warrant ADS Delivery Date in accordance with Section 4(d) hereof and, if the Warrant ADSs are not delivered to the Holder on or prior to the Warrant ADS Delivery Date, the provisions of Section 4(k) shall apply.

No exercising Holder, which Holder effected a Warrant Exchange pursuant to Section 2(b) prior to the Exercise Date, shall be required to surrender its Warrant to the Warrant Agent, unless such exercise is for the remaining numbers of ADSs issuable upon exercise of such Warrant, in which case the Holder shall deliver the Warrant Certificate to the Warrant Agent within three (3) Business Days.

i) Restrictive Legend Events. The Company shall use its commercially reasonable efforts to maintain the effectiveness of the Registration Statement and the ADS Registration Statement and the current status of the prospectuses included therein or to file and maintain the effectiveness of another registration statement and another current prospectus covering the Warrants and the Warrant ADSs (and related ordinary shares) at any time that the Warrants are exercisable. The Company shall provide to the Warrant Agent and each Holder prompt written notice of any time that the Company is unable to deliver the Warrant ADSs via DTC transfer or otherwise without restrictive legend because (A) the Commission has issued a stop order with respect to the Registration Statement or the ADS Registration Statement, (B) the Commission otherwise has suspended or withdrawn the effectiveness of the Registration Statement or the ADS Registration Statement, either temporarily or permanently, (C) the Company has suspended or withdrawn the effectiveness of the Registration Statement or the ADS Registration Statement, either temporarily or permanently, (D) the prospectuses contained in the Registration Statement and the ADS Registration Statement are not available for the issuance of the Warrant ADSs to the Holder, (E) the Registration Statement or the ADS Registration Statement or the prospectuses contained therein are not current and do not conform to the requirements of the applicable rules and regulations, or the SEC has not declared effective a post-effective amendment to the Registration Statement or the ADS Registration Statement are if one is required to be filed to update the disclosures therein, or (F) otherwise (each a "Restrictive Legend Event"). To the extent that the Warrants cannot be exercised as a result of a Restrictive Legend Event or a Restrictive Legend Event occurs after a Holder has exercised Warrants in accordance with the terms of the Warrants but prior to the delivery of the Warrant ADSs, the Company shall, at the election of the Holder, which shall be given within five (5) days of receipt of such notice of the Restrictive Legend Event, either rescind the previously submitted Election to Purchase and the Company shall return all consideration paid by registered holder for such shares upon such.

j) Disputes. In the case of a dispute as to the determination of the Exercise Price or the arithmetic calculation of the number of Warrant ADSs issuable in connection with any exercise, the Company shall promptly deliver to the Holder the number of Warrant ADSs that are not disputed.

k) Compensation for Buy-In on Failure to Timely Deliver Warrant ADSs Upon Exercise. In addition to any other rights available to the Holder, if the Company fails to cause the Depositary to deliver the Warrant ADSs to the Holder pursuant to Section 4(d), and if after such date the beneficial owner is required by its broker to purchase (in an open market transaction or otherwise) or the beneficial owner's brokerage firm otherwise purchases, ADSs or ordinary shares to deliver in satisfaction of a sale by the beneficial owner of the Warrant ADSs, which the beneficial owner anticipated receiving upon such exercise (a " Buy-In"), then the Company shall (A) pay in cash to the Holder the amount, if any, by which (x) the beneficial owner's total purchase price (including brokerage commissions, if any) for the Warrant ADSs so purchased exceeds (y) the amount obtained by multiplying (i) the number of Warrant ADSs, as applicable, that the Company was required to deliver to the Holder in connection with the exercise at issue times (ii) the price at which the sell order giving rise to such purchase obligation was executed, and (B) at the option of the Holder, either reinstate the portion of the Warrant and equivalent number of Warrant ADSs, as applicable, for which such exercise was not honored (in which case such exercise shall be deemed rescinded) or deliver to the Holder the number of Warrant ADSs, as applicable, that would have been issued had the Company timely complied with its delivery obligations. For example, if the beneficial owner purchases ADSs having a total purchase price (including brokerage commissions) of $11,000 to cover a Buy-In with respect to an attempted exercise of Warrant ADSs with an aggregate sale price giving rise to such purchase obligation of $10,000, under clause (A) of the immediately preceding sentence, the Company shall be required to pay the Holder $1,000 for the benefit of the beneficial owner. The Holder shall provide the Company written notice indicating the amounts payable to the Holder in respect of the Buy-In and, upon request of the Company, evidence of the amount of such loss. Nothing herein shall limit right of a Holder to pursue any other remedies available to it hereunder, at law or in equity including, without limitation, a decree of specific performance and/or injunctive relief with respect to the Company's failure to timely deliver Warrant ADSs upon exercise of Warrants as required pursuant to the terms of this Warrant Agreement. The Warrant Agent shall have no liability for the Company's failure to deliver to the Holders the Warrant ADSs as set forth in this Section 4(k).

In addition, if the Company fails for any reason to deliver to the Holder the Warrant ADSs subject to an Election to Purchase by the Warrant ADS Delivery Date, the Company shall pay to the Holder, in cash, as liquidated damages and not as a penalty, for each $1,000 of Warrant ADSs subject to such exercise (based on the VWAP of the ADSs on the date of the applicable Election to Purchase), $10 per Trading Day for each Trading Day after such Warrant ADS Delivery Date until such Warrant ADSs are delivered or Holder rescinds such exercise. The Company agrees to maintain a transfer agent that is a participant in the FAST program so long as this Warrant remains outstanding and exercisable. In addition, if the Company fails to cause the Depository to transmit to the Holder the Warrant ADSs by the Warrant ADS Delivery Date, then the Holder will have the right to rescind such exercise.

l) Expenses. The Company shall pay all Warrant Agent and Depositary fees required for timely processing of any Election to Purchase and all fees to DTC (or another established clearing corporation performing similar functions) required for electronic issuance and delivery of the Warrant ADSs for timely delivery of Warrant ADSs on or prior to the Warrant ADSs Delivery Date. The Company shall pay all applicable fees and expenses of the Depositary in connection with the issuance of the Warrants ADSs hereunder.

Section 5. Certain Adjustments.

a) Stock Dividends and Splits. If the Company, at any time while this Warrant is outstanding:

i) pays a stock dividend or otherwise makes a distribution or distributions on Ordinary Shares or any other equity or Equivalent Securities payable in Ordinary Shares (which, for avoidance of doubt, shall not include any Warrant ADSs issued by the Company upon exercise of this Warrant),

ii) subdivides outstanding Ordinary Shares into a larger number of shares,

iii) combines (including by way of reverse stock split) outstanding Ordinary Shares into a smaller number of shares, or
iv) issues by reclassification of Ordinary Shares any shares of capital stock of the Company,

then in each case the Exercise Price shall be multiplied by a fraction of which the numerator shall be the number of Ordinary Shares and such other capital stock of the Company (excluding treasury shares, if any) outstanding immediately before such event and of which the denominator shall be the number of Ordinary Shares and such other capital stock of the Company (excluding treasury shares, if any) outstanding immediately after such event, and the number of ADSs issuable upon exercise of this Warrant shall be proportionately adjusted such that the aggregate Exercise Price of this Warrant shall remain unchanged. Any adjustment made pursuant to this Section 5(a) shall become effective immediately after the record date for the determination of shareholders entitled to receive such dividend or distribution and shall become effective immediately after the effective date in the case of a subdivision, combination or re-classification.

b) Subsequent Equity Sales. If the Company or any Subsidiary thereof, as applicable, at any time while this Warrant is outstanding, shall sell, enter into an agreement to sell, or grant any option to purchase, or sell, enter into an agreement to sell, or grant any right to reprice, or otherwise dispose of or issue (or announce any offer, sale, grant or any option to purchase or other disposition) any Ordinary Shares or Equivalent Securities, at an effective price per share less than the Exercise Price then in effect (such lower price, the "Base Share Price" and such issuances collectively, a "Dilutive Issuance") (it being understood and agreed that if the holder of the Ordinary Shares or such other securities so issued shall at any time, whether by operation of purchase price adjustments, reset provisions, floating conversion, exercise or exchange prices or otherwise, or due to warrants, options or rights per share which are issued in connection with such issuance, be entitled to receive Ordinary Shares at an effective price per share that is less than the Exercise Price, such issuance shall be deemed to have occurred for less than the Exercise Price on such date of the Dilutive Issuance at such effective price), then simultaneously with the consummation (or, if earlier, the announcement) of each Dilutive Issuance the Exercise Price shall be reduced and only reduced to equal the Base Share Price provided that the Base Share Price shall not be less than $___ (subject to adjustment for reverse and forward stock splits, recapitalizations and similar transactions following the Initial Issuance Date). Notwithstanding the foregoing, no adjustments shall be made, paid or issued under this Section 5(b) in respect of an Exempt Issuance. The Company shall notify the Holder, in writing, no later than the Trading Day following the issuance or deemed issuance of any Ordinary Shares Stock or Equivalent Securities subject to this Section 5(b), indicating therein the applicable issuance price, or applicable reset price, exchange price, conversion price and other pricing terms (such notice, the "Dilutive Issuance Notice"). For purposes of clarification, whether or not the Company provides a Dilutive Issuance Notice pursuant to this Section 5(b), upon the occurrence of any Dilutive Issuance, the Holder is entitled to receive a number of Warrant Shares based upon the Base Share Price regardless of whether the Holder accurately refers to the Base Share Price in the Notice of Exercise. If the Company enters into a Variable Rate Transaction, the Company shall be deemed to have issued Ordinary Shares or Equivalent Securities at the lowest possible price, conversion price or exercise price at which such securities may be issued, converted or exercised.

c) Subsequent Rights Offerings. In addition to any adjustments pursuant to Section 5(a) above, if at any time the Company grants, issues or sells any Equivalent Securities or rights to purchase stock, warrants, securities or other property pro rata to the record holders of any class of Common Stock (the "Purchase Rights"), then the Holder will be entitled to acquire, upon the terms applicable to such Purchase Rights, the aggregate Purchase Rights which the Holder could have acquired if the Holder had held the number of ADSs acquirable upon complete exercise of this Warrant immediately before the date on which a record is taken for the grant, issuance or sale of such Purchase Rights, or, if no such record is taken, the date as of which the record holders of Ordinary Shares are to be determined for the grant, issue or sale of such Purchase Rights.

d) Pro Rata Distributions. During such time as this Warrant is outstanding, if the Company shall declare or make any dividend or other distribution of its assets (or rights to acquire its assets) to holders of Ordinary Shares, by way of return of capital or otherwise (including, without limitation, any distribution of cash, stock or other securities, property or options by way of a dividend, spin off, reclassification, corporate rearrangement, scheme of arrangement or other similar transaction) (a "Distribution"), at any time after the issuance of this Warrant, then, in each such case, the Holder shall be entitled to participate in such Distribution to the same extent that the Holder would have participated therein if the Holder had held the number of ADSs acquirable upon complete exercise of this Warrant immediately before the date of which a record is taken for such Distribution, or, if no such record is taken, the date as of which the record holders of Ordinary Shares are to be determined for the participation in such Distribution. To the extent that this Warrant has not been partially or completely exercised at the time of such Distribution, such portion of the Distribution shall be held in abeyance for the benefit of the Holder until the Holder has exercised this Warrant.

e) Fundamental Transaction. If, at any time while the Warrants are outstanding,

(i) the Company, directly or indirectly, in one or more related transactions effects any merger or consolidation of the Company with or into another person;
(ii) the Company, directly or indirectly, effects any sale, lease, license, assignment, transfer, conveyance or other disposition of all or substantially all of its assets in one or a series of related transactions;
(iii) any direct or indirect purchase offer, tender offer or exchange offer (whether by the Company or another person) is completed pursuant to which holders of ordinary shares (including those represented by ADSs) are permitted to sell, tender or exchange their shares for other securities, cash or property and has been accepted by the holders of 50% or more of the total voting power of the Company's ordinary shares (including those represented by ADSs) (not including any ordinary shares (including those represented by ADSs) held by the other person or other persons making or party to, or associated or affiliated with the other persons making, such purchase offer, tender offer or exchange offer);
(iv) the Company, directly or indirectly, in one or more related transactions effects any reclassification, reorganization or recapitalization of ADSs or ordinary shares or any compulsory share exchange pursuant to which the ADSs or ordinary shares are effectively converted into or exchanged for other securities, cash or property, or
(v) the Company, directly or indirectly, in one or more related transactions consummates a stock or share purchase agreement or other business combination (including, without limitation, a reorganization, recapitalization, spin-off or scheme of arrangement) with another person or group of persons whereby such other person or group acquires more than 50% of the total voting power of the Company's ordinary shares (including those represented by ADSs) (not including any ordinary shares (including those represented by ADSs) held by the other person or group or other persons or group making or party to, or associated or affiliated with the other persons or group making or party to, such stock or share purchase agreement or other business combination) (each a "Fundamental Transaction"),

then, upon any subsequent exercise of a Warrant, the Holder shall have the right to receive, for each Warrant ADS that would have been issuable upon such exercise immediately prior to the occurrence of such Fundamental Transaction, at the option of the Holder, the number of shares of capital stock of the successor or acquiring corporation or of the Company, if it is the surviving corporation, or depositary shares representing those shares, and any additional consideration (the "Alternate Consideration") receivable as a result of such Fundamental Transaction by a holder of the number of ADSs for which this Warrant is exercisable immediately prior to such Fundamental Transaction. For purposes of any such exercise, the determination of the Exercise Price shall be appropriately adjusted to apply to such Alternate Consideration based on the amount of Alternate Consideration issuable in respect of one ADS in such Fundamental Transaction and the Company shall apportion the Exercise Price among the Alternate Consideration in a reasonable manner reflecting the relative value of any different components of the Alternate Consideration. If holders of ADSs are given any choice as to the securities, cash or property to be received in a Fundamental Transaction, then the Holder shall be given the same choice as to the Alternate Consideration it receives upon any exercise of this Warrant following such Fundamental Transaction.

Notwithstanding anything to the contrary, in the event of a Fundamental Transaction, the Company or any Successor Entity (as defined below) shall, at the Holder's option, exercisable at any time concurrently with, or within 30 days after, the consummation of the Fundamental Transaction (or, if later, the date of the public announcement of the applicable Fundamental Transaction), purchase this Warrant from the Holder by paying to the Holder an amount of cash equal to the Black Scholes Value (as defined below) of the remaining unexercised portion of this Warrant on the date of the consummation of such Fundamental Transaction; provided, however, that, if the Fundamental Transaction is not within the Company's control, including not approved by the Company's Board of Directors, Holder shall only be entitled to receive from the Company or any Successor Entity the same type or form of consideration (and in the same proportion), at the Black Scholes Value of the unexercised portion of this Warrant, that is being offered and paid to the holders of ordinary shares (including those represented by ADSs) of the Company in connection with the Fundamental Transaction, whether that consideration be in the form of cash, stock or any combination thereof, or whether the holders of ordinary shares (including those represented by ADSs) are given the choice to receive from among alternative forms of consideration in connection with the Fundamental Transaction; provided, further, that if holders of ordinary shares (including those represented by ADSs) of the Company are not offered or paid any consideration in such Fundamental Transaction, such holders will be deemed to have received common stock of the Successor Entity (which Entity may be the Company following such Fundamental Transaction) in such Fundamental Transaction.

"Black Scholes Value" means the value of this Warrant based on the Black-Scholes Option Pricing Model obtained from the "OV" function on Bloomberg determined as of the day of consummation of the applicable Fundamental Transaction for pricing purposes and reflecting (A) a risk-free interest rate corresponding to the U.S. Treasury rate for a period equal to the time between the date of the public announcement of the applicable Fundamental Transaction and the Termination Date, (B) an expected volatility equal to the greater of 100% and the 100 day volatility obtained from the HVT function on Bloomberg (determined utilizing a 365 day annualization factor) as of the Trading Day immediately following the public announcement of the applicable Fundamental Transaction, (C) the underlying price per share used in such calculation shall be the greater of (i) the sum of the price per share being offered in cash, if any, plus the value of any non-cash consideration, if any, being offered in such Fundamental Transaction and (ii) the highest VWAP during the period beginning on the Trading Day immediately preceding the announcement of the applicable Fundamental Transaction (or the consummation of the applicable Fundamental Transaction, if earlier) and ending on the Trading Day of the Holder's request pursuant to this Section 3(e) and (D) a remaining option time equal to the time between the date of the public announcement of the applicable Fundamental Transaction and the Termination Date and (E) a zero cost of borrow. The payment of the Black Scholes Value will be made by wire transfer of immediately available funds (or such other consideration) within the later of (i) five (5) Business Days of the Holder's election and (ii) the date of consummation of the Fundamental Transaction.

The Company shall cause any successor entity in a Fundamental Transaction in which the Company is not the survivor (the "Successor Entity"), to assume in writing all of the obligations of the Company under this Warrant in accordance with the provisions of this Section 5(e) pursuant to written agreements in form reasonably satisfactory to the Holder and approved by the Holder (without unreasonable delay) prior to such Fundamental Transaction and shall, at the option of the Holder, deliver to such Holder in exchange for this Warrant a security of the Successor Entity evidenced by a written instrument substantially similar in form and substance to this Warrant that is exercisable for a corresponding number of shares of capital stock of such Successor Entity (or its parent entity) equivalent to the Warrant ADSs acquirable and receivable upon exercise of this Warrant prior to such Fundamental Transaction and with an exercise price which applies the exercise price hereunder to such shares of capital stock (but taking into account the relative value of the ADSs or ordinary shares prior to such Fundamental Transaction and the value of such shares of capital stock, such number of shares of capital stock and such exercise price being for the purpose of protecting the economic value this Warrant had immediately prior to the consummation of such Fundamental Transaction). Upon the occurrence of any such Fundamental Transaction, the Successor Entity shall succeed to, and be substituted for (so that from and after the date of such Fundamental Transaction, the provisions of this Warrant referring to the "Company" shall refer instead to the Successor Entity), and may exercise every right and power of the Company and shall assume all of the obligations of the Company under this Warrant Agreement and the Warrant with the same effect as if such Successor Entity had been named as the Company herein.

The Company shall instruct the Warrant Agent in writing to mail, by first class mail, postage prepaid, to each Holder, written notice of the execution of any such amendment, supplement or agreement with the Successor Entity. Any supplemented or amended agreement entered into by the successor corporation or transferee shall provide for adjustments, which shall be as nearly equivalent as may be practicable to the adjustments provided for in this Section 5(e). The Warrant Agent shall have no duty, responsibility or obligation to determine the correctness of any provisions contained in such agreement or such notice, including but not limited to any provisions relating either to the kind or amount of securities or other property receivable upon exercise of warrants or with respect to the method employed and provided therein for any adjustments, and shall be entitled to rely conclusively for all purposes upon the provisions contained in any such agreement. The provisions of this Section 5(e) shall similarly apply to successive reclassifications, changes, consolidations, mergers, sales and conveyances of the kind described above.

f) Calculations. All calculations under this Section 5 shall be made to the nearest cent or the nearest 1/100th of a share, as the case may be. For purposes of this Section 5, the number of shares deemed to be issued and outstanding as of a given date shall be the sum of the number shares (excluding treasury shares, if any) issued and outstanding.

g) Notice to Holder.

i. Adjustment to Exercise Price. Whenever the Exercise Price is adjusted pursuant to any provision of this Section5, the Company shall promptly deliver to the Holder by facsimile or email a notice setting forth the Exercise Price after such adjustment and any resulting adjustment to the number of Warrant ADSs and setting forth a brief statement of the facts requiring such adjustment.

ii. Notice to Allow Exercise by Holder. If (A) the Company shall declare a dividend (or any other distribution in whatever form) on the Ordinary Shares, (B) the Company shall declare a special nonrecurring cash dividend on or a redemption of the Ordinary Shares, (C) the Company shall authorize the granting to all holders of Ordinary Shares rights or warrants to subscribe for or purchase any shares of capital stock of any class or of any rights, (D) the approval of any shareholders of the Company shall be required in connection with any reclassification of Ordinary Shares, any consolidation or merger to which the Company (or any of its Subsidiaries) is a party, any sale or transfer of all or substantially all of the assets of the Company, or any compulsory share exchange whereby Ordinary Shares are converted into other securities, cash or property, or (E) the Company shall authorize the voluntary or involuntary dissolution, liquidation or winding up of the affairs of the Company, then, in each case, the Company shall cause to be delivered by facsimile or email to the Holder at its last facsimile number or email address as it shall appear upon the Warrant Register of the Company, at least 20 calendar days prior to the applicable record or effective date hereinafter specified, a notice stating (x) the date on which a record is to be taken for the purpose of such dividend, distribution, redemption, rights or warrants, or if a record is not to be taken, the date as of which the holders of record of Ordinary Shares to be entitled to such dividend, distributions, redemption, rights or warrants are to be determined or (y) the date on which such reclassification, consolidation, merger, sale, transfer or share exchange is expected to become effective or close, and the date as of which it is expected that holders of record of the Ordinary Shares shall be entitled to exchange their Ordinary Shares for securities, cash or other property deliverable upon such reclassification, consolidation, merger, sale, transfer or share exchange; provided that the failure to deliver such notice or any defect therein or in the delivery thereof shall not affect the validity of the corporate action required to be specified in such notice. To the extent that any notice provided in this Warrant constitutes, or contains, material, non-public information regarding the Company or any of the Subsidiaries, the Company shall simultaneously file such notice with the Commission pursuant to a Current Report on Form 8-K. The Holder shall remain entitled to exercise this Warrant during the period commencing on the date of such notice to the effective date of the event triggering such notice except as may otherwise be expressly set forth herein.

h) Voluntary Adjustment by Company. Subject to the rules and regulations of the Trading Market, the Company may at any time during the term of this Warrant, subject to the prior written consent of the Holder, reduce the then current Exercise Price to any amount and for any period of time deemed appropriate by the board of directors of the Company.

Section 6. Miscellaneous.

a) No Rights as Stockholder. Except as otherwise specifically provided herein, a Holder, solely in its capacity as a holder of Warrants, shall not be entitled to vote or receive dividends or be deemed the holder of share capital of the Company for any purpose, nor shall anything contained in this Warrant be construed to confer upon a Holder, solely in its capacity as the registered holder of Warrants, any of the rights of a stockholder of the Company or any right to vote, give or withhold consent to any corporate action (whether any reorganization, issue of stock, reclassification of share capital, consolidation, merger, conveyance or otherwise), receive notice of meetings, receive dividends or subscription rights or rights to participate in new issues of shares, or otherwise, prior to the issuance to the Holder of the Warrant ADSs which it is then entitled to receive upon the due exercise of Warrants.

b) Due Authorization. The Company represents and warrants that (a) it is duly incorporated and validly existing under the laws of its jurisdiction of incorporation, (b) the offer and sale of the Warrants and the execution, delivery and performance of all transactions contemplated thereby (including this Warrant) have been duly authorized by all necessary corporate action and will not result in a breach of or constitute a default under the articles of association, bylaws or any similar document of the Company or any indenture, agreement or instrument to which it is a party or is bound, (c) this Warrant has been duly executed and delivered by the Company and constitutes the legal, valid, binding and enforceable obligation of the Company, (d) the Warrants will comply in all material respects with all applicable requirements of law and (e) to the best of its knowledge, there is no litigation pending or threatened as of the date hereof in connection with the offering of the Warrants.

c) Reservation of Ordinary Shares. The Company shall at all times reserve and keep available a number of its authorized but unissued ordinary shares that will be sufficient to permit the exercise in full of all outstanding Warrants issued pursuant to this Warrant Agreement.

d) Authorized Shares. The Company covenants that its issuance of this Warrant shall constitute full authority to its officers who are charged with the duty of issuing the necessary Warrant ADSs upon the exercise of the purchase rights under this Warrant. The Company will take all such reasonable action as may be necessary to assure that such Warrant ADSs may be issued as provided herein without violation of any applicable law or regulation, or of any requirements of the Trading Market upon which the ordinary shares may be listed. The Company covenants that all Warrant ADS which may be issued upon the exercise of the purchase rights represented by this Warrant will, upon exercise of the purchase rights represented by this Warrant and payment for such Warrant ADS in accordance herewith, be duly authorized, validly issued and fully paid and free from all taxes, liens and charges created by the Company in respect of the issue thereof (other than taxes in respect of any transfer occurring contemporaneously with such issue).

e) Restrictive Legends; Fractional Warrants. In the event that a Warrant Certificate surrendered for transfer bears a restrictive legend, the Warrant Agent shall not register that transfer until the Warrant Agent has received an opinion of counsel for the Company stating that such transfer may be made and indicating whether the Warrants must also bear a restrictive legend upon that transfer. The Warrant Agent shall not be required to effect any registration of transfer or exchange which will result in the transfer of or delivery of a Warrant Certificate for a fraction of a Warrant. The Holder acknowledges that the Warrant ADSs acquired upon the exercise of this Warrant, if not registered, will have restrictions upon resale imposed by state and federal securities laws.

f) Expense Reimbursement. The Company shall reimburse the Holder, upon the Holder's request, for any reasonable fees charged to the Holder by the Depositary in connection with the issuance or holding or sale of ADSs, Warrant ADSs and/or ordinary shares.

g) Notices to Warrant Agent. Except as expressly set forth elsewhere in this Warrant Agreement, all notices, instructions and communications under this Warrant Agreement shall be in writing, by overnight delivery service, first-class mail, postage prepaid, properly addressed shall be effective upon receipt and shall be addressed, if to the Company, to its address set forth beneath its signature to this Warrant Agreement, or, if to the Warrant Agent, to:

Computershare Inc.
Computershare Trust Company, N.A.
150 Royall Street
Canton, MA 02021
Attention: Client Services

or to such other address of which a party hereto has notified the other party; and, if to a Holder made if sent by first-class mail, postage prepaid, or overnight delivery service, addressed to such Holder at the last address of such Holder set forth for such holder in the Warrant Register.

h) Governing Law. All questions concerning the construction, validity, enforcement and interpretation of this Warrant shall be governed by and construed and enforced in accordance with the internal laws of the State of New York. Each party agrees that all legal proceedings concerning the interpretations, enforcement and defense of the transactions contemplated by this Warrant (whether brought against a party hereto or their respective affiliates, directors, officers, shareholders, partners, members, employees or agents) shall be commenced exclusively in the state and federal courts sitting in the City of New York. Each party hereby irrevocably submits to the exclusive jurisdiction of the state and federal courts sitting in the City of New York, Borough of Manhattan for the adjudication of any dispute hereunder or in connection herewith or with any transaction contemplated hereby or discussed herein, and hereby irrevocably waives, and agrees not to assert in any suit, action or proceeding, any claim that it is not personally subject to the jurisdiction of any such court, that such suit, action or proceeding is improper or is an inconvenient venue for such proceeding. Each party hereby irrevocably waives personal service of process and consents to process being served in any such suit, action or proceeding by mailing a copy thereof via registered or certified mail or overnight delivery (with evidence of delivery) to such party at the address in effect for notices to it under this Warrant and agrees that such service shall constitute good and sufficient service of process and notice thereof. Nothing contained herein shall be deemed to limit in any way any right to serve process in any other manner permitted by law. If either party shall commence an action, suit or proceeding to enforce any provisions of this Warrant, the prevailing party in such action, suit or proceeding shall be reimbursed by the other party for their reasonable attorneys' fees and other costs and expenses incurred with the investigation, preparation and prosecution of such action or proceeding.

i) Payment of Taxes. The Company will from time to time promptly pay all taxes and charges that may be imposed upon the Company or the Warrant Agent in respect of the issuance or delivery of Warrant ADSs upon the exercise of Warrants, but the Company may require the Holders to pay any transfer taxes in respect of the Warrants or such shares. The Warrant Agent may refrain from registering any transfer of Warrants or any delivery of any Warrant ADSs unless or until the persons requesting the registration or issuance shall have paid to the Warrant Agent for the account of the Company the amount of such tax or charge, if any, or shall have established to the reasonable satisfaction of the Company and the Warrant Agent that such tax or charge, if any, has been paid.

j) Limitation of Liability. No provision hereof, in the absence of any affirmative action by the Holder to exercise this Warrant to purchase Warrant ADSs, and no enumeration herein of the rights or privileges of the Holder, shall give rise to any liability of the Holder for the purchase price of any Warrant ADSs or as a shareholder of the Company, whether such liability is asserted by the Company or by creditors of the Company.

k) Remedies. The Holder, in addition to being entitled to exercise all rights granted by law, including recovery of damages, will be entitled to specific performance of its rights under this Warrant. The Company agrees that monetary damages would not be adequate compensation for any loss incurred by reason of a breach by it of the provisions of this Warrant and hereby agrees to waive and not to assert the defense in any action for specific performance that a remedy at law would be adequate.

l) Successors and Assigns. Subject to applicable securities laws, this Warrant and the rights and obligations evidenced hereby shall inure to the benefit of and be binding upon the successors and permitted assigns of the Company and the successors and permitted assigns of Holder. The provisions of this Warrant are intended to be for the benefit of any Holder from time to time of this Warrant and shall be enforceable by the Holder or holder of Warrant ADSs.

m) Amendment. This Warrant may be modified or amended or the provisions hereof waived with the written consent of the Company, on the one hand, and the Holder or the beneficial owner of this Warrant, on the other hand.

n) Severability. Wherever possible, each provision of this Warrant shall be interpreted in such manner as to be effective and valid under applicable law, but if any provision of this Warrant shall be prohibited by or invalid under applicable law, such provision shall be ineffective to the extent of such prohibition or invalidity, without invalidating the remainder of such provisions or the remaining provisions of this Warrant.

o) Headings. The headings used in this Warrant are for the convenience of reference only and shall not, for any purpose, be deemed a part of this Warrant.

p) Warrant Agency Agreement. If this Warrant is held in global form through DTC (or any successor depositary), this Warrant is issued subject to the Warrant Agency Agreement. To the extent any provision of this Warrant conflicts with the express provisions of the Warrant Agency Agreement, the provisions of this Warrant shall govern and be controlling.

****

(Signature Page Follows)

IN WITNESS WHEREOF, the Company has caused this Warrant to be executed by its officer thereunto duly authorized as of the date first above indicated.

TC BioPharm (Holdings) plc

By: ______________________________
Name:
Title:

EXHIBIT A

NOTICE OF EXERCISE

TO: TC BIOPHARM (HOLDINGS) PLC

(1) The undersigned hereby elects to purchase ________ Warrant ADSs of the Company pursuant to the terms of the attached Warrant (only if exercised in full), and tenders herewith payment of the exercise price in full, together with all applicable transfer taxes, if any.

(2) Payment shall be in the in lawful money of the United States only.

(3) Please issue said Warrant ADSs in the name of the undersigned or in such other name as is specified below:

____

The Warrant ADSs shall be delivered to the following DWAC Account Number:

____
____
____

[SIGNATURE OF HOLDER]

Name of Investing Entity: ______________________________

Signature of Authorized Signatory of Investing Entity: ______________________________

Name of Authorized Signatory: ______________________________

Title of Authorized Signatory: ______________________________

Date: ______________________________

EXHIBIT B

ASSIGNMENT FORM

(To assign the foregoing Warrant, execute this form and supply required information. Do not use this form to purchase shares.)

FOR VALUE RECEIVED, the foregoing Warrant and all rights evidenced thereby are hereby assigned to

Name: (Please Print)

Address: (Please Print)

Phone Number
Email Address

Dated: ______________ ___, _______
Holder's Signature:
Holder's Address:

ANNEX B

Form of Warrant Certificate Request Notice

WARRANT CERTIFICATE REQUEST NOTICE

To: Computershare Inc., as Warrant Agent for TC BioPharm (Holdings) plc (the "Company")

The undersigned Holder of Purchase Warrants ("Warrants") in the form of Global Warrants issued by the Company hereby elects to receive a Warrant Certificate evidencing the Warrants held by the Holder as specified below:

1. Name of Holder of Warrants in form of Global Warrants: ______

2. Name of Holder in Warrant Certificate (if different from name of Holder of Warrants in form of Global Warrants): ______

3. Number of Warrants in name of Holder in form of Global Warrants: ______

4. Number of Warrants for which Warrant Certificate shall be issued: ______

5. Number of Warrants in name of Holder in form of Global Warrants after issuance of Warrant Certificate, if any: ______

6. Warrant Certificate shall be delivered to the following address:

____
____
____
____

The undersigned hereby acknowledges and agrees that, in connection with this Warrant Exchange and the issuance of the Warrant Certificate, the Holder is deemed to have surrendered the number of Warrants in form of Global Warrants in the name of the Holder equal to the number of Warrants evidenced by the Warrant Certificate.

[SIGNATURE OF HOLDER]

Name of Investing Entity: ______

Signature of Authorized Signatory of Investing Entity: ______

Name of Authorized Signatory: ______

Title of Authorized Signatory: ______

Date: ______

ANNEX C

Form of Global Warrants Request Notice

GLOBAL WARRANTS REQUEST NOTICE

To: Computershare Inc., as Warrant Agent for TC BioPharm (Holdings) plc (the "Company")

The undersigned Holder of Purchase Warrants ("Warrants") in the form of Warrants Certificates issued by the Company hereby elects to receive a Global Warrant evidencing the Warrants held by the Holder as specified below:

1. Name of Holder of Warrants in form of Warrant Certificates: ______

2. Name of Holder in Global Warrant (if different from name of Holder of Warrants in form of Warrant Certificates): ______

3. Number of Warrants in name of Holder in form of Warrant Certificates: ______

4. Number of Warrants for which Global Warrant shall be issued: ______

5. Number of Warrants in name of Holder in form of Warrant Certificates after issuance of Global Warrant, if any: ______________________

6. Global Warrant shall be delivered to the following address:

____

____

____

____

The undersigned hereby acknowledges and agrees that, in connection with this Global Warrant Exchange and the issuance of the Global Warrant, the Holder is deemed to have surrendered the number of Warrants in form of Warrant Certificates in the name of the Holder equal to the number of Warrants evidenced by the Global Warrant.

[SIGNATURE OF HOLDER]

Name of Investing Entity: ______________________

Signature of Authorized Signatory of Investing Entity: ______________________

Name of Authorized Signatory: ______________________

Title of Authorized Signatory: ______________________

Date: ______________________

Exhibit 10.10

__________, 2022

EF Hutton,
division of Benchmark Investments, LLC
as Representative of the several Underwriters named on Schedule 1 attached hereto
590 Madison Avenue, 39th Floor
New York, New York 10022

Re: TC BioPharm (Holdings) Limited – Public Offering

Ladies and Gentlemen:

The undersigned holder of convertible loan notes issued by the Company (defined below) with the right to obtain ordinary shares, par value £0.01 per share ("**Ordinary Shares**"), or rights to acquire Ordinary Shares through American Depositary Shares and warrants to purchase Ordinary Shares or American Depositary Shares ("Investor Warrants") of TC BioPharm (Holdings) Limited, a private company limited by shares organized under the law of Scotland, United Kingdom (the "**Company**"), understands that you are the representative (the "**Representative**") of the several underwriters, if any (collectively, the "**Underwriters**"), named or to be named in the final form of Schedule I to the underwriting agreement (the "**Underwriting Agreement**") to be entered into by the several Underwriters and the Company, providing for the public offering of Ordinary Shares through American Depositary Shares and Investor Warrants (the "**Public Offering**") registered with the U.S. Securities and Exchange Commission (the "**SEC**") under the Securities Act of 1933, as amended. Capitalized terms used herein and not otherwise defined shall have the meanings set forth in the Underwriting Agreement.

For purposes of this Agreement, references to (a) "Company" shall include TC BioPharm (Holdings) plc, a public limited company organized or to be organised under the law of Scotland, United Kingdom that will succeed to the interests of the Company pursuant to a reorganization prior to the closing of the Public Offering and that will be the issuer of the Ordinary Shares and Investor Warrants in the Public Offering, (b) "Ordinary Shares" shall include the ordinary shares of TC BioPharm (Holdings) plc and American Depositary Shares representing the Ordinary Shares, and (c) "Investor Warrants" shall include the warrant securities, the underlying Ordinary Shares and the American Depositary Shares into which the underlying Ordinary Shares may be dematerialized.

In consideration of the Underwriters' agreement to enter into the Underwriting Agreement and to proceed with the Public Offering, and for other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the undersigned hereby agrees, for the benefit of the Company, the Representative and the other Underwriters that, without the prior written consent of the Representative, the undersigned will not, during the period specified in the following paragraph (the "**Lock-Up Period**"), directly or indirectly, unless otherwise provided herein, (a) offer, sell, agree to offer or sell, solicit offers to purchase, grant any call option or purchase any put option with respect to, pledge, encumber, assign, borrow or otherwise dispose of (each a "**Transfer**") any Relevant Security (as defined below) or otherwise publicly disclose the intention to do so, or (b) establish or increase any "put equivalent position" or liquidate or decrease any "call equivalent position" with respect to any Relevant Security (in each case within the meaning of Section 16 of the Securities Exchange Act of 1934, as amended (the "**Exchange Act**"), and the rules and regulations thereunder) with respect to any Relevant Security or otherwise enter into any swap, derivative or other transaction or arrangement that Transfers to another, in whole or in part, any economic consequence of ownership of a Relevant Security, whether or not such transaction is to be settled by the delivery of Relevant Securities, other securities, cash or other consideration, or otherwise publicly disclose the intention to do so. As used herein, the term "**Relevant Security**" means Ordinary Shares, Investor Warrants, any warrant to purchase Ordinary Shares or any other security of the Company or any other entity that is convertible into, or exercisable or exchangeable for, Ordinary Shares or any other equity or equity linked security of the Company, including any American Depositary Shares representing the foregoing, in each case owned beneficially or otherwise by the undersigned on the date of closing of the Public Offering or acquired by the undersigned during the Lock-Up Period.

The restrictions in the foregoing paragraph shall not apply to (a) any exercise (including a cashless exercise or broker-assisted exercise and payment of tax obligations) of options or warrants to purchase Shares; provided that any Shares received upon such exercise, conversion or exchange will be subject to the Lock-Up Period, (b) any establishment of a trading plan pursuant to Rule 10b5-1 under the Exchange Act for the transfer of Shares (a "**Trading Plan**"), provided that (i) the Trading Plan shall not provide for or permit any transfers, sales or other dispositions of Shares during the Lock-Up Period and (ii) the Trading Plan would not require any filing under Section 16(a) of the Exchange Act and no such filing is voluntarily made, or (c) any transfer of Ordinary Shares acquired in open market transactions following the closing of the Public Offering, provided the transfer would not require any filing under Section 16(a) of the Exchange Act and no such filing is voluntarily made. <u>The Lock-Up Period will commence on the date of this Agreement and continue and include the date that is one-hundred eighty (180) days after the closing of the Public Offering</u>.

Notwithstanding the lock up provisions, the undersigned will be able to sell, during any one week in the Lock-Up Period Ordinary Shares and/or Investor Warrants representing up to an aggregate of the American Depositary Shares of the Company equal to 15% of the average daily trading volume during the immediately preceding calendar week, as defined by Bloomberg LLP. No shares that may be sold but are not sold may be carried over from one week to the next. In addition, the lock up provisions of this letter and the 15% weekly leak out provision, will terminate prior to the end of the Lock-Up Period as follows, (i) as to 50% of the Relevant Securities, if the average daily closing price, as reported by Bloomberg LLP, at which an American Depositary Shares trades in any consecutive 10 trading days exceeds 200% of the initial IPO offering price of a American Depositary Share (disregarding any amount attributable to the Investor Warrant) and (ii) as to 100% of the Relevant Securities, if the average daily closing price, as reported by Bloomberg LLP, at which an American Depositary Share trades in any consecutive 14 trading days exceeds 225% of the initial IPO offering price of a American Depositary Share (disregarding any amount attributable to the Investor Warrant.

In addition, the undersigned further agrees that, except for the registration statement filed or to be filed in connection with the Public Offering, during the Lock-Up Period the undersigned will not, without the prior written consent of the Representative: (a) file or participate in the filing with the SEC of any registration statement or circulate or participate in the circulation of any preliminary or final prospectus or other disclosure document, in each case with respect to any proposed offering or sale of a Relevant Security beneficially owned by the undersigned, or (b) exercise any rights the undersigned may have to require registration with the SEC of any proposed offering or sale of a Relevant Security beneficially owned by the undersigned.

In furtherance of the undersigned's obligations hereunder, the undersigned hereby authorizes the Company during the Lock-Up Period to cause any transfer agent for the Relevant Securities to decline to transfer, and to note stop transfer restrictions on the stock register and other records relating to, Relevant Securities for which the undersigned is the record owner and the transfer of which would be a violation of this Agreement and, in the case of Relevant Securities for which the undersigned is the beneficial but not the record owner, agrees that during the Lock-Up Period it will use its reasonable best efforts to cause the record owner to authorize the Company to cause the relevant transfer agent to decline to transfer, and to note stop transfer restrictions on the stock register and other records relating to, such Relevant Securities to the extent such transfer would be a violation of this Agreement.

Notwithstanding the foregoing, the undersigned may transfer the undersigned's Relevant Securities:

(i) as a *bona fide* gift or gifts;

(ii) to any trust, partnership, limited liability company or other legal entity commonly used for estate planning purposes which is established for the direct or indirect benefit of the undersigned or a member or members of the immediate family of the undersigned;

(iii) if the undersigned is a corporation, partnership, limited liability company, trust or other business entity, (1) to another corporation, partnership, limited liability company, trust or other business entity that is a direct or indirect affiliate (as defined in Rule 405 under the Securities Act of 1933, as amended) of the undersigned, (2) to limited partners, limited liability company members or stockholders of the undersigned or holders of similar equity interests in the undersigned, or (3) in connection with a sale, merger or transfer of all or substantially all of the assets of the undersigned or any other change of control of the undersigned, not undertaken for the purpose of avoiding the restrictions imposed by this Agreement;

(iv) if the undersigned is a trust, to the beneficiary of such trust;

(v) by testate or intestate succession;

(vi) by operation of law, such as pursuant to a qualified domestic order or in connection with a divorce settlement;

(vii) pursuant to the Underwriting Agreement; or

(viii) to the Company, if the Company agrees, solely in an amount necessary to satisfy tax obligations (withholding or otherwise) in connection with any grant of restricted Ordinary Shares, exercise or vesting of options or warrants to purchase Ordinary Shares.

provided, however, in the case of clauses (i)-(vi), that (A) such transfer shall not involve a disposition for value, (B) the transferee agrees in writing with the Underwriters and the Company to be bound by the terms of this Agreement, and (C) such transfer would not require any filing under Section 16(a) of the Exchange Act and no such filing is voluntarily made.

For purposes of this Agreement, “immediate family” shall mean any relationship by blood, marriage or adoption, not more remote than first cousin.

The undersigned hereby represents and warrants that (a) the undersigned has full power and authority to enter into this Agreement, (b) this Agreement has been duly authorized (if the undersigned is not a natural person) or, in the case of a natural person, such person has the legal capacity to enter into this Agreement, and (c) this Agreement constitutes the legal, valid and binding obligation of the undersigned, enforceable against the undersigned in accordance with its terms. Upon request, the undersigned will execute any additional documents necessary in connection with the enforcement hereof. Any obligations of the undersigned shall be binding upon the successors and assigns of the undersigned from the date of this Agreement.

The undersigned understands that, if the Underwriting Agreement does not become effective, or if the Underwriting Agreement (other than the provisions thereof which survive termination) shall terminate or be terminated prior to payment for and delivery of the Securities to be sold thereunder, the undersigned shall be released from all obligations under this Agreement.

The undersigned, whether or not participating in the Public Offering, understands that the Underwriters are entering into the Underwriting Agreement and proceeding with the Public Offering in reliance upon this Agreement.

This Agreement shall be governed by and construed in accordance with the law of the State of New York. Delivery of a signed copy of this Agreement by facsimile or e-mail/.pdf transmission shall be effective as the delivery of the original hereof.

Very truly yours,

Signature: ______________________

Name (printed): ______________________

Title (if applicable): ______________________

Entity (if applicable): ______________________

Exhibit 23.1

Consent of Independent Registered Public Accounting Firm

We consent to the reference to our firm under the caption “Experts” and to the use of our report dated December 23, 2021 (except for the retroactive effect of the 10-for-1 stock split of the Company’s ordinary shares as described in Note 1 which is dated January 14, 2022), with respect to the statement of financial position of TC BioPharm (Holdings) Limited as of October 25, 2021 and to the use of our report dated July 26, 2021 (except for the retroactive effect of the 10-for-1 stock split of the Company’s ordinary shares as described in Note 1 which is dated January 14, 2022), with respect to the consolidated financial statements of TC BioPharm Limited for the years ended December 31, 2020 and 2019, in the Registration Statement (Form F-1) and related Public Offering Prospectus and Security Holder Prospectus of TC BioPharm (Holdings) Limited, for the registration of shares of its common stock and warrants.

/s/ Ernst & Young LLP
Edinburgh, United Kingdom
January 31, 2022