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

**FORM 20-F/A
(Amendment No. 1)**

REGISTRATION STATEMENT PURSUANT TO SECTION 12(b) OR (g) OF THE SECURITIES EXCHANGE ACT OF 1934

OR

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the fiscal year ended December 31, 2024

OR

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the transition period from to

OR

SHELL COMPANY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

Commission file number:

Tiziana Life Sciences Ltd

(Exact name of Registrant as specified in its charter and translation of Registrant's name into English)

Bermuda

(Jurisdiction of incorporation or organization)

Clarendon House,
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(Address of principal executive offices)

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Securities registered or to be registered pursuant to Section 12(b) of the Act:

Title of each class

Name of each exchange on which registered

Common Shares

NASDAQ Capital Market

Securities registered or to be registered pursuant to Section 12(g) of the Act: **None**

Securities for which there is a reporting obligation pursuant to Section 15(d) of the Act: **None**

Number of outstanding shares of each of the issuer's classes of capital or common stock as of December 31, 2024: 111,462,617 common shares.

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act.

Yes No

If this report is an annual or transition report, indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or 15 (d) of the Securities Exchange Act of 1934.

Yes No

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.

Yes No

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files).

Yes No

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, or a non-accelerated filer, smaller reporting company, or an emerging growth company. See definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer

Accelerated filer

Non-accelerated filer

Smaller reporting company

Emerging growth company

If an emerging growth company that prepares its financial statements in accordance with U.S. GAAP, indicate by checkmark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards† provided pursuant to Section 13(a) of the Exchange Act.

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

Indicate by check mark whether the registrant has filed a report on and attestation to its management's assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firm that prepared or issued its audit report.

If the securities are registered pursuant to Section 12(b) of the Act, indicate by check mark whether the financial statements of the registrant included in the filing reflect the correction of an error to previously issued financial statements.

Indicate by check mark whether any of those error corrections are restatements that required a recovery analysis of incentive-based compensation received by any of the registrant's executive officers during the relevant recovery period pursuant to §240.10D-1(b).

Indicate by check mark which basis of accounting the registrant has used to prepare the financial statements included in this filing:

U.S. GAAP

International Financial Reporting Standards as issued by the
International Accounting Standards Board

Other

If "Other" has been checked in response to the previous question, indicate by check mark which financial statement item the registrant has elected to follow:

Item 17 Item 18

If this is an annual report, indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act).

Yes No

EXPLANATORY NOTE

Tiziana Life Sciences Ltd. (the “Company”) is filing this Amendment No. 1 to its annual report on Form 20-F for the fiscal year ended December 31, 2024 (the “Amendment No. 1”), which was originally filed with the Securities and Exchange Commission (the “SEC”) on May 6, 2025 (the “Original Filing”). The purpose of this Amendment No. 1 is to include recent information regarding our clinical program and to correct Exhibit numbers 12.1 and 13.1.

In order to comply with certain requirements of the SEC’s rules in connection with this filing, this Amendment No. 1 includes an update in Item 3 Key Information. Consistent with the rules of the SEC, the certifications of the Company’s principal executive officer and principal financial officer as of the date of this Amendment No. 1 are attached as exhibits to this Amendment No. 1.

Except as described above, no other changes have been made to the Original Filing. This Amendment No. 1 speaks as of the filing date of the Original Filing. Other than as stated otherwise, this Amendment No. 1 does not, and does not purport to, amend, update or restate any other information or disclosure included in the Original Filing, or reflect any events that have occurred since the date thereof. Accordingly, this Amendment No. 1 should be read in conjunction with the Original Filing and any documents filed with or furnished to the SEC by the Company subsequent to May 6, 2025.

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INTRODUCTION

In this Annual Report on the Form 20-F references to “Tiziana,” “Tiziana Life Sciences plc,” “the company,” “we,” “us” and “our” refer to Tiziana Life Sciences Ltd, Bermuda and its wholly owned subsidiaries, Tiziana Life Sciences Ltd (formerly Tiziana Life Sciences plc), Tiziana Therapeutics Inc., Tiziana Pharma Limited and Longevia Genomics S.r.l.

Solely for convenience, the trademarks, service marks and trade names in this registration statement may be referred to without the ® and ™ symbols, but such references should not be construed as any indicator that their respective owners will not assert, to the fullest extent under applicable law, their rights thereto. This annual report contains additional trademarks, service marks and trade names of others, which are the property of their respective owners. We do not intend to use or display other companies’ trademarks, service marks and trade names to imply a relationship with, or endorsement or sponsorship of us by, any other companies.

In this annual report, unless otherwise stated, all references to “U.S. dollars” or “US\$” or “\$” or “cents” are to the currency of the United States of America, and all references to “Pounds Sterling” or “Sterling” or “£” or “pence” are to the currency of the United Kingdom.

In this annual report, any reference to any provision of any legislation shall include any amendment, modification, re-enactment or extension thereof. Words importing the singular shall include the plural and vice versa, and words importing the masculine gender shall include the feminine or neutral gender.

PRESENTATION OF FINANCIAL INFORMATION

This annual report includes our audited consolidated financial statements as of and for the years ended December 31, 2024 and 2023, which are prepared in accordance with International Financial Reporting Standards, or IFRS, as issued by the International Accounting Standards Board, or IASB. None of our financial statements were prepared in accordance with generally accepted accounting principles in the United States.

Our financial information is presented in United States dollars. For the convenience of the reader, in this prospectus, unless otherwise indicated, translations from Pounds Sterling into U.S. dollars were made at the rate of £1.00 to \$1.2521, which was the noon buying rate of the Federal Reserve Bank of New York on December 31, 2024. Such U.S. dollar amounts are not necessarily indicative of the amounts of U.S. dollars that could actually have been purchased upon exchange of Pounds Sterling at the dates indicated.

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

CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING STATEMENTS

This Annual Report contains forward-looking statements that involve substantial risks and uncertainties. All statements contained in this Annual Report, other than statements of historical fact, including statements regarding our strategy, future operations, future financial position, future revenues, projected costs, prospects, plans and objectives of management, are forward-looking statements. The words “may,” “might,” “will,” “could,” “would,” “should,” “expect,” “intend,” “plan,” “objective,” “anticipate,” “believe,” “estimate,” “predict,” “potential,” “continue” and “ongoing,” or the negative of these terms, or other comparable terminology intended to identify statements about the future. These statements involve known and unknown risks, uncertainties and other important factors that may cause our actual results, levels of activity, performance or achievements to be materially different from the information expressed or implied by these forward-looking statements. The forward-looking statements and opinions contained in this registration statement are based upon information available to us as of the date of this registration statement and, while we believe such information forms a reasonable basis for such statements, such information may be limited or incomplete, and our statements should not be read to indicate that we have conducted an exhaustive inquiry into, or review of, all potentially available relevant information. Forward-looking statements include statement as about:

- the development of Foralumab, anti-IL6R monoclonal antibody (TZLS-501), and any of our other product candidates, including statements regarding the timing of initiation, completion and the outcome of clinical studies or trials and related preparatory work, the period during which the results of the trials will become available and our research and development programs;
- our ability to obtain and maintain regulatory approval of our product candidates, including Foralumab, anti-IL6R monoclonal antibody (TZLS-501), in the indications for which we plan to develop them, and any related restrictions, limitations or warnings in the label of an approved drug or therapy;
- our plans to research, develop, manufacture and commercialize our product candidates;
- the timing of our regulatory filings for our product candidates;
- the size and growth potential of the markets for our product candidates;
- our ability to raise additional capital;
- our commercialization, marketing and manufacturing capabilities and strategy;
- our expectations regarding our ability to obtain and maintain intellectual property protection;
- our ability to attract and retain qualified employees and key personnel;
- our ability to contract with third-party suppliers and manufacturers and their ability to perform adequately;
- our estimates regarding future revenue, expenses and needs for additional financing; and
- regulatory developments in the United States, European Union and foreign countries.

You should refer to the section titled “Risk Factors” for a discussion of important factors that may cause our actual results to differ materially from those expressed or implied by our forward-looking statements. As a result of these factors, we cannot assure you that the forward-looking statements in this registration statement will prove to be accurate.

Furthermore, if our forward-looking statements prove to be inaccurate, the inaccuracy may be material. In light of the significant uncertainties in these forward-looking statements, you should not regard these statements as a representation or warranty by us or any other person that we will achieve our objectives and plans in any specified time frame, or at all. We undertake 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 read this Annual Report and the documents that we have filed as exhibits to this Annual Report completely and with the understanding that our actual future results may be materially different from what we expect. We qualify all of our forward-looking statements by these cautionary statements.

PART I**ITEM 1: IDENTITY OF DIRECTORS, SENIOR MANAGEMENT AND ADVISERS**

Not Applicable

ITEM 2: OFFER STATISTICS AND EXPECTED TIMETABLE

Not applicable.

ITEM 3: KEY INFORMATION**A. Selected Financial Data**

The following table summarizes our consolidated financial data as of the dates and for the periods indicated. The consolidated financial statement data as of December 31, 2024 and 2023 and for the years ended December 31, 2024, 2023 and 2022 have been derived from our consolidated financial statements, as presented at the end of this Annual Report, which have been prepared in accordance with IFRS, as issued by the IASB, and audited in accordance with the standards of the Public Company Accounting Oversight Board (United States). The consolidated financial statement data as of December 31, 2021 and 2020 and for the years ended December 31, 2021 and 2020 have been derived from our consolidated financial statements, which are not presented herein, which have also been prepared in accordance with IFRS as issued by the IASB.

Our functional and presentational currency is the U.S. dollar.

Our historical results are not necessarily indicative of the results that may be expected in the future. The following selected consolidated financial data should be read in conjunction with our audited consolidated financial statements included at the end of this Annual Report and the related notes and Item 5, "Operating and Financial Review and Prospects" below.

Consolidated Statement of Operations and Comprehensive Loss Data:

	Years Ended December 31,				
	2024	2023	2022	2021	2020
	(in thousands except share and per share data)				
Operating expenses:					
Research and development	\$ (5,229)	(8,113)	\$ (12,955)	\$ (13,208)	\$ (5,993)
General and administrative	(10,565)	(9,871)	(1,631)	(13,311)	(11,203)
Realization bonus	-	-	-	(855)	(13,214)
Impairment of asset	-	-	-	-	(279)
Disposal of Intellectual Property	-	-	-	-	2,663
Total operating expenses	(15,794)	(17,984)	(14,586)	(27,374)	(28,026)
Loss from operations	(15,794)	(17,984)	(14,586)	(27,374)	(28,026)
Other income (expense), net	(952)	742	(811)	717	(312)
Tax provision	4,883	(449)	-	3,240	2,207
Net loss attributable to ordinary shareholders	(11,863)	(17,691)	(15,397)	(23,417)	(26,131)
Other comprehensive loss:					
Foreign currency translation adjustment	(72)	1,492	(3,582)	(4,478)	3,474
Total comprehensive loss	(11,935)	(16,199)	(18,979)	(27,895)	(22,657)
Basic and diluted net loss per ordinary share	(0.11)	(0.15)	(0.15)	(0.24)	(0.16)

Consolidated Balance Sheet Data:

	As of December 31,				
	2024	2023	2022	2021	2020
	(in thousands except share and per share data)				
Cash and cash equivalents	\$ 3,724	1,183	\$ 18,122	\$ 42,186	\$ 65,824
Working capital	160	688	17,619	41,133	62,196
Total assets	11,284	12,184	26,477	48,826	70,656
Total shareholders' equity/(deficit)	3,936	5,534	19,571	41,280	62,386

We define working capital as current assets less current liabilities.

B. Capitalization and Indebtedness

Not applicable.

C. Reasons for the Offer and Use of Proceeds

Not applicable.

D. Risk Factors

Our business has significant risks. You should consider carefully the risks described below, together with the other information contained in this Annual Report, including our financial statements and the related notes. If any of the following risks occur, our business, financial condition, results of operations and future growth prospects could be materially and adversely affected. This Annual Report also contains forward-looking statements that involve risks and uncertainties. Our results could materially differ from those anticipated in these forward-looking statements, as a result of certain factors including the risks described below and elsewhere in this Annual Report and our other SEC filings. See "Cautionary Statement Regarding Forward-Looking Statements" above.

Risks Related to the Development of our Product Candidates

If we encounter substantial delays in clinical trials of our product candidates, we may be unable to obtain required regulatory approvals, and therefore will be unable to commercialize our product candidates on a timely basis or at all.

Before obtaining marketing approval from regulatory authorities for the sale of our product candidates, we must conduct extensive clinical trials to demonstrate the safety and utility of the product candidates. Clinical testing is expensive, time-consuming and uncertain as to outcome. We cannot guarantee that any clinical trials will be conducted as planned or completed on schedule, if at all, as a failure of one or more clinical trials can occur at any stage of testing. Events that may prevent successful or timely completion of clinical development include:

- delays in reaching a consensus with the U.S. Food and Drug Administration, or FDA, European Medicines Agency, or EMA, or other regulatory authorities on trial design;
- delays in reaching agreement on acceptable terms with prospective contract research organizations, or CROs, and clinical trial sites;
- delays in execution of development due to financial instability of our CROs, CMOs and CDMOs;
- delays in opening clinical trial sites or obtaining required institutional review board or independent ethics committee approval at each clinical trial site;
- delays in recruiting suitable patients to participate in our future clinical trials;
- imposition of a clinical hold by regulatory authorities as a result of a serious adverse event or after an inspection of our clinical trial operations or clinical trial sites;
- failure by us, any CROs we engage or any other third parties to adhere to clinical trial requirements;
- failure to perform in accordance with good clinical practice, or GCP, or applicable regulatory guidelines in Europe and other international markets;
- delays in the testing, validation, manufacturing and delivery of our product candidates to the clinical trial sites, including delays by third parties with whom we have contracted to perform certain of those functions;
- delays in having patients complete participation in a clinical trial or return for post-treatment follow-up;
- clinical trial sites or patients dropping out of a clinical trial;
- selection of clinical endpoints that require prolonged periods of clinical observation or analysis of the resulting data;
- occurrence of serious adverse events associated with the product candidate that are viewed to outweigh its potential benefits;
- occurrence of serious adverse events in clinical trials of the same class of agents conducted by other sponsors; and
- changes in regulatory requirements and guidance that require amending or submitting new clinical protocols.

Any inability to successfully complete preclinical and clinical development could result in additional costs to us or impair our ability to generate revenues from product sales, regulatory and commercialization milestones and royalties. In addition, if we make manufacturing or formulation changes to our product candidates, we may need to conduct additional studies to bridge our modified product candidates to earlier versions. We have recently received a clinical hold letter from the FDA with respect to an IND filed with the FDA for a Phase 2 clinical trial in ALS, which was primarily focused on amendments to the proposed ALS study trial design, including the addition of a placebo arm. There can be no assurance that we will be able to resolve the issues raised by the FDA in a timely basis or that the FDA will not place future clinical trials of our product candidates on additional clinical holds in the future. Clinical trial delays also could shorten any periods during which we may have the exclusive right to commercialize our product candidates or allow our competitors to bring products to market before we do, which could impair our ability to successfully commercialize our product candidates and may harm our business, financial condition, results of operations and prospects.

We may fail to demonstrate the safety and therapeutic utility of our product candidates to the satisfaction of applicable regulatory authorities, which would prevent or delay regulatory approval and commercialization.

Before obtaining regulatory approvals for the commercial sale of our product candidates, we must demonstrate through lengthy, complex and expensive preclinical testing and clinical trials that our product candidates are both safe and effective for use in each target indication. Clinical testing is expensive and can take many years to complete, and its outcome is inherently uncertain. Most product candidates that commence clinical trials are never approved as products. If the results of our registrational trial or future pivotal trials for our other product candidates do not demonstrate therapeutic utility of our product candidates, or if there are safety concerns or serious adverse events associated with our product candidates, we may:

- be delayed in obtaining marketing approval for our product candidates, if at all;
- obtain approval for indications or patient populations that are not as broad as intended or desired;
- obtain approval with labeling that includes significant use or distribution restrictions or safety warnings;
- be subject to additional post-marketing testing requirements;
- be subject to changes in the way the product is administered;
- be required to perform additional clinical trials to support approval or be subject to additional post-marketing testing requirements;
- have regulatory authorities withdraw or suspend their approval of the product or impose restrictions on its distribution in the form of a modified risk evaluation and mitigation strategy, or REMS;
- be subject to the addition of labeling statements, such as warnings or contraindications; or
- be sued or experience damage to our reputation.

Success in preclinical studies or clinical trials may not be indicative of results in future clinical trials.

Success in preclinical testing and early clinical trials does not ensure that later clinical trials will generate the same results or otherwise provide adequate data to demonstrate the effectiveness and safety of our product candidate. Frequently, product candidates that have shown promising results in early clinical trials have subsequently suffered significant setbacks in later clinical trials. To date, some of our clinical trials have involved small patient populations and because of the small sample size in such trials, the interim results of these clinical trials may be subject to substantial variability and may not be indicative of either future interim results or final results. In addition, the design of a clinical trial can determine whether its results will support approval of a product and flaws in the design of a clinical trial may not become apparent until the clinical trial is well advanced. In addition, there is a high failure rate for drugs and biologic products proceeding through clinical trials. In fact, many companies in the pharmaceutical and biotechnology industries have suffered significant setbacks in late-stage clinical trials even after achieving promising results in preclinical testing and earlier-stage clinical trials. Moreover, data obtained from preclinical and clinical activities is subject to varying interpretations, which may delay, limit or prevent regulatory approval. In addition, we may experience regulatory delays or rejections as a result of many factors, including due to changes in regulatory policy during the period of our product candidate development. Any such delays could negatively impact our business, financial condition, results of operations and prospects.

We depend on enrollment of patients in our clinical trials for our product candidates and may find it difficult to enroll patients in our clinical trials, which could delay or prevent us from proceeding with clinical trials of our product candidates and could materially adversely affect our R&D efforts and business, financial condition and results of operations.

Identifying and qualifying patients to participate in clinical trials of our product candidates is critical to our success. The timing of our clinical trials depends on our ability to recruit patients to participate, and to see those patients through the completion of required follow-up periods. If, for any reason, patients are unwilling to enroll in our clinical trials, then the timeline for recruiting patients, conducting studies and obtaining regulatory approvals for our product candidates may be delayed. These delays could result in increased costs, delays in advancing our product candidates, delays in testing the effectiveness of our product candidates or termination of clinical trials altogether.

Our current product candidates are being developed to treat oncology and immune diseases of high unmet medical need. However, we may not be able to initiate or continue clinical trials if we cannot enroll a sufficient number of eligible patients to participate in the clinical trials required by the FDA, EMA or other regulatory authorities. As a result, we may not be able to identify, recruit and enroll a sufficient number of patients, or those with required or desired characteristics, to complete our clinical trials in a timely manner. Patient enrollment can be affected by many factors, including:

- size of the patient population and process for identifying patients;
- eligibility and exclusion criteria for our clinical trials;
- perceived risks and benefits of our product candidates;
- severity of the disease under investigation;
- proximity and availability of clinical trial sites for prospective patients;
- competition with other clinical trials for product candidates competing in the same therapeutic areas as our product candidates;
- ability to obtain and maintain patient consent;
- patient drop-outs prior to completion of clinical trials;
- patient referral practices of physicians; and
- ability to monitor patients adequately during and after treatment.

Our ability to successfully initiate, enroll and complete clinical trials in any foreign country is subject to numerous risks unique to conducting business in foreign countries, including:

- difficulty in establishing or managing relationships with CROs and physicians;
- different standards for the conduct of clinical trials;
- absence in some countries of established groups with sufficient regulatory expertise for review of certain treatment protocols;
- inability to locate qualified local consultants, physicians and partners; and
- the potential burden of complying with a variety of foreign laws, medical standards and regulatory requirements, including the regulation of pharmaceutical and biotechnology products and treatment.

If we have difficulty enrolling a sufficient number of patients or finding additional clinical trial sites to conduct our clinical trials as planned, we may need to delay, limit or terminate ongoing or planned clinical trials, any of which could have an adverse effect on our business, financial condition, results of operations and prospects.

Our product candidates and the process for administering our product candidates may cause undesirable side effects or have other properties that could delay or prevent their regulatory approval, limit their commercial potential or result in significant negative consequences following any potential marketing approval.

During the conduct of clinical trials, patients report changes in their health, including illnesses, injuries and discomforts, to their study doctor. Often, it is not possible to determine whether the product candidate being studied caused these conditions. Regulatory authorities may draw different conclusions or require additional testing to confirm these determinations. For Foralumab, the most frequent drug-related side effects reported following intravenous administration were infusion related reactions, or IRR, including fever, headaches, chills, nausea, vomiting, diarrhea and hypotension considered the result of cytokine release also known as cytokine release syndrome, or CRS. Other adverse events included reactivation of Epstein-Barr virus (clinically silent); moderate lymphocytopenia, abnormalities in liver function tests. Since most of these changes are related to the infusion route of administration and dosage level, such systemic toxicities are not anticipated when administered orally or nasally due to what we assume will be minimal systemic absorption.

In addition, it is possible that as we test our product candidates in larger, longer and more extensive clinical programs, or as use of these product candidates becomes more widespread if they receive regulatory approval, illnesses, injuries, discomforts and other adverse events that were observed in earlier trials, as well as conditions that did not occur or went undetected in previous trials, will be reported by patients. Many times, side effects are only detectable after investigational products are tested in large-scale, Phase 3 clinical trials or, in some cases, after they are made available to patients on a commercial scale after approval. If additional clinical experience indicates that our product candidates cause serious or life-threatening side effects, the development of our product candidates may fail or be delayed, or, if the product candidate has received regulatory approval, such approval may be revoked, which would harm our business, prospects, operating results and financial condition.

If in the future we are unable to demonstrate that such adverse events were caused by the administration process or related procedures, the FDA, EMA or other regulatory authorities could order us to cease further development of, or deny approval of, our product candidates for any or all targeted indications. Even if we are able to demonstrate that any serious adverse events are not product-related, such occurrences could affect patient recruitment or the ability of enrolled patients to complete the clinical trial. Moreover, if we elect or are required to delay, suspend or terminate any clinical trial of any of our product candidates, the commercial prospects of such product candidate may be harmed and our ability to generate product revenues from such product candidate may be delayed or eliminated. Any of these occurrences may harm our ability to develop other product candidates, and may harm our business, financial condition and prospects.

Additionally, if we or others later identify undesirable side effects caused by any of our product candidates, several potentially significant negative consequences could result, including:

- regulatory authorities may suspend or withdraw approvals of such product candidate;
- regulatory authorities may require additional warnings on the label;
- we may be required to change the way a product candidate is administered or conduct additional clinical trials;
- we could be sued and held liable for harm caused to patients; and
- our reputation may suffer.

Any of these events could prevent us from achieving or maintaining market acceptance of our product candidates.

Any contamination in our manufacturing process, shortages of raw materials or failure of any of our key suppliers to deliver necessary components could result in delays in our clinical development or marketing schedules.

Given the nature of biologics and NCE manufacturing, there is a risk of contamination. Any contamination could adversely affect our ability to produce product candidates on schedule and could, therefore, harm our results of operations and cause reputational damage. In addition, some of the raw materials required in our manufacturing process are derived from biologic sources and are difficult to procure and may be subject to contamination or recall. A material shortage, contamination, recall or restriction on the use of biologically derived substances in the manufacture of our product candidates could adversely impact or disrupt the commercial manufacturing or the production of clinical material, which could adversely affect our development timelines and our business, financial condition, results of operations and prospects.

Risks Related to Our Financial Position and Need for Capital

We have incurred net losses in every year since our inception. We anticipate that we will continue to incur losses for the foreseeable future and may never achieve or maintain profitability.

We are a clinical stage biotechnology company with a limited operating history. Since our inception in May 2013, we have incurred significant net losses. Our net losses were \$12.0m, \$17.8m and \$15.4m for the years ended December 31, 2024, 2023 and 2022, respectively. As of December 31, 2024, we had an accumulated loss of \$146m. We have devoted substantially all of our efforts to research and development of our product candidates, including clinical development of our lead product candidate, Foralumab, as well as to building out our management team and infrastructure. We expect that it could be several years, if ever, before we have a commercialized product candidate. We expect to continue to incur significant expenses and increasing operating losses for the foreseeable future. These net losses will adversely impact our shareholders' equity and net assets and may fluctuate significantly from quarter to quarter and year to year. We anticipate that our expenses will increase substantially if, and as, we:

- continue research and development of foralumab, including the initiation of a clinical trial with nasally administered foralumab in patients with secondary progressive multiple sclerosis (SPMS), develop a program for intranasal administration of foralumab for the treatment or prevention of Type 1 Diabetes (T1D), investigate intranasal foralumab for the treatment of Long COVID, study intranasal foralumab in patients with mild to moderate Alzheimer's Disease and potentially study intranasal foralumab in rare Orphan pediatric diseases when funding becomes available.
- cGMP manufacturing of anti-IL6R mAb drug substance and drug product for treatment Interstitial lung disease associated with systemic sclerosis (SSc-ILD) is complete. An IND to conduct a Phase 1 clinical trial was submitted in December 2021
- manufacture our product candidates in accordance with current good manufacturing practices, or cGMP, for clinical trials or potential commercial sales;

- establish a sales, marketing and distribution infrastructure to commercialize any product candidate for which we may obtain marketing approval;
- develop, maintain, expand and protect our intellectual property portfolio;
- identify, assess, and acquire or in-license other product candidates and technologies;
- secure, maintain or obtain freedom to operate for any in-licensed technologies and products;
- address any competing technological and market developments; and
- expand our operations in the United States and Europe.

We may never succeed in any or all of these activities and, even if we do, we may never generate revenues that are significant or large enough to achieve profitability. If we do achieve profitability, we may not be able to sustain or increase profitability on a quarterly or annual basis. Our failure to become and remain profitable would decrease the value of our company and could impair our ability to raise capital, maintain our R&D efforts, expand our business or continue our operations.

We need substantial additional funding to complete the development of our product candidates, which may not be available on acceptable terms, if at all. Failure to obtain this necessary capital when needed may force us to delay, limit or terminate certain of our product development, research operations or future commercialization efforts, if any.

Our operations have consumed substantial amounts of cash since inception, and we expect our expenses to increase in connection with our ongoing activities, particularly as we continue the R&D of, initiate further clinical trials of and seek marketing approval for, our product candidates. In addition, if we obtain marketing approval for our product candidates, we expect to incur significant expenses related to product sales, marketing, manufacturing and distribution. Furthermore, we expect to incur additional costs associated with operating as a public company listed on the Nasdaq in the United States. Our future capital requirements will depend on many factors, including:

- the scope, progress, results and costs of laboratory testing, manufacturing, preclinical and clinical development for our current and future product candidates;
- the costs, timing and outcome of regulatory review of our product candidates;
- the extent to which we acquire or in-license and develop other product candidates and technologies;
- our ability to establish and maintain collaborations and license agreements on favorable terms, if at all;
- the costs, timing and outcome of potential future commercialization activities, including manufacturing, marketing, sales and distribution for our product candidates for which we receive marketing approval;
- the costs of developing, maintaining and enforcing our intellectual property rights and defending intellectual property-related claims; and
- the sales price and availability of adequate third-party coverage and reimbursement for our product candidates, if and when approved.

Developing product candidates and conducting preclinical studies and clinical trials is a time-consuming, expensive and uncertain process that takes years to complete, and we may never generate the necessary data or results required to obtain marketing approval and achieve product sales. In addition, our product candidates, if approved, may not achieve commercial success. Our product revenues, if any, will be derived from or based on sales of product candidates that may not be commercially available for many years, if at all. Accordingly, we will need to continue to rely on additional financing to achieve our business objectives. Adequate additional financing may not be available to us on acceptable terms, if at all. To the extent that additional capital is raised through the issuance of equity or equity-linked securities, the issuance of those securities could result in substantial dilution for our current shareholders and the terms of any future issuance may include liquidation or other preferences that adversely affect the rights of our current shareholders. Debt financing, if available, may involve covenants restricting our operations or our ability to incur additional debt. Any debt or additional equity financing that we raise may contain terms that are not favorable to us or our shareholders. If we raise additional funds through collaboration and licensing arrangements with third parties, it may be necessary to relinquish some rights to our technologies or our product candidates or grant licenses on terms that are not favorable to us. Furthermore, the potential issuance of additional securities in the future, whether equity or debt, by us, or the possibility of such issuance, may cause the market price of our Common shares, to decline and existing shareholders may not agree with our financing plans or the terms of such financings.

If we are unable to obtain adequate funding on a timely basis, we may be required to significantly curtail, delay or discontinue our R&D programs of our product candidates or any future commercialization efforts, be unable to expand our operations or be unable to otherwise capitalize on our business opportunities, as desired, which could harm our business and potentially cause us to discontinue operations.

Our limited operating history and no history of commercializing pharmaceutical products may make it difficult to evaluate the success of our business to date and to assess the prospects for our future viability.

Since our inception, we have devoted substantially all of our resources to developing Foralumab and our other product candidates, building our intellectual property portfolio and providing general and administrative support for these operations. Although our R&D efforts to date have resulted in a pipeline of product candidates, we have not yet demonstrated our ability to successfully complete Phase 3 or other pivotal clinical trials, obtain regulatory approvals, or commercialize any of our product candidates. In addition, given our limited operating history, we may encounter unforeseen expenses, difficulties, complications, delays and other known and unknown factors in achieving our business objectives.

Additionally, we are not profitable and have incurred losses in each year since our inception, and we expect that our financial condition and operating results may continue to fluctuate significantly from quarter to quarter and year to year due to a variety of factors, many of which are beyond our control. Consequently, any predictions you make about our future success or viability may not be as accurate as they could be if we had a longer operating history.

Risks Related to Our Reliance on Third Parties

We rely, and expect to continue to rely, on third parties to conduct our preclinical studies and clinical trials. If these third parties do not successfully carry out their contractual duties or meet expected deadlines, we may not be able to obtain regulatory approval for or commercialize our product candidates.

We have relied upon and plan to continue to rely upon third parties, including independent clinical investigators and third-party CROs, to conduct our preclinical studies and clinical trials and to monitor and manage data for our ongoing preclinical and clinical programs. In engaging these third parties, we typically have to, and expect to have to, negotiate budgets and contracts, which may result in delays to our development timelines and increases costs. Additionally, there is a limited number of qualified third-party service providers that specialize or have the expertise required to achieve our business objectives, and so it may be challenging to find alternative investigators or CROs, or do so on commercially reasonable terms. We rely on these parties for execution of our preclinical studies and clinical trials, and control only certain aspects of their activities. Nevertheless, we are responsible for ensuring that each of our preclinical studies and clinical trials is conducted in accordance with the applicable protocol and legal, regulatory and scientific standards, and our reliance on these third parties does not relieve us of our regulatory responsibilities. We and our third-party contractors and CROs are required to comply with GCP requirements, which are regulations and guidelines enforced by the FDA, the Competent Authorities of the Member States of the European Economic Area and comparable foreign regulatory authorities for all of our product candidates in clinical development. Regulatory authorities enforce these GCP requirements through periodic inspections of trial sponsors, principal investigators and clinical trial sites. If we fail to exercise adequate oversight over any of our CROs or if we or any of our CROs fail to comply with applicable GCP requirements, the clinical data generated in our clinical trials may be deemed unreliable and the FDA, EMA or other regulatory authorities may require us to perform additional clinical trials before approving our marketing applications. We cannot assure you that upon a regulatory inspection of us or our CROs or other third parties performing services in connection with our clinical trials, such regulatory authority will determine that any of our clinical trials complies with GCP regulations. In addition, our clinical trials must be conducted with product produced under applicable cGMP regulations. Our failure to comply with these regulations may require us to repeat clinical trials, which would delay the regulatory approval process.

Further, these investigators and CROs are not our employees and we will not be able to control, other than by contract, the amount of resources, including time, which they devote to our product candidates and clinical trials. If independent investigators or CROs fail to devote sufficient resources to the development of our product candidates, or if their performance is substandard, it may delay or compromise the prospects for approval and commercialization of our product candidates. These investigators and CROs may also have relationships with other commercial entities, including our competitors, for whom they may also be conducting clinical studies or other drug development activities, which could affect their performance on our behalf. In addition, the use of third-party service providers requires us to disclose our proprietary information to these parties, which increases the risk that a competitor will discover them or that this information will be misappropriated or disclosed.

If any of our relationships with these third-party CROs terminate, we may not be able to enter into arrangements with alternative CROs or to do so on commercially reasonable terms. If CROs do not successfully carry out their contractual duties or obligations or meet expected deadlines, if they need to be replaced or if the quality or accuracy of the clinical data they obtain is compromised due to the failure to adhere to our clinical protocols, regulatory requirements or for other reasons, our clinical trials may be extended, delayed or terminated and we may not be able to obtain regulatory approval for or successfully commercialize our product candidates. As a result, our results of operations and commercial prospects would be harmed, our costs could increase and our ability to generate revenues could be delayed.

Repeating clinical trials or switching or engaging additional CROs involves additional cost and requires our management's time and focus. In addition, there is a natural transition period when a clinical trial has to be repeated or when a new CRO commences work. As a result, delays could occur, which could materially impact our ability to meet our desired clinical development timelines.

Our reliance on third parties requires us to share our trade secrets, which increases the possibility that a competitor will discover them or that our trade secrets will be misappropriated or disclosed.

We have engaged contract manufacturing organizations, or CMOs, to cGMP manufacture Foralumab (TZLS-401) drug product, and anti-Interleukin 6 Receptor monoclonal antibody (anti-IL6R mAb, TZLS-501) drug substance and drug product and to perform quality testing, and because we collaborate with various organizations and academic institutions for the advancement of our platforms, we must, at times, share our proprietary technology and confidential information, including trade secrets, with them. We seek to protect our proprietary technology, in part, by entering into confidentiality agreements and, if applicable, material transfer agreements, collaborative research agreements, consulting agreements or other similar agreements with our collaborators, advisors, employees and consultants prior to beginning research or disclosing proprietary information. These agreements typically limit the rights of the third parties to use or disclose our confidential information. Despite the contractual provisions employed when working with third parties, the need to share trade secrets and other confidential information increases the risk that such trade secrets become known by our competitors, are inadvertently incorporated into the technology of others or are disclosed or used in violation of these agreements. Given that our proprietary position is based, in part, on our know-how and trade secrets, a competitor's discovery of our proprietary technology and confidential information or other unauthorized use or disclosure of such technology or information would impair our competitive position and may have an adverse effect on our business, financial condition, results of operations and prospects.

Despite our efforts to protect our trade secrets, our competitors may discover our trade secrets, either through breach of these agreements, independent development or publication of information including our trade secrets by third parties. A competitor's discovery of our trade secrets would impair our competitive position and have an adverse impact on our business, financial condition, results of operations and prospects.

We utilize, and expect to continue to utilize, third parties to conduct our product manufacturing for the foreseeable future, and these third parties may not perform satisfactorily.

We currently rely on CMOs for the manufacturing of clinical batches and intend to continue to rely on third parties to manufacture our preclinical study and clinical trial product supplies. If our current CMOs, or any future third-party manufacturers, do not successfully carry out their contractual duties, meet expected deadlines or manufacture our product candidates in accordance with regulatory requirements, or if there are disagreements between us and our CMOs or any future third-party manufacturers, we will not be able to complete, or may be delayed in completing, the preclinical studies required to support future investigational new drug, or IND, submissions and the clinical trials required for approval of our product candidates.

In addition to our current CMOs, we may rely on additional third parties to manufacture ingredients of our product candidates in the future and to perform quality testing, and reliance on these third parties entails risks to which we would not be subject if we manufactured the product candidates ourselves, including:

- reduced control for certain aspects of manufacturing activities;
- termination or nonrenewal of manufacturing and service agreements with third parties in a manner or at a time that is costly or damaging to us; and
- disruptions to the operations of our third-party manufacturers and service providers caused by conditions unrelated to our business or operations, including the bankruptcy of the manufacturer or service provider.

Any of these events could lead to clinical trial delays or failure to obtain regulatory approval or impact our ability to successfully commercialize any of our product candidates. Some of these events could be the basis for FDA, EMA or other regulatory authority action, including injunction, recall, seizure or total or partial suspension of product manufacture.

To the extent we rely on a third-party manufacturing facility for commercial supply, that third party will be subject to significant regulatory oversight with respect to manufacturing our product candidates.

The preparation of therapeutics for clinical trials or commercial sale is subject to extensive regulation. Components of a finished therapeutic product approved for commercial sale or used in late-stage clinical trials must be manufactured in accordance with cGMP requirements. These regulations govern manufacturing processes and procedures, including record keeping, and the implementation and operation of quality systems to control and assure the quality of investigational products and products approved for sale. Poor control of production processes can lead to the introduction of outside agents or other contaminants, or to inadvertent changes in the properties or stability of a product candidate that may not be detectable in final product testing. To the extent that we utilize third-party facilities for commercial supply, the third party's facilities and quality systems must pass an inspection for compliance with the applicable regulations as a condition of regulatory approval. In addition, the regulatory authorities may, at any time, audit or inspect the third-party manufacturing facility or the associated quality systems for compliance with the regulations applicable to the activities being conducted. If, for example, these facilities do not pass a plant inspection, the FDA will not approve the applicable NDA or biologics license application, or BLA.

We do not directly control the manufacturing of, and are completely dependent on, our CMOs for compliance with cGMP requirements. If our CMOs cannot successfully manufacture material that conforms to our specifications and the strict regulatory requirements of the FDA, EMA or other regulatory authorities, they will not be able to secure and/or maintain regulatory approval for their manufacturing facilities. In addition, we have no direct control over the ability of our CMOs to maintain adequate quality control, quality assurance and qualified personnel. Furthermore, all of our CMOs are engaged with other companies to supply and/or manufacture materials or products for such companies, which exposes our CMOs to regulatory risks for the production of such materials and products. As a result, failure to meet the regulatory requirements for the production of those materials and products may generally affect the regulatory clearance of our CMOs' facilities. Our failure, or the failure of third parties, to comply with applicable regulations could result in sanctions being imposed on us, including clinical holds, fines, injunctions, civil penalties, delays, suspension or withdrawal of approvals, license revocation, seizures or recalls of product candidates or products, operating restrictions and criminal prosecutions, any of which could significantly and adversely affect supplies of our products and product candidates.

Our potential future dependence upon others for the manufacture of our product candidates may adversely affect our future profit margins and our ability to commercialize any products that receive regulatory approval on a timely and competitive basis.

Risks Related to Commercialization of Our Product Candidates

We currently have no marketing and sales force. If we are unable to establish effective sales, marketing and distribution capabilities or enter into agreements with third parties to market, sell and distribute our product candidates that may be approved, we may not be successful in commercializing our product candidates if and when approved, and we may be unable to generate any product revenue.

We currently do not have a marketing or sales team for the marketing, sales and distribution of any of our product candidates. In order to commercialize any of our product candidates that may be approved, we intend to build, on a territory-by-territory basis, marketing, sales, distribution, managerial and other non-technical capabilities or make arrangements with third parties to perform these services. These efforts will require significant capital expenditures, management resources and time, and we face competition in search for qualified personnel or third parties to assist with marketing, sales and distribution of any of our product candidates. We may not be successful in building these capabilities.

There are risks involved with both establishing our own sales, marketing and distribution capabilities and entering into arrangements with third parties to perform these services. For example, recruiting and training a sales force is expensive and time consuming and could delay any product launch. If the commercial launch of a product candidate for which we recruit a sales force and establish marketing and/or distribution capabilities is delayed or does not occur for any reason, we would have prematurely or unnecessarily incurred these commercialization expenses. This may be costly, and our investment would be lost if we cannot retain or reposition our sales and marketing personnel.

Factors that may inhibit our efforts to commercialize our product candidates on our own include:

- our inability to recruit, train and retain adequate numbers of effective sales and marketing personnel;
- the inability of sales personnel to obtain access to physicians or persuade adequate numbers of physicians to prescribe any future product that we may develop;
- the lack of complementary treatments to be offered by sales personnel, which may put us at a competitive disadvantage relative to companies with more extensive product lines; and
- unforeseen costs and expenses associated with creating an independent sales and marketing organization.

If we enter into arrangements with third parties to perform sales, marketing and distribution services, our product revenue or the profitability to us from these revenue streams is likely to be lower than if we were to market and sell any product candidates that we develop ourselves. In addition, we may not be successful in entering into arrangements with third parties to sell and market our product candidates or may be unable to do so on terms that are favorable to us. We likely will have little control over such third parties and any of them may fail to devote the necessary resources and attention to sell and market our product candidates effectively. If we do not establish sales and marketing capabilities successfully, either on our own or in collaboration with third parties, we may not be successful in commercializing our product candidates.

We face significant competition in an environment of rapid technological change and the possibility that our competitors may achieve regulatory approval before us or develop therapies that are more advanced or effective than ours.

The biotechnology and pharmaceutical industries are characterized by rapidly changing technologies, significant competition and a strong emphasis on intellectual property. We face substantial competition from many different sources, including large and specialty pharmaceutical and biotechnology companies, academic research institutions, government agencies and public and private research institutions.

New developments, including the development of other pharmaceutical technologies and methods of treating disease, occur in the pharmaceutical and life sciences industries at a rapid pace. Developments by competitors may render our product candidates obsolete or noncompetitive. We anticipate that we will face intense and increasing competition as new treatments enter the market and advanced technologies become available.

Many of our potential competitors, alone or with their strategic partