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

FORM 6-K

REPORT OF FOREIGN PRIVATE ISSUER
PURSUANT TO RULE 13a-16 OR 15d-16
UNDER THE SECURITIES EXCHANGE ACT OF 1934

For the Month of December 2022

Commission File Number: 001-41231

TC BioPharm (Holdings) plc
(Translation of registrant's name into English)

Maxim 1, 2 Parklands Way
Holytown, Motherwell, ML1 4WR
Scotland, United Kingdom
+44 (0) 141 433 7557
(Address of principal executive office)

Indicate by check mark whether the registrant files or will file annual reports under cover of Form 20-F or Form 40-F:

☒ Form 20-F ☐ Form 40-F

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(1): ☐

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(7): ☐

INCORPORATION BY REFERENCE

On December 12, 2022, TC BioPharm (Holdings) plc (the "Company") issued a press release announcing its first half 2022 financial results. The Company's unaudited condensed consolidated financial statements as of June 30, 2022 are attached as Exhibit 99.1 and are incorporated by reference herein. The Company's Management's Discussion and Analysis of Financial Condition and Results of Operations is attached hereto as Exhibit 99.2 and is incorporated by reference herein. The press release is attached as Exhibit 99.3 and is incorporated by reference herein.

Exhibit 99.3 to this Report is being furnished and shall not be deemed "filed" for purposes of Section 18 of the Securities Exchange Act of 1934 (the "Exchange Act") or otherwise subject to the liabilities of that section, nor shall it be deemed incorporated by reference in any filing under the Securities Act of 1933 or the Exchange Act.

CAUTIONARY NOTE ON FORWARD-LOOKING STATEMENTS

This Report contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. Words such as "may," "will," "expect," "plan," "anticipate," "estimate," "intend" and similar expressions (as well as other words or expressions referencing future events, conditions or circumstances) are intended to identify forward-looking statements. These forward-looking statements are based on the Company's expectations and assumptions as of the date of this Report. Each of these forward-looking statements involves risks and uncertainties. Actual results may differ materially from those expressed or implied by these forward-looking statements. For a discussion of risk factors that may cause the Company's actual results to differ from those expressed or implied in the forward-looking statements in this Report, you should refer to the Company's filings with the U.S. Securities and Exchange Commission, including the "Risk Factors" sections contained therein. Except as required by law, the Company undertakes no obligation to publicly update any forward-looking statements, whether as a result of new information, future events or otherwise, except as required by law. You should, therefore, not rely on these forward-looking statements as representing the Company's views as of any date subsequent to the date of this Report.

EXHIBIT INDEX

Exhibit No.	Description
99.1	Unaudited Condensed Consolidated Interim Financial Statements for the Six Months Ended June 30, 2022.
99.2	Management's Discussion and Analysis of Financial Condition and Results of Operations for the Six Months Ended June 30, 2022.
99.3	Press Release dated December 12, 2022.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

TC BIOPHARM (HOLDINGS) PLC

Date: December 12, 2022

By: */s/ Bryan Kobel*
Name Bryan Kobel
Title: Chief Executive Officer

Date: December 12, 2022

By: */s/ Martin Thorp*
Name Martin Thorp
Title: Chief Financial Officer

Exhibit 99.1

INDEX TO UNAUDITED CONDENSED CONSOLIDATED INTERIM FINANCIAL STATEMENTS

TC BioPharm (Holdings) plc

Unaudited Condensed Consolidated Interim Financial Statements

Unaudited Condensed Consolidated Statements of Income/(Loss) and Total Comprehensive Income/(Loss)

	Notes	Six months ended June 30, 2022 £	Six months ended June 30, 2021 £
Revenue	3	**989,330**	**989,330**
Research and development expenses		(3,698,142)	(2,907,758)
Administrative expenses		(4,077,671)	(885,280)
Administrative expenses – costs related to preparing for a listing		(1,133,099)	-
Total operating expenses, net		**(8,908,912)**	**(3,793,038)**
Other income	4	54,002	5,946
Change in fair value of convertible loan derivatives		6,943,594	-
Change in fair value of warrants		10,537,611	-
Change in fair value of other derivative liabilities		(3,832,379)	-
Finance income – interest		4	21
Finance costs	5	(5,990,592)	(362,958)
Loss before tax		**(207,342)**	**(3,160,699)**
Income tax credit	6	720,000	512,507
Net income/(loss) for the period and Total comprehensive income/(loss)		**512,658**	**(2,648,192)**
Basic income/(loss) per share	7	**0.93**	**(6.79)**
Diluted income/(loss) per share		**0.76**	**(6.79)**

The accompanying notes form an integral part of these unaudited condensed consolidated interim financial statements.

TC BioPharm (Holdings) plc

Unaudited Condensed Consolidated Interim Financial Statements

Unaudited Condensed Consolidated Statements of Financial Position as at

	Notes	June 30, 2022 £	December 31, 2021 £
Assets			
Non-current assets			
Intangible assets		520,553	483,577
Right of use assets		1,287,235	1,385,524
Property, plant and equipment		1,945,450	2,298,655
Total non-current assets		**3,753,238**	**4,167,756**
Current assets			
Trade and other receivables	8	1,695,291	881,953
Corporation tax receivable		2,127,199	1,407,199
Cash and cash equivalents		5,997,297	1,566,688
Total current assets		**9,819,787**	**3,855,840**
Total assets		**13,573,025**	**8,023,596**
Equity			
Share capital	14	395,638	195,476
Share premium	14	16,027,724	-
Other reserves		16,710,757	16,710,757
Accumulated deficit		(32,115,218)	(33,465,282)
Total equity		**1,018,901**	**(16,559,049)**

Non-current liabilities			
Deferred income		1,865,872	1,865,873
Lease liabilities and similar	13	1,964,509	2,136,875
Total non-current liabilities		**3,830,381**	**4,002,748**
Current liabilities			
Deferred income		989,330	1,978,660
Trade and other payables	9	3,641,912	4,103,615
Convertible loan notes	10	1,047,109	6,806,210
Convertible loan - derivative	10	-	6,925,654
Warrants - derivative	11	2,645,544	-
Lease liabilities and similar	13	399,848	765,758
Total current liabilities		**8,723,743**	**20,579,897**
Total liabilities		**12,554,124**	**24,582,645**
Total equity and liabilities		**13,573,025**	**8,023,596**

The accompanying notes form an integral part of these unaudited condensed consolidated interim financial statements.

TC BioPharm (Holdings) plc

Unaudited Condensed Consolidated Interim Financial Statements

Unaudited Condensed Consolidated Statements of Changes in Equity

	Notes	Share capital £	Share premium £	Other reserve £	Accumulated deficit £	Total equity £
As at January 1, 2021 (1)		194,580	-	16,347,704	(19,889,357)	(3,347,073)
Net loss for the period		-	-	-	(2,648,192)	(2,648,192)
Issue of share capital, net	14	896		363,053	-	363,949
As at June 30, 2021		**195,476**	**-**	**16,710,757**	**(22,537,549)**	**(5,631,316)**
As at January 1, 2022		195,476	-	16,710,757	(33,465,282)	(16,559,049)
Net income for the period		-	-	-	512,658	512,658
Recognition of share-based payment costs	15	-	-	-	837,406	837,406
Issue of share capital, net	14	200,162	16,027,724	-	-	16,227,886
As at June 30, 2022		**395,638**	**16,027,724**	**16,710,757**	**(32,115,218)**	**1,018,901**

The accompanying notes form an integral part of these unaudited condensed consolidated interim financial statements.

(1) Share capital, Share premium and Other reserves in the table above have been adjusted to give retrospective effect to the Group's corporate reorganization. Further details of the effects of this reorganization are provided in Note 1.

TC BioPharm (Holdings) plc

Unaudited Condensed Consolidated Interim Financial Statements

Unaudited Condensed Consolidated Statements of Cash Flows

	Six Months Ended June 30, 2022 £	Six Months Ended June 30, 2021 £
Cash flows from operating activities		
Loss before tax	(207,342)	(3,160,699)
Adjustments for:		
Depreciation	361,664	396,528
Amortization of intangible assets	36,145	30,583
Amortization of right of use assets	98,289	98,289
Change in fair value of derivative liability	(6,943,594)	-
Change in fair value of warrant liability	(10,537,611)	-
Change in fair value of other derivative liabilities	3,832,379	-
Share-based payment expense	837,406	-
Net foreign exchange (gains)/losses	(54,002)	8,051
Finance income	(4)	(21)
Finance costs	5,990,592	362,958
Movements in working capital:		
Decrease in deferred income	(989,330)	(989,330)
(Increase)/decrease in trade and other receivables	(813,253)	100,096
Increase in trade and other payables	(370,774)	1,338,513
Cash used in operations	**(8,759,435)**	**(1,815,032)**
Interest paid	(135,807)	(131,966)

Interest received	4	21
Net cash flows used in operating activities	**(8,895,238)**	**(1,946,977)**
Cash flows from investing activities		
Purchase of property, plant and equipment	(8,459)	(1,950)
Purchase of intangible assets	(73,121)	(58,961)
Net cash flows used in investing activities	**(81,580)**	**(60,911)**
Cash flows from financing activities		
Repayment of lease liabilities	(538,275)	(214,815)
Receipt from issuance of convertible loan (net of issue costs)	18,110	1,500,000
Repayment of convertible loan	(1,936,360)	-
Proceeds from sale of warrants	13,092,139	-
Proceeds of sale of own shares	2,915,284	285,107
Share issue costs	(381,182)	(21,160)
Net cash flows from financing activities	**13,169,716**	**1,549,132**
Net increase/(decrease) in cash and cash equivalents	**4,192,898**	**(458,756)**
Foreign exchange movements on cash and cash equivalents	237,711	(1,272)
Cash and cash equivalents at the beginning of the period	1,566,688	748,015
Cash and cash equivalents at the end of the period	**5,997,297**	**287,987**

The accompanying notes form an integral part of these unaudited condensed consolidated interim financial statements.

TC BioPharm (Holdings) plc

Unaudited Condensed Consolidated Interim Financial Statements

Notes to the Financial Statements

1. Accounting policies

General information

TC BioPharm (Holdings) plc ("TC BioPharm" or the "Company") is incorporated as a Public limited company, limited by shares, in Scotland and domiciled in the United Kingdom (registration number: SC713098) and has the following wholly owned subsidiaries TC BioPharm Limited, TC BioPharm (North America) Inc. and 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 the Group 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.

TC BioPharm (Holdings) plc was incorporated on October 25, 2021. 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) plc and, as a result, TC BioPharm Limited became a wholly owned subsidiary of TC BioPharm (Holdings) plc. The corporate reorganization has been accounted for as a business combination under common control and therefore, TC BioPharm (Holdings) plc is a continuation of TC BioPharm Limited and its subsidiaries. The corporate reorganization has been given retrospective effect in these consolidated financial statements, which represent the consolidated financial statements of TC BioPharm (Holdings) plc. All TC BioPharm Limited share options granted to directors and employees under share option plans that were in existence immediately prior to the reorganization were exchanged for share options in TC BioPharm (Holdings) plc on a one-for-one basis with no change in any of the terms or conditions.

On December 17, 2021 and subsequent to the group reorganization, the Company undertook a share split such that one issued ordinary share was exchanged for ten new ordinary shares. As a result of the share split, all references in these consolidated 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 ordinary 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 Company's American Depositary Shares ("ADSs") began trading on the Nasdaq Capital Market under the ticker symbol "TCBP" on February 10, 2022, following its initial public offering ("IPO"). As part of the IPO, the Company, issued 82,353 American Depositary Shares ("ADSs") representing 82,353 ordinary shares with nominal value of £41,176 and warrants to buy 189,412 ADSs for proceeds before expenses of $17.5 million. Funding costs of $3.0 million including underwriter fees were incurred. On February 10, 2022, TC BioPharm (Holdings) plc issued 63,280 American Depositary Shares ("ADSs") representing 63,280 ordinary shares with nominal value of £31,640 and warrants to buy 126,560 ADSs on conversion of loan notes totaling $13.4 million. Between June 7, 2022 and June 8, 2022, the Company issued and sold 230,000 ADSs representing ordinary shares generating proceeds of $4.6 million before deductions for offering expenses of approximately $0.78 million.

On November 18, 2022 the Company undertook a reverse share split such that fifty issued ordinary share were exchanged for one new ordinary share. As a result of the share split, all references in these unaudited condensed consolidated interim financial statements and accompanying notes to units of ordinary shares or per share amounts are reflective of the reverse share split for all periods presented. In addition, the exercise prices and the numbers of ordinary 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 unaudited condensed consolidated financial statements for the six months ended June 30, 2022 and June 30, 2021 have been prepared in accordance with International Accounting Standard 34, "I*nterim 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, 2021.

The unaudited condensed consolidated 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, 2021.

The unaudited 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.

Going concern

Since incorporation the Group has been focused on the development of therapeutic products based around its gamma delta T cell platform technology, with the objective of conducting clinical trials to demonstrate safety and efficacy and eventually being granted regulatory approval to market and sell its products. This activity was expected to be several years in development and has involved considerable expenditure to date on carrying out research and development and conducting clinical trials. In common with most development and/or clinical stage biotechnology companies, the Group has not yet generated any revenues from sales of products, but has obtained cash to finance its research, development and clinical trial activities from equity, debt and grant financings and from receipts from partners under collaborative co-development agreements (totaling £72 million since inception). The Group is expected to continue in this clinical development phase for a number of years before any product becomes marketable. The Group therefore expects to continue to incur significant losses in the foreseeable future.

As at June 30, 2022, the Group had an accumulated deficit of £32.1 million. It experienced an outflow of cash from operating activities during the six months ended June 30, 2022, of £8.9 million, and expects to incur continued outflow of cash for the foreseeable future. Net income/(losses) incurred for the six months ended June 30, 2022, and 2021, amounted to £0.5 million and (£2.6) million, respectively.

As at June 30, 2022, the Group's cash and cash equivalents amounted to £6.0 million, current assets amounted to £9.9 million and current liabilities (excluding amounts which may become payable under its Convertible Loan Notes and Warrant derivative liabilities) amounted to £5.0 million.

The Group raised $17.5 million (£12.8 million), $14.5 million (£10.6 million) net of all commissions, costs and expenses) through the completion of an initial public offering of its ADS and Warrants on Nasdaq (IPO) in February 2022 and raised a further $ 4.6 million (£3.7 million), $3.8 million (£3.0 million) net of all commissions, costs and expenses) through the completion of a follow-on offering in June 2022.

In November 2022, TC BioPharm (Holdings) plc raised $7.4 million (£6.2 million), $6.6 million (£5.5 million) net of all commissions, costs and expenses, through the completion of a private placement of its ADS and Warrants.

On November 30, 2022, the Group had cash on hand of $7.9 million (£6.5 million), which will not be sufficient to enable the Group to meet the cash requirements required to enable it to conduct its business plan through the going concern period (being to December 31, 2023) ("Going Concern Period"). With existing resources, we expect to be able to fund current operations to May 2023.

In common with many clinical development stage biotechnology companies our future liquidity needs, and ability to address them, will largely be determined by the availability of capital, both generally and in particular to fund our product candidates and key development and regulatory projects. As a pre-revenue biotechnology company, we have financed our operations though continuously raising capital; and we expect to continue having to raise capital routinely on the capital markets, taking advantage of our public listing. The Group are currently and continuously progressing various funding options to fill our projected working capital gap, including the current short-term requirements, which could be in the form of an equity raise or other forms of financings such as debt funding, collaborations or licensing arrangements.

We believe that our ongoing financing initiatives should improve our net short-term working capital position sufficiently to provide sufficient capital to finance planned operations through 2023, and thereafter we would expect to be in a position to raise significantly greater capital as our clinical program progresses. However, there can be no certainty that these initiatives will be successful and, if they are not, management will seek to deploy alternative plans, which could have a potentially significant negative impact on shareholder and asset value. Such plans could include all or any of the following: raising additional capital through low priced and/or complex equity and/or debt financings; entering transactions involving sales, joint venturing or licensing of intellectual property; reducing and/or deferring discretionary spending on research and development or clinical programs; restructuring our operating model to take advantage of our manufacturing capability to generate short term revenues; reducing our cash burn rate through reduction in planned operating costs.

The accompanying unaudited condensed consolidated interim financial statements have been prepared in conformity with IFRS as issued by IASB, which contemplate continuation of the Group as a going concern (having adequate working capital to maintain operations through the Going Concern Period). In common with many clinical stage development enterprises, the Group has not established a source of revenues sufficient to cover its operating costs, and as such, has been dependent on ongoing funding operations primarily through ongoing initiatives to sell securities via its Nasdaq listing, commercial partnerships, and/or grants. The Group expects to require substantially more capital to fund its clinical, development and operational requirements, and therefore incur further losses over the next several years as it develops its clinical products towards the market. The Group has utilized, and expects to continue to utilize, substantial amounts of funding to implement its business strategy. Although the completion of the IPO on Nasdaq was a major milestone for the Group, as it opens much wider avenues to raise future finance, the market conditions were such that the initial and subsequent funds raised are less than was initially targeted, and the proceeds of the offerings alone are not adequate to finance the Group's clinical and product development programs through the Going Concern Period. Nonetheless the proceeds of the offerings, together with the anticipated proceeds from ongoing and future fund-raising activities, cause management to believe that the Group will have sufficient liquidity to fund its operations through the Going Concern Period, and, on that basis, management continues to view the Company as a going concern.

Notwithstanding this, management recognizes, that there is uncertainty surrounding the ability of the Group to implement successfully the funding activities required to maintain operations through the Going Concern Period, and immediately beyond. The quantum and timing of such funding is also uncertain. If the Group is unable to maintain adequate liquidity, future operations will need to be scaled back or discontinued. These conditions raise material uncertainty about the Group's ability to provide support and therefore may cast significant doubt on the Company's ability to continue as a going concern. The Group's unaudited condensed consolidated interim financial statements do not include any adjustments that might result from the outcome of this uncertainty.

Adoption of New Accounting Standards

There have been no recent new accounting standards that have had an impact on the unaudited 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 to June 30, 2022, the Group converted loan notes totaling $13,447,012 (£9,861,405) in to ordinary shares and warrants over ordinary shares and repaid US dollar denominated convertible loan notes totaling $2,363,687 (£1,936,360).

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 unaudited condensed consolidated statements of comprehensive income/(loss).

Warrant liability

On February 10, 2022, TC BioPharm (Holdings) plc completed an initial public offering on Nasdaq, issuing82,353 American Depositary Shares ("ADSs") representing 82,353 ordinary shares with nominal value of £41,176 and warrants to buy 189,412 ADSs for proceeds before expenses of $17.5 million (£12.8 million). The convertible loan notes totaling $13,447,012 (£9,861,405) converted into 63,280 ordinary shares and 126,560 warrants over ordinary shares.

ADSs and warrants are considered two freestanding financial instruments because each can be traded separately. The exercise price of the Warrants is $4.25 per ADS and will expire on the sixth anniversary of the date of issuance. The exercise price is subject to standard anti-dilutive adjustments in the event of certain stock splits, stock combinations, stock dividends or recapitalizations.

Given the warrants include a net settlement clause and the exercise (or strike) price of the warrants is denominated in a foreign currency ($) other than the Company's functional currency, management concluded that, in line with IAS 32 Financial Instruments: Presentation, the warrants will be accounted for as derivative financial instruments and presented as a liability on the consolidated statement of financial position with the changes in fair value recognized in the consolidated statement of comprehensive income/(loss).

The relative fair values of the derivative liability and the equity component will be calculated and based on the actual transaction price, will be allocated to the equity and the liability components using the relative fair value method.

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

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 its existing cash balances will be able to fund current operations to May 2023 and when coupled with planned further financings during 2023 cash balances will be sufficient to fund the current operating plans for at least the twelve month period following the filing date of these unaudited condensed consolidated interim financial statements. Should the additional planned financings not occur as expected, management will implement alternative arrangements and such arrangements could have a potentially significant negative impact on the current net asset value of the Group. These alternatives include: (1) raising additional capital my means other than those planned through equity and/or debt financings; (2) entering into new commercial relationships to help fund future clinical trial costs (i.e. licensing and partnerships); (3) reducing and/or deferring discretionary spending on general corporate overheads and one or more of our research and development and / or clinical programs; and/or (4) restructuring operations to change our overhead structure and make use of our manufacturing facilities to generate revenues from through third party manufacturing contracts. In the medium term 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 unaudited condensed consolidated interim financial statements for the six months ended June 30, 2022.

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.

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 June 30, 2022. The estimated time to complete as at June 30, 2022 is 17 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 six month period to June 30, 2022 would have decreased by £339,201 and deferred income liabilities would have increased by £339,201 as at June 30, 2022. 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

In the period prior to become a listed Company on Nasdaq on February 10, 2022, there had been no public market for the Group's ordinary shares, the estimated fair value of the ordinary shares in the financial periods prior to February 10, 2022 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.

As a public trading market for our ordinary shares has now been established in connection with the completion of the IPO, the fair value of our ordinary shares in connection with our accounting for embedded derivatives, warrants and share-based payment expenses will be determinable by reference to the trading price of our ordinary shares on Nasdaq.

Valuation of warrants

At the time of issue of the warrants at the IPO date there was no trading history, as such the Group determined that a more appropriate method for calculating the estimated fair value of the warrants at the point of recognition was 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'. As a recently listed entity, 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 80% was appropriate for the valuation of embedded derivatives in in existence as at June 30, 2022.

As a public trading market for our listed warrants has now been established in connection with the completion of the IPO, under the ticker symbol 'TCBPW', the fair value of our listed warrants will be determinable by reference to the trading price of the warrants on Nasdaq.

With respect to our unlisted warrants that are in issue, in the absence of any trading history, the Group determined that the most appropriate method for calculating the estimated fair value of the warrants at the reporting date was using a Black Scholes option pricing model.

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 2021 and a Black Scholes Model for those options issued in 2022 and periods prior to 2021. 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 15.

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 recently listed entity, 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 80% was appropriate for the valuation of share options granted during the six months ended June 30, 2022. There were no share options granted in the six months ended June 30, 2021.

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) converted to equity in the listed entity and 25% of the face value of the loan notes were repaid 90 days after the listing date. The remaining loan notes are repayable or convertible at the loan note holders' option at 180 days after the listing date. For the purpose of calculating the EIR, management has used the listing date of February 10, 2022.

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'. As a recently listed entity, 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 80% was appropriate for the valuation of embedded derivatives in in existence as at June 30, 2022.

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

	Six months ended	
	June 30, 2022	**June 30, 2021**
	£	**£**
Revenue from collaboration agreements	989,330	989,330

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 June 30, 2022 the amount of the transaction price allocated to performance obligations that are unsatisfied totaled £2,855,202 (December 31, 2021: £3,844,532). 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 income

	Six months ended	
	June 30, 2022	**June 30, 2021**
	£	**£**
Unrealized and realized exchange differences	54,002	
Grant income	-	5,946
	54,002	5,946

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

	Six months ended	
	June 30, 2022	**June 30, 2021**
	£	**£**
Interest on lease liabilities	122,304	131,966
Other interest	13,503	
Interest on convertible loan (Note 10)	5,854,785	230,992
	5,990,592	362,958

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 income/(loss) per share

	Six months ended	
	June 30, 2022	June 30, 2021
	£	£
Income/(loss) for the period	512,658	(2,648,192)
Basic weighted average number of shares outstanding [(1)]	551,923	390,202
Basic and diluted weighted average number of shares outstanding [(1)]	674,398	390,202
Basic income/(loss) per share	**0.93**	**(6.79)**
Diluted income/(loss) per share	**0.76**	**(6.79)**

(1) On November 18, 2022, the Company undertook a reverse share split such that fifty issued ordinary shares were exchanged for one new share. The outstanding shares presented above reflect the fifty for one reverse share split.

Basic income/(loss) per share is calculated by dividing the income/(loss) for the period attributable to the equity holders of the Group by the weighted average number of shares outstanding during the period.

The following potential shares, presented to reflect the fifty for one reverse share split noted above are anti-dilutive and are therefore excluded from the weighted average number of shares for the purpose of diluted income/(loss) per share:

	Six months ended June 30, 2022	Six months ended June 30, 2021
	Number of shares	Number of shares
Convertible loan notes – assuming all loan notes are converted to equity (including all warrants are fully exercised)	33,768	-
TC BioPharm Limited Enterprise Management Incentive Plan 2014	-	106,585
2021 Share Option Scheme	52,305	-
Warrants issued at the time of the IPO	318,443	-
Options to subscribe for ordinary shares at a future date based on certain clinical and commercial milestones	-	15,891
	404,516	122,476

8. Trade and other receivables: due within one year

	June 30, 2022	December 31, 2021
	£	£
Other receivables	23,481	-
VAT owed to the Group	134,297	70,650
Prepayments	1,537,513	811,303
	1,695,291	881,953

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

	June 30, 2022	December 31, 2021
	£	£
Trade payables	1,689,386	1,422,393
Other tax and social security	229,715	311,204
Accruals	1,685,480	2,330,582
Other payables	37,331	39,436
	3,641,912	4,103,615

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 six month period to June 30, 2022:

	Residual loan	Embedded derivative	Total
	£	£	£
Balance at December 31, 2021	6,806,210	6,925,654	13,731,864
Loan notes issued in the period	170	17,940	18,110
Accrued interest	5,854,785	-	5,854,785
Conversion of loan notes	(9,861,405)	-	(9,861,405)
Repayment of loan notes	(1,936,360)	-	(1,936,360)
Fair value adjustment	-	(6,943,594)	(6,943,594)
Currency adjustment	183,709	-	183,709
Balance at June 30, 2022	1,047,109	-	1,047,109

The fair value of the residual loan is not materially different to the book value.

On February 10, 2022, 74% of the face value, totaling $13,447,012 (£9,861,405), of loan notes in issue at the time (including interest accrued to date) converted into 63,280 ordinary shares and 126,560 warrants over ordinary shares in the listed entity. In line with terms of the loan notes and at the loan note holders' option25% of the face value of the loan notes outstanding at the IPO (after adjusting for noteholders who had converted in full at the IPO) were repaid 90 days after the listing date.

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.

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 income/(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:

		2022
Exercise price in USD	$	212.50
Share price in USD		18.40
Time to maturity		One month
Expected volatility		80%
Risk free interest rate (US treasury bond)		0.08%
Dividend yield		-

11. Warrants – derivative

The following table summarizes the changes in the warrant derivative liability during the six month period to June 30, 2022:

	Embedded derivative £
Balance at December 31, 2021	-
Fair value of warrants issued in the period	13,183,155
Fair value adjustment	(10,537,611)
Balance at June 30, 2022	2,645,544

On February 10, 2022, TC BioPharm (Holdings) plc completed an IPO on Nasdaq, issuing American Depositary Shares ("ADSs") and warrants to buy ADSs. The ADSs and warrants are considered two freestanding financial instruments because each can be traded separately. The exercise price of the Warrants is $ 4.25 per ADS and will expire on the sixth anniversary of the date of issuance. The exercise price is subject to standard anti-dilutive adjustments in the event of certain stock splits, stock combinations, stock dividends or recapitalizations, and it is also subject to adjustment in certain events specified in the warrant agreement.

Given the warrants include a net settlement clause and the exercise (or strike) price of the warrants is denominated in a foreign currency ($) other than the Company's functional currency, management concluded that the warrants should be accounted for as derivative financial instruments and presented as a liability on the consolidated statement of financial position with the changes in fair value recognized in the consolidated statement of comprehensive income/(loss).

The relative fair values of the derivative liability and the equity component were calculated and based on the actual transaction price will be allocated to the equity and the liability components using the relative fair value method. A fair value of $ 1.13 per each warrant was identified at the IPO date of February 10, 2022. A fair value of $0.20 per each warrant has been identified as at the reporting date.

The inputs associated with calculating the fair value of the embedded derivative at recognition were 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:

		February 10, 2022
Exercise price in USD	$	212.50
Share price in USD		100.00
Time to maturity		Six years
Expected volatility		80%
Risk free interest rate (US treasury bond)		1.99%
Dividend yield		-

The value of the embedded derivative for the listed warrants is remeasured at fair value at each reporting date (based on the quoted price of the listed warrants) with recognition of the changes in fair value in the consolidated statements of comprehensive income/(loss) in accordance with IFRS 9.

12. Other derivative liabilities

The following table summarizes the changes in the warrant derivative liability during the six month period to June 30, 2022:

	Embedded derivative £
Balance at December 31, 2021	-
Change in fair value of embedded derivative liabilities	3,832,379
Reallocation of derivative liabilities to equity	(3,832,379)
Balance at June 30, 2022	-

Prior to completion of the Initial Public Offering, the issued share capital of TC BioPharm (Holdings) plc included outstanding A ordinary shares which carried the

right in the form of an anti-dilution provision, to subscribe at nominal value for a certain number of additional shares, calculated by reference to the pre-money valuation of implied by an issuance of new share.

The probability of a new issue at a price below £215.00 per share was considered remote as of December 31, 2021 and therefore the value of the anti-dilution provision was nil as the year end. In light of the IPO being planned at an issue price of $212.00 per share (£155.70 per share) the Company calculated the fair value of the anti-dilution rights and incurred a corresponding charge in the Income Statement.

Immediately prior to the completion of the offering, 24,693 ordinary shares were issued, under the terms of our Articles of Association to certain shareholders who, prior to the IPO, owned A ordinary shares 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 corresponding fair value of the related embedded derivative was transferred to equity at the time of the issuance.

As part of the IPO share issue, TC BioPharm (Holdings) plc re-organized its share capital whereby all of the outstanding series A ordinary shares were re-designated as ordinary shares of TC BioPharm (Holdings) plc on a one for one basis and as such no anti-dilution provisions are included within the issued share capital.

13. Lease liabilities and similar

Maturity analysis of leases and similar

June 30, 2022	Undiscounted lease payments	Interest	Present value
	£	£	£
Not later than one year	620,459	220,611	399,848
Between one year and five years	1,797,448	456,208	1,341,240
More than five years	669,569	46,300	623,269
	3,087,476	723,119	2,364,357

December 31, 2021	Undiscounted lease payments	Interest	Present value
	£	£	£
Not later than one year	1,010,039	244,281	765,758
Between one year and five years	1,849,762	525,317	1,324,445
More than five years	893,077	80,647	812,430
	3,752,878	850,245	2,902,633

The balances relating to lease liabilities and similar can be further analyzed as follows:

Lease liabilities

June 30, 2022	Undiscounted lease payments	Interest	Present value
	£	£	£
Not later than one year	451,559	213,181	238,378
Between one year and five years	1,789,398	456,144	1,333,254
More than five years	669,569	46,300	623,269
	2,910,526	715,625	2,194,901

December 31, 2021	Undiscounted lease payments	Interest	Present value
	£	£	£
Not later than one year	768,839	227,630	541,209
Between one year and five years	1,793,412	523,560	1,269,852
More than five years	893,077	80,647	812,430
	3,455,328	831,837	2,623,491

The principal leasing activities undertaken by the Group relate to the lease of property for the business.

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.

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.

June 30, 2022	Undiscounted lease payments	Interest	Present value
	£	£	£
Not later than one year	168,900	7,430	161,470
Between one year and five years	8,050	64	7,986
	176,950	7,494	169,456

December 31, 2021	Undiscounted lease payments	Interest	Present value
	£	£	£
Not later than one year	241,200	16,651	224,549
Between one year and five years	56,350	1,757	54,593
	297,550	18,408	279,142

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, 2022	1,379,360	6,164	1,385,524
Charge for the period	(96,234)	(2,055)	(98,289)
At June 30, 2022	1,283,126	4,109	1,287,235

The following amounts are recognized in the consolidated statement of comprehensive income/(loss) :

	Six months ended June 30, 2022 £	Six months ended June 30, 2021 £
Amortization of right of use assets	98,289	98,289
Interest on lease liabilities	113,283	110,743
	211,572	209,032

14. Share capital and reserves

	June 30, 2022 £	December 31, 2021 £
Share capital	395,638	195,476
Share premium	16,027,724	-
	16,423,362	195,476

	June 30, 2022 Number (1)	December 31, 2021 Number
Authorized, allotted, called up and fully paid share capital comprises:		
Ordinary shares of £0.50 each	791,278	356,260
A Ordinary shares of £0.50 each	-	34,692
Total Ordinary shares outstanding at the end of the period	791,278	390,952

	Number of shares (1)	Share capital £	Share premium £
Fully paid share capital:			
Balance at December 31, 2021	390,952	195,476	-
Issue of Ordinary shares	400,326	200,162	16,027,724
Balance at June 30, 2022	791,278	395,638	16,027,724

(1) On November 18, 2022 the Company undertook a reverse share split such that fifty issued ordinary shares were exchanged for one new. As a result of the reverse share split, all references in these unaudited condensed consolidated interim financial statements and accompanying notes to units of ordinary shares or per share amounts are reflective of the reverse share split for all periods presented.

On January 10, 2022, TC BioPharm (Holdings) Holdings Limited was re-registered as a public limited company ("plc") with the name TC BioPharm (Holdings) plc.

Immediately prior to completion of the Initial Public Offering, TC BioPharm (Holdings) plc re-organized its share capital whereby all of the outstanding series A ordinary shares were re-designated as ordinary shares of TC BioPharm (Holdings) plc on a one for one basis. Immediately prior to the completion of the offering, a further 24,693 ordinary shares were issued, under the terms of our Articles of Association to certain shareholders who, prior to the IPO, owned A ordinary shares 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 fair value of the shares issued was £3.8 million.

On February 10, 2022, TC BioPharm (Holdings) plc issued 63,280 American Depositary Shares ("ADSs") representing 63,280 ordinary shares with nominal value of £31,640 and warrants to buy 126,560 ADSs on conversion of loan notes totaling $13.4 million (£9.9 million).

On February 10, 2022, TC BioPharm (Holdings) plc completed an IPO on Nasdaq, issuing 82,353 American Depositary Shares ("ADSs") representing 82,353 ordinary shares with nominal value of £41,176 and warrants to buy 189,412 ADSs for proceeds before expenses of $17.5 million (£12.8 million). Funding costs of $3.0 million (£2.2 million) including underwriter fees were incurred.

Between June 7, 2022 and June 8, 2022, the Company issued and sold 230,000 ADSs representing ordinary shares generating proceeds of $4,600,000 (£3,656,598) before deductions for offering expenses of approximately $780,000 (£620,032).

The ADSs and warrants are considered two freestanding financial instruments because each can be traded separately. The exercise price of the Warrants is $4.25 per ADS and will expire on the sixth anniversary of the date of issuance. The exercise price is subject to standard anti-dilutive adjustments in the event of certain stock splits, stock combinations, stock dividends or recapitalizations, and it is also subject to adjustment in certain events specified in the warrant agreement.

Given the warrants include a net settlement clause and the exercise (or strike) price of the warrants is denominated in a foreign currency ($) other than the Company's functional currency, management concluded that the warrants should be accounted for as derivative financial instruments and presented as a liability on the consolidated statement of financial position with the changes in fair value recognized in the consolidated statement of comprehensive income/(loss).

The relative fair values of the derivative liability and the equity component was calculated and based on the actual transaction price was allocated to the equity and the liability components using the relative fair value method.

15. Share-based payments

Enterprise Management Incentive (EMI) share option scheme

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.

	Number of share options	Weighted average exercise price £
Outstanding at December 31, 2021	106,585	23.00
Granted during the period	-	-
Exercised during the period	-	-
Forfeited during the period	-	-
Outstanding at June 30, 2022	106,585	23.00
Exercisable at June 30, 2022	106,585	23.00
Unexercisable at June 30, 2022	-	-

The estimated fair value of the options outstanding in the period was calculated by applying a Monte Carlo Simulation for those options issued in 2021 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 (2021: £59.00). The expense recognized for share-based payments in respect of employee services received during the six months to June 30, 2022 is £Nil as all options were fully vested as of December 31, 2022 (six months to June 30, 2021: £Nil).

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 June 30, 2021 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.

2021 Share Option Scheme

Effective immediately prior to completion of the IPO on February 10, 2022, the Company 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 Company has granted options over shares to certain employees and directors.

	Number of share options	Weighted average exercise price $
Outstanding at December 31, 2021	-	-
Granted during the period	52,305	212.00
Exercised during the period	-	-
Forfeited during the period	-	-
Outstanding at June 30, 2022	52,305	212.00
Exercisable at June 30, 2022	16,833	212.00
Unexercisable at June 30, 2022	35,472	212.00

The estimated fair value of the options outstanding in the period was calculated by applying a Black Scholes Model. 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 $53.42. The expense recognized for share-based payments in respect of employee services received during the six months to June 30, 2022 is £837,406.

As a recently listed entity, 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 80% was appropriate for the valuation of our share options.

The options granted under the 2021 share option scheme will typically vest over three years after the date of grant. In some cases, options granted to senior management vested immediately. As at June 30, 2022 the unvested options would, under the agreed terms, vest evenly over the remaining period in either six month or annual instalments.

Upon vesting, each option entitles the holder to purchase one ordinary share at a specified option price determined at the grant date.

The model inputs were as follows:

	February 10, 2022

Exercise price in USD	$ 212.00
Share price in USD	100.00
Expected term	From 5 years to 6 years
Expected volatility	80%
Risk free interest rate (US treasury bond)	1.99%
Dividend yield	-

Additional right to subscribe for shares

On August 25, 2020 the Company issued Ordinary shares included an additional right to subscribe for a fixed number (15,891) of shares at £215.00 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.

16. 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:

	Six months ended June 30, 2022 £	Six months ended June 30, 2021 £
Short-term employee benefits	859,730	453,553
Share-based payments	827,913	-
	1,687,643	453,553

During the six month period ended June 30, 2022 and 2021, 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 £17,132 and £22,718 respectively.

From March 2021, 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 June 30, 2022 the balance outstanding to executive directors totaled £356,332 (December 31, 2021: £591,886).

17. 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.

June 30, 2022 Financial liabilities	Carrying amounts £	Total £	2 months or less £	2-12 months £	12-24 months £	More than 2 years £
Trade payables	1,689,386	1,689,386	1,689,386	-	-	-
Convertible loan	1,047,109	1,047,109	1,047,109	-	-	-
Other payables	1,952,526	1,952,526	1,000,366	952,160	-	-
	4,689,021	4,689,021	3,736,861	952,160	-	-

December 31, 2021 Financial liabilities	Carrying amounts £	Total £	2 months or less £	2-12 months £	12-24 months £	More than 2 years £
Trade payables	1,422,393	1,422,393	1,422,393		-	-
Convertible loan	13,731,864	20,359,893	10,088,496	10,271,397		
Other payables	2,681,223	2,681,223	831,029	1,850,194	-	-
	17,835,480	24,463,509	12,341,918	12,121,591	-	-

18. 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.

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 June 30, 2022, a 1% increase in GBPUSD exchange rate would reduce the liability for the Convertible Loan Notes by £10,367. As at June 30, 2022, a 1% decrease in GBPUSD exchange rate would increase the liability for the Convertible Loan Notes by £10,576.

Equity price risk

The Warrants issued by the Group at the time of the IPO contain an embedded derivative component that is accounted for at fair value at each period end. A change in the price per warrant will impact the valuation of the embedded derivative. As at June 30, 2022, a 5% increase in the price per warrant would increase the value of the embedded derivative by £131,190. As at June 30, 2022, a 5% decrease in the price per warrant would decrease the value of the embedded derivative by £124,943.

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.

19. Subsequent events

On August 9, 2022, Convertible Loan Noteholders with loan notes with a face value of $750,000 (£620,399) agreed to not exercise their right to be repaid and in consideration for this agreement received warrants over 11,678 ordinary shares. In addition, the conversion price of the loan notes was amended to be the lower of (i) the 5-day trailing VWAP of the Company's ADS calculated as at 31 January 2023 and (ii) $25.00, subject to not being below $10.00.

On August 9, 2022, TC BioPharm (Holdings) plc issued 3,676 American Depositary Shares ("ADSs") representing 3,676 ordinary shares and warrants to buy 7,352 ADSs on conversion of loan notes totaling $0.8 million (£0.7 million).

On November 15, 2022, TC BioPharm (Holdings) plc issued 21 Ordinary shares for a consideration of $7.565 (£6.362) per share.

On November 21, 2022, TC BioPharm (Holdings) plc completed a reverse stock split of one (1) new share for every fifty (50) existing shares effective November 21, 2022. As a result, the depositary bank, BNY Mellon effected a reverse stock split on the TC BioPharm (Holdings) plc American Depositary Receipt ("ADR") program. Following the reverse split, a sub-division of every Ordinary share into one new Ordinary Share with a nominal value of £0.0001 and one deferred share with a nominal value of £0.4999 was enacted.

On November 24, 2022, TC BioPharm (Holdings) plc issued 3 Ordinary shares for a consideration of $6.51 (£5.41) per share.

On November 27, 2022, the Company entered into a Securities Purchase Agreement (the "Purchase Agreement") with certain accredited investors (the "Investors") as purchasers. Pursuant to the Purchase Agreement, the Company sold, and the Investors purchased in a private placement an aggregate of 155,000 American Depositary Shares (the "ADSs"), pre-funded warrants to purchase up to 1,315,000 ADS (the "Pre-Funded Warrants"), series A purchase warrants to purchase up to 1,470,000 ADSs (the "Series A Ordinary Warrants") and series B purchase warrants to purchase up to 1,470,000 ADSs (the "Series B Ordinary Warrants" and together with the Series A Ordinary Warrants, the "Ordinary Warrants") for aggregate gross proceeds of $ 7,350,000 (£6,073,376), excluding any proceeds that may be received upon exercise of the Ordinary Warrants. The purchase price for each ADS and associated Ordinary Warrants is $ 5.00 and the purchase price per each Pre-Funded Warrant and associated Ordinary Warrants is $4.999.

Exhibit 99.2

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 and the related notes to those statements included elsewhere in our Annual Report. 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" within our Annual Report. Our actual results may differ materially from those contained in the following discussion and analysis.

Our books and records are maintained in pounds sterling. For the purposes of convenience to the reader, we have translated pound sterling amounts as of and for the month ended June 30, 2022 into US Dollars at the rate of £1.00 to $1.2162, which was the noon buying rate of the Federal Reserve Bank of New York on June 30, 2022. These translations should not be considered representations that any such amounts have been, could have been, or could be converted into US Dollars at that or any other exchange rate as of that date or any other date.

TC BioPharm (Holdings) plc ("TC BioPharm" or the "Company") was incorporated on October 25, 2021. 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) plc and, as a result, TC BioPharm Limited became a wholly owned subsidiary of TC BioPharm (Holdings) plc (the "Group"). The corporate reorganization has been accounted for as a business combination under common control and therefore, TC BioPharm (Holdings) plc is a continuation of TC BioPharm Limited and its subsidiaries. The corporate reorganization has been given retrospective effect in these consolidated financial statements, which represent the consolidated financial statements of TC BioPharm (Holdings) plc. All TC BioPharm Limited share options granted to directors and employees under share option plans that were in existence immediately prior to the reorganization were exchanged for share options in TC BioPharm (Holdings) plc on a one-for-one basis with no change in any of the terms or conditions.

On December 17, 2021 and subsequent to the group reorganization, the Company undertook a share split such that one issued ordinary share was exchanged for ten new ordinary shares. As a result of the share split, all references in these consolidated 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 ordinary 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 Company's American Depositary Shares ("ADSs") began trading on the Nasdaq Capital Market under the ticker symbol "TCBP" on February 10, 2022, following its initial public offering ("IPO"). As part of the IPO, the Company, issued 82,353 American Depositary Shares ("ADSs") representing 82,353 ordinary shares with nominal value of £41,176 and warrants to buy 189,412 ADSs for proceeds before expenses of $17.5 million. Funding costs of $3.0 million including underwriter fees were incurred. On February 10, 2022, TC BioPharm (Holdings) plc issued 63,280 American Depositary Shares ("ADSs") representing 63,280 ordinary shares with nominal value of £31,640 and warrants to buy 126,560 ADSs on conversion of loan notes totaling $13.4 million. Between June 7, 2022 and June 8, 2022, the Company issued and sold 230,000 ADSs representing ordinary shares generating proceeds of $4.6 million before deductions for offering expenses of approximately $0.78 million.

On November 18, 2022 the Company undertook a reverse share split such that fifty issued ordinary share were exchanged for one new ordinary share. As a result of the share split, all references included in this document to units of ordinary shares or per share amounts are reflective of the reverse share split for all periods presented. In addition, the exercise prices and the numbers of ordinary 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 (Holdings) plc (TCB) 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

Since incorporation the Group has been focused on the development of therapeutic products based around its gamma delta T cell platform technology, with the objective of conducting clinical trials to demonstrate safety and efficacy and eventually being granted regulatory approval to market and sell its products. This activity was expected to be several years in development and has involved considerable expenditure to date on carrying out research and development and conducting clinical trials. In common with most development and/or clinical stage biotechnology companies, the Group has not yet generated any revenues from sales of products, but has obtained cash to finance its research, development and clinical trial activities from equity, debt and grant financings and from receipts from partners under collaborative co-development agreements (totalling £72 million since inception). The Group is expected to continue in this clinical development phase for a number of years before any product becomes marketable. The Group therefore expects to continue to incur significant losses in the foreseeable future.

As at June 30, 2022, the Group had an accumulated deficit of £32.1 million. It experienced an outflow of cash from operating activities during the six months ended June 30, 2022, of £8.9 million, and expects to incur continued outflow of cash for the foreseeable future. Net income/(losses) incurred for the six months ended June 30, 2022, and 2021, amounted to £0.5 million and (£2.6) million, respectively.

As at June 30, 2022, the Group's cash and cash equivalents amounted to £6.0 million, current assets amounted to £9.8 million and current liabilities (excluding amounts which may become payable under its Convertible Loan Notes and Warrant derivative liabilities) amounted to £5.0 million.

The Group raised $17.5million (£12.8 million), $14.5 million (£10.6 million) net of all commissions, costs and expenses) through the completion of an initial public offering of its ADS and Warrants on Nasdaq (IPO) in February 2022 and raised a further $4.6 million (£3.7 million), $3.8 million (£3.0 million) net of all commissions, costs and expenses) through the completion of a follow-on offering in June 2022.

In November 2022, TC BioPharm (Holdings) plc raised $7.4million (£6.2 million), $6.6 million (£5.5 million) net of all commissions, costs and expenses, through the completion of a private placement of its ADS and Warrants.

On November 30, 2022, the Group had cash on hand of $7.9 million (£6.5 million), which will not be sufficient to enable the Group to meet the cash requirements required to enable it to conduct its business plan through the going concern period (being to December 31, 2023) ("Going Concern Period"). With existing resources, we expect to be able to fund current operations to May 2023.

In common with many clinical development stage biotechnology companies our future liquidity needs, and ability to address them, will largely be determined by the availability of capital, both generally and in particular to fund our product candidates and key development and regulatory projects. As a pre-revenue biotechnology company, we have financed our operations though continuously raising capital; and we expect to continue having to raise capital routinely on the capital markets, taking advantage of our public listing. We are currently and continuously progressing various funding options to fill our projected working capital gap, including the current short-term requirements, which could be in the form of an equity raise or other forms of financings such as debt funding, collaborations or licensing arrangements.

We believe that our ongoing financing initiatives should improve our net short-term working capital position sufficiently to provide sufficient capital to finance planned operations through 2023, and thereafter we would expect to be in a position to raise significantly greater capital as our clinical program progresses. However, there can be no certainty that these initiatives will be successful and, if they are not, management will seek to deploy alternative plans, which could have a potentially significant negative impact on shareholder and asset value. Such plans could include all or any of the following: raising additional capital through low priced and/or complex equity and/or debt financings; entering transactions involving sales, joint venturing or licensing of intellectual property; reducing and/or deferring discretionary spending on research and development or clinical programs; restructuring our operating model to take advantage of our manufacturing capability to generate short term revenues; reducing our cash burn rate through reduction in planned operating costs.

The accompanying unaudited condensed consolidated interim financial statements have been prepared in conformity with IFRS as issued by IASB, which contemplate continuation of the Group as a going concern (having adequate working capital to maintain operations through the Going Concern Period). In common with many clinical stage development enterprises, the Group has not established a source of revenues sufficient to cover its operating costs, and as such, has been dependent on ongoing funding operations primarily through ongoing initiatives to sell securities via its Nasdaq listing, commercial partnerships, and/or grants. The Group expects to require substantially more capital to fund its clinical, development and operational requirements, and therefore incur further losses over the next several years as it develops its clinical products towards the market. The Group has utilized, and expects to continue to utilize, substantial amounts of funding to implement its business strategy. Although the completion of the IPO on Nasdaq was a major milestone for the Group, as it opens much wider avenues to raise future finance, the market conditions were such that the initial and subsequent funds raised are less than was initially targeted, and the proceeds of the offerings alone are not adequate to finance the Group's clinical and product development programs through the Going Concern Period. Nonetheless the proceeds of the offerings, together with the anticipated proceeds from ongoing and future fund-raising activities, cause management to believe that the Group will have sufficient liquidity to fund its operations through the Going Concern Period, and, on that basis, management continues to view the Company as a going concern.

Notwithstanding this, management recognizes, that there is uncertainty surrounding the ability of the Group to implement successfully the funding activities required to maintain operations through the Going Concern Period, and immediately beyond. The quantum and timing of such funding is also uncertain. If the Group is unable to maintain adequate liquidity, future operations will need to be scaled back or discontinued. These conditions raise material uncertainty about the Group's ability to provide support and therefore may cast significant doubt on the Company's ability to continue as a going concern. The Group's unaudited condensed consolidated interim 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 periods ended June 30, 2021 and 2022, 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 June 30, 2022, the Company has received £14.5 million ($17.6 million) in pre-clinical payments connected with CAR-T development deals with listed pharma companies (NIPRO, Japan: Bluebird Bio, US (now called 2seventy bio – NASDAQ (TSVT)).

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, with our development activities not yet at the point at which capitalization can occur under IFRS. 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 the 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 derivative

The gain/loss relates to the movement in the estimated fair value of the embedded derivative related to the issue of Notes from the point of recognition to the period end, calculated by using a Black Scholes option pricing model.

Finance Income

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

Finance Costs

Finance costs include the effective interest charge accrued in relation to the Notes and interest expense representing the unwinding of discounted lease liabilities in respect of assets presented on our consolidated statement of financial position 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.

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%.

Ukrainian Conflict

Currently the conflict between Ukraine and Russia does not have any direct effect on our operations, as they are generally conducted only in the United Kingdom. Currently, we believe the conflict will have only a general impact on our operations in the same manner as it is having a general impact on all businesses resulting from sanction and embargo regulations, possible shortages of goods that may be supplied from the Ukraine and Russia, and the inflationary results of the conflict.

Results of Operations

Comparison of the six months ended June 30, 2022 and 2021

The following table summarizes the results of our operations for the six months ended June 30, 2022 and 2021:

		Six Months Ended June 30,	
	2022	2022	2021
	$'000	£'000	£'000
Revenue	1,203	989	989
Research and development expenses	(4,498)	(3,698)	(2,908)
Administrative expenses	(4,960)	(4,078)	(885)
Administrative expenses – costs related to preparing for a listing	(1,377)	(1,133)	
Other (expense)/income	66	54	6
Change in fair value of convertible loan derivatives	8,445	6,944	-
Change in fair value of warrants	12,816	10,538	-
Change in fair value of other derivative liabilities	(4,661)	(3,832)	
Finance income – interest	-	-	-
Finance costs	(7,286)	(5,991)	(363)
Loss before tax	**(252)**	**(207)**	**(3,161)**
Income tax credit	876	720	513
Net Income/(Loss) for the period	**624**	**513**	**(2,648)**

Research and development expenses

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

		Six Months Ended June 30,	
	2022	2022	2021
	$'000	£'000	£'000
Direct research and development expenses by program:			
Unmodified cell therapy programs [(1)]	562	462	298
Other research and development programs [(2)]	426	350	216
Total direct research and development expense	988	812	514
Research and development and unallocated costs:			
Personnel related (including share-based compensation)	2,576	2,118	1,639
Indirect research and development expense[(3)]	934	768	755
Total research and development expenses	4,498	3,698	2,908

(1) Unmodified cell therapy programs include OmnImmune® and ImmuniStim®
(2) 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.
(3) Indirect research and development expense includes property relates costs and depreciation and amortization.

Research and development expenses increased by 27% to £3.7 million for the six months ended June 30, 2022 from £2.9 million for the six months ended June 30, 2021. The increase in direct research and development expenses of £0.3 million in 2022 reflected the impact of an increase in activity following the completion of our initial public offering. Personnel costs increased to £2.2 million for the six months ended June 30, 2022 from £1.6 million for the six months ended June 30, 2021 reflecting an increase in headcount post listing and awards of share options during the period (£0.5m) during 2022. The share based payment expense in the six months to June 30, 2021 was Nil. Indirect research and development expense, which contains a number of fixed costs such as facility and property expenditure remained the same in the six month period to June 30, 2022 compared to the six month period to June 30, 2021. 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 increased by 388% to £4.1 million for the six months ended June 30, 2022 from £0.9 million for the six months ended June 30, 2021. The

increase reflected higher levels of activity following the completion of the listing, costs associated with running a listed entity and share based payments in the period.

		Six Months Ended June 30,	
	2022	2022	2021
	$'000	£'000	£'000
Share based payment	683	561	—
Employee related costs	1,756	1,444	466
Legal & professional services	2,326	1,912	310
Other expenses	195	161	109
Total Administrative Expenses	**4,960**	**4,078**	**885**

Costs related to preparing for IPO of £1.1 million are also part of administrative expenses but are shown separately on the face of consolidated statements of comprehensive income/(loss) due to its material size.

During the six months to June 30, 2022, the business granted share options as part of the listing process which resulted in a share-based payment charge of £0.5 million (2021: Nil). In addition, since June 2021, the business has, in preparation for the listing, expanded the management team and established an operational presence in the United States of America. The legal and professional fees in the six months to June 30, 2022 reflect the higher compliance costs associated with being a quoted Company. These costs include director and office insurance, professional accounting advisory and audit fees and investor relations costs.

Change in fair value of convertible loan derivatives

The credit, totaling £6.9 million, for the six months ended June 30, 2022 relates to the movement in the estimated fair value of the embedded derivatives related to the issue of Convertible Loan Notes from December 31, 2021 to the period end, calculated by using a Black Scholes option pricing model. There was no value attributed to the embedded derivatives in issue at June 30, 2021.

Change in fair value of warrant liabilities

The credit, totaling £10.5 million, for the six months ended June 30, 2022 relates to the movement in the estimated fair value of the embedded derivatives related to the issue of warrants at the time of the IPO, from the point of recognition, calculated by using a Black Scholes option pricing model, to the period end, calculated by using a the market price of the listed warrants. There were no warrants in issue in 2021.

Change in fair value of other derivative liabilities

The charge, totaling £3.8 million, for the six months ended June 30, 2022 relates to the movement in the estimated fair value of the embedded derivatives related to anti-dilution provisions within A Ordinary shares immediately prior to the completion to the IPO. During the completion of the IPO, A Ordinary shareholders exercised their right to subscribe for additional shares at nominal value and the value of the derivative liability was transferred to equity. All of the outstanding series A ordinary shares were subsequently re-designated as ordinary shares of TC BioPharm (Holdings) plc on a one for one basis and as such no anti-dilution provisions are included within the issued share capital.

Finance Costs

Finance costs were £6.0 million for the six months ended June 30, 2022 compared to £0.4 million for the six months ended June 30, 2021. The increase reflected the effective interest rate calculated in respect of Convertible Loan Notes issued during the year ended December 31, 2021 and in existence during the six months ended June 30, 2022.

Liquidity and Capital Resources

Sources of Liquidity

For the six months ended June 30, 2022 and June 30, 2021, we incurred net income/(losses) of £0.5 million and (£2.6) million, respectively. We used £8.8 million of cash in operating activities in the six months ended June 30, 2022 and used £1.8 million of cash in operating activities for the six months ended June 30, 2021.

As of June 30, 2022, and June 30, 2021, we had cash and cash equivalents of £6.0 million and £0.3 million, respectively. From incorporation through to June 30, 2022, we have financed our operations primarily through placements of equity securities, convertible loans, government grants, research and development tax credits, and receipts from partner for collaborative research and development services totaling £72 million. On February 15, 2022, the Company completed its IPO on Nasdaq, raising net proceeds of $14.5 million and completed further funding rounds in June 2022 and November 2022 raising net proceeds of £6.7 million.

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:

	Six Months Ended June 30,		
	2022	2022	2021
	$'000	£'000	£'000
Consolidated Cash Flow Statement:			
Net cash flows used in operating activities	(10,818)	(8,895)	(1,947)
Net cash flows used in investing activities	(100)	(82)	(61)
Net cash flows from financing activities	16,017	13,170	1,549
Net increase in cash and cash equivalents	5,100	4,193	(459)

Operating Activities

Net cash used in operating activities was £8.9 million for the six months ended June 30, 2022. The loss before taxation for the six months ended June 30, 2022 was £0.2 million, which is offset by noncash items of £0.4 million, share based payments of £0.8 million, £10.5 million of income related to movements in the embedded derivative related to warrants issued at the IPO in the income statement, £3.8 million of costs related to the movement in fair value of embedded derivatives relating to anti-dilution provisions within certain share classes, £1.1 million of costs related to the interest charge on the convertible loan note and movement in the embedded derivative in the income statement and changes in working capital of £1.0 million. The noncash items consisted primarily of finance costs, changes in fair value of a derivative liabilities, depreciation and amortization. The changes in working capital in the period reflected an increase in trade and other receivables, a decrease in deferred income offset by an increase in trade and other payables.

Net cash used in operating activities was £1.9 million for the six months ended June 30, 2021. The loss before taxation for the six months ended June 30, 2021 was £3.2 million, which is offset by noncash items of £0.9 million and changes in working capital of £0.4 million. The noncash items consisted primarily of finance costs, 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.

Investing Activities

Net cash used in investing activities was £0.1 million and £0.1 million for the six months ended June 30, 2022 and six months ended June 30, 2021, 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 £13.2 million and £1.5 million for the six months ended June 30, 2022 and six months ended June 30, 2021, respectively.

For the six months ended June 30, 2022, these amounts consisted of net proceeds from the issue of shares and warrants as part of the IPO and further follow on round (£15.6 million net of issue costs), offset by the repayment of Convertible Loan Notes (£1.9 million) and the repayment of lease liabilities (£0.5 million). For the six months ended June 30, 2021, these amounts consisted of net proceeds from the issue of convertible loan notes (£1.5 million) and ordinary share capital (£0.3 million) offset by the repayment of sale and leaseback asset finance obligations and lease liabilities (£0.2 million).

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.

Since February 10, 2022, we have been 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. 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 received from the IPO and subsequent to this to be able to fund current operations to May 2023 and together with future planned fundraisings in 2023 will enable us to fund our planned operating expenses and capital expenditure requirements for at least twelve months. 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 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.

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 Annual Report.

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 its existing cash balances will be able to fund current operations to May 2023 and when coupled with planned further financings during 2023 cash balances will be sufficient to fund the current operating plans for at least the twelve month period following the filing date of these unaudited condensed consolidated interim financial statements. Should the additional planned financings not occur as expected, management will implement alternative arrangements and such arrangements could have a potentially significant negative impact on the current net asset value of the Group. These alternatives include: (1) raising additional capital my means other than those planned through equity and/or debt financings; (2) entering into new commercial relationships to help fund future clinical trial costs (i.e. licensing and partnerships); (3) reducing and/or deferring discretionary spending on general corporate overheads and one or more of our research and development and / or clinical programs; and/or (4) restructuring operations to change our overhead structure and make use of our manufacturing facilities to generate revenues from through third party manufacturing contracts. In the medium term 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 unaudited condensed consolidated interim financial statements for the six months ended June 30, 2022.

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 for the period ended June 30, 2022. The estimated time to complete as at June 30, 2022 is 17 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 six month period to June 30, 2022 would have decreased by £339,201 and deferred income liabilities would have increased by £339,201 as at June 30, 2022. 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

In the period prior to become a listed Company on Nasdaq on February 10, 2022, there had been no public market for the Group's ordinary shares, the estimated fair value of the ordinary shares in the financial periods prior to February 10, 2022 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.

As a public trading market for our ordinary shares has now been established in connection with the completion of this offering, the fair value of our ordinary shares in connection with our accounting for embedded derivatives, warrants and share-based payment expenses will be determinable by reference to the trading price of our ordinary shares on Nasdaq.

Valuation of warrants

At the time of issue of the warrants at the IPO date there was no trading history, as such the Group determined that a more appropriate method for calculating the estimated fair value of the warrants at the point of recognition was 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'. As a recently listed entity, 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 80% was appropriate for the valuation of embedded derivatives in in existence as at June 30, 2022.

As a public trading market for our listed warrants has now been established in connection with the completion of the IPO, under the ticker symbol 'TCBPW', the fair value of our listed warrants will be determinable by reference to the trading price of the warrants on Nasdaq.

With respect to our unlisted warrants that are in issue, in the absence of any trading history, the Group determined that the most appropriate method for calculating the estimated fair value of the warrants at the reporting date was using a Black Scholes option pricing model.

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 2021 and a Black Scholes Model for those options issued in 2022 and periods prior to 2021. 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 14 to the unaudited condensed consolidated interim financial statements for the six months ended June 30, 2022.

The Group determines the share price used in the fair value calculation in line with the methods discussed in Note 2 to the unaudited condensed consolidated interim financial statements for the six months ended June 30, 2022 in connection with the 'Valuation of ordinary shares'. As a recently listed entity, 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 80% was appropriate for the valuation of share options granted during the six months ended June 30, 2022. There were no share options granted in the six months ended June 30, 2021.

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) converted to equity in the listed entity and 25% of the face value of the loan notes were repaid 90 days after the listing date. The remaining loan notes are repayable or convertible at the loan note holders' option at 180 days after the listing date. For the purpose of calculating the EIR, management has used the listing date of February 10, 2022.

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 to the unaudited condensed consolidated interim financial statements for the six months ended June 30, 2022 in connection with the 'Valuation of ordinary shares'. As a recently listed entity, 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 80% was appropriate for the valuation of embedded derivatives in in existence as at June 30, 2022.

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.

Emerging Growth Company

The federal securities laws provide that an emerging growth company may take advantage of an extended transition period for complying with new or revised accounting standards. As an emerging growth company, we have irrevocably elected not to take advantage of the extended transition period for implementation of new or revised accounting standards and, as a result, we will comply with new or revised accounting standards on the relevant dates on which adoption of such standards is required for non-emerging growth public companies.

In addition, we intend to rely on the other exemptions and reduced reporting requirements for emerging growth companies. Subject to certain conditions, we are entitled to rely on certain exemptions as an "emerging growth company," we are not required to, among other things, (i) provide an auditor's attestation report on our system of internal controls over financial reporting pursuant to Section 404(b), (ii) provide all of the compensation disclosure that may be required of non-emerging growth public companies under the Dodd-Frank Wall Street Reform and Consumer Protection Act, (iii) comply with any requirement that may be adopted by the Public Company Accounting Oversight Board regarding mandatory audit firm rotation or a supplement to the auditor's report providing additional information about the audit and the financial statements (auditor discussion and analysis), and (iv) disclose certain executive compensation-related items such as the correlation between executive compensation and performance and comparisons of the chief executive officer's compensation to median employee compensation. These exemptions will apply for a period of five years following the completion of our initial public offering, or December 2026, or until we no longer meet the requirements of being an emerging growth company, whichever is earlier.

Recently Issued and Adopted Accounting Pronouncements

There are no recently issued accounting pronouncements that are expected to materially impact our financial position and results of operations.

Exhibit 99.3

TC BioPharm Reports First Half 2022 Financial Results and Provides Shareholder Update

- *Dosed first three patients within Phase 2b clinical trial of OmnImmune®, an allogeneic unmodified cell therapy focused on treating Acute Myeloid Leukemia (AML).*
- *Complete and near complete responses (morphologic leukemia-free state) observed with OmnImmune® starting at lowest dose level in Phase 1b/2a study for the treatment of AML*
- *Received MHRA Approval for 18-Month Extrapolated Shelf-Life of Allogeneic Cell Therapy Product, OmnImmune®*
- *Announced FDA Orphan Drug Status Granted for OmnImmune®*

EDINBURGH, Scotland, December 12, 2022 — TC BioPharm (Holdings) PLC ("TC Biopharm" or the "Company") (NASDAQ: TCBP) (NASDAQ: TCBPW), a clinical stage biotechnology company developing platform allogeneic gamma-delta T cell therapies for cancer treatment, today announced its financial results for the first half ended June 30, 2022 and provided a shareholder update.

"The current year has been an eventful time for TC BioPharm as we launched our Phase 2b in AML," said Bryan Kobel, Chief Executive Officer. "Since completing our IPO in early 2022, we have advanced testing of our lead drug, OmnImmune®, are actively forging strategic relationships with key industry leaders and established a strong foundation capable of supporting long-term growth. I am pleased with the current trajectory of the Company and eager to leverage the many opportunities that lay before us, as we execute on our clinical strategy and business development efforts from the second half of 2022. I look forward to providing additional operational announcements in 2023 as we continue to focus on our primary goal of enhancing overall shareholder value through clinical inflection points and strategic efforts."

First Half 2022 Highlights

- On February 15, 2022, the Company announced closing of its $17.5 million Initial Public Offering and began trading on the NASDAQ stock exchange under the ticker "TCBP"
- Earlier this year, TC BioPharm formally announced positive interim data its Phase 1a/2b human study evaluating safety and tolerability of TCB-002, OmnImmune®, the Company's allogeneic unmodified gamma delta t-cell product, a novel therapeutic targeting the potential treatment of relapse/refractory Acute Myeloid Leukemia ("AML")
- In March 2022, TC BioPharm received MHRA and Research Ethics Committee approvals to initiate phase 2B/3 Clinical Trials for the treatment of Acute Myeloid Leukemia
- During the First Quarter 2022, the Company announced that orphan drug status had been granted for lead product OmnImmune®
- In June 2022, the Company announced the closing of a further offering raising $4.6 million before expenses

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Financial results

Basic and diluted income/(loss) per share was £0.93 (or $1.13) and £0.76 (or $0.92) for the six months ended June 30, 2022, respectively, compared to (£6.79) and (£6.79) for the six months ended June 30, 2021, respectively. Total net income for the six months ended June 30, 2022 was £0.5 million (or $0.6 million), respectively, compared to a net loss of £2.6 million, for the same period in 2021.

For the six months ended June 30, 2022, our research and development expenses were £3.7 million (or $4.5 million), as compared to £2.9 million for the six months ended June 30, 2021. For the six months ended June 30, 2022, our administrative expenses were £4.1 million (or $5.3 million), compared to £0.9 million for the six months ended June 30, 2021. For the six months ended June 30, 2022, our administrative expenses related to preparing for a listing were £1.1 million (or $1.4 million), compared to £Nil for the six months ended June 30, 2021.

Cash and cash equivalents were £6.0 million or $7.3 million as of June 30, 2022 compared to £1.6 million as of December 31, 2021. We subsequently raised a further £6.0 million (or $7.3 million) in the November 2022 PIPE before deductions for estimated attributable expense of £0.7 million (or $0.9 million).

We maintain our books and records in pounds sterling. For the convenience of the reader, we have translated pound sterling amounts as of and for the period ended June 30, 2022 into U.S. dollars at a rate of £1.00 to $1.2162.

About TC BioPharm (Holdings) PLC

TC BioPharm is a clinical-stage biopharmaceutical company focused on the discovery, development and commercialization of gamma-delta T cell therapies for the treatment of cancer with human efficacy data in acute myeloid leukemia. Gamma-delta T cells are naturally occurring immune cells that embody properties of both the innate and adaptive immune systems and can intrinsically differentiate between healthy and diseased tissue. TC BioPharm uses an allogeneic approach in both unmodified and CAR modified gamma-delta T cells to effectively identify, target and eradicate both liquid and solid tumors in cancer.

TC BioPharm is the leader in developing gamma-delta T cell therapies, and the first company to conduct phase II/pivotal clinical studies in oncology. The Company is conducting two investigator-initiated clinical trials for its unmodified gamma-delta T cell product line - Phase 2b/3 pivotal trial for OmnImmune® in treatment of acute myeloid leukemia using the Company's proprietary allogenic CryoTC technology to provide frozen product to clinics worldwide. TC BioPharm also maintains a robust pipeline for future indications in solid tumors and a significant IP/patent portfolio in the use of CARs with gamma-delta T cells and owns our manufacturing facility to maintain cost and product quality controls.

Forward Looking Statements

This press release may contain statements of a forward-looking nature relating to future events. These forward-looking statements are subject to the inherent uncertainties in predicting future results and conditions. These statements reflect our current beliefs, and a number of important factors could cause actual results to differ materially from those expressed in this press release. We undertake no obligation to revise or update any forward-looking statements, whether as a result of new information, future events or otherwise. The reference to the website of TC BioPharm has been provided as a convenience, and the information contained on such website is not incorporated by reference into this press release.

Contact

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We maintain our books and records in pounds sterling. For the convenience of the reader, we have translated pound sterling amounts as of and for the period ended June 30, 2022 into U.S. dollars at a rate of £1.00 to $1.2162.

Unaudited Condensed Consolidated Statements of Income/(Loss)

Comparison of the Six Months Ended June 30, 2022 and 2021

	Six Months Ended June 30,		
	2022	**2022**	**2021**
	$'000	**£'000**	**£'000**
Revenue	**1,203**	**989**	**989**
Research and development expenses	(4,498)	(3,698)	(2,908)
Administrative expenses	(4,960)	(4,078)	(885)
Administrative expenses – costs related to preparing for a listing	(1,377)	(1,133)	
Total operating expenses, net	**(10,836)**	**(8,909)**	**(3,793)**
Other income	66	54	6
Change in fair value of convertible loan derivatives	8,445	6,944	-
Change in fair value of warrants	12,816	10,538	-
Change in fair value of other derivative liabilities	(4,661)	(3,832)	
Finance income – interest	-	-	-
Finance costs	(7,286)	(5,991)	(363)
Loss before tax	**(252)**	**(207)**	**(3,161)**
Income tax credit	876	720	513
Net Income/(loss) for the period	**624**	**513**	**(2,648)**

Unaudited Condensed Consolidated Statement of Cash Flows for Each Period Presented:

Comparison of the Six Months Ended June 30, 2022 and 2021

	Six Months Ended June 30,		
	2022	**2022**	**2021**
	$'000	**£'000**	**£'000**
Cash and cash equivalents at the beginning of the year	1,906	1,567	748
Net cash flows used in operating activities	(10,818)	(8,895)	(1,947)
Net cash flows used in investing activities	(100)	(82)	(61)
Net cash flows from financing activities	16,017	13,170	1,549
Net foreign exchange differences	289	238	(1)
Cash and cash equivalents at the end of the period	**7,294**	**5,998**	**288**

Unaudited Condensed Consolidated Statements of Financial Position as at:

	June 30, 2022 £'000	**December 31, 2021 £'000**
Assets		
Non-current assets		
Intangible assets	521	484
Right of use assets	1,287	1,385
Property, plant and equipment	1,945	2,299
Total non-current assets	**3,753**	**4,168**
Current assets		
Trade and other receivables	1,695	882
Corporation tax receivable	2,127	1,407
Cash and cash equivalents	5,998	1,567
Total current assets	**9,820**	**3,856**
Total assets	**13,573**	**8,024**
Equity		
Share capital	396	195
Share premium	16,028	-
Other reserves	16,711	16,711
Accumulated deficit	(32,116)	(33,465)
Total equity	**1,019**	**(16,559)**
Non-current liabilities		
Deferred income	1,866	1,866
Lease liabilities and similar	1,964	2,137
Total non-current liabilities	**3,830**	**4,003**
Current liabilities		
Deferred income	989	1,979
Trade and other payables	3,642	4,103
Convertible loan notes	1,047	6,806
Convertible loan - derivative	-	6,926
Warrants - derivative	2,646	-
Lease liabilities and similar	400	766
Total current liabilities	**8,724**	**20,580**

Total liabilities	**12,554**	**24,583**
Total equity and liabilities	**13,573**	**8,024**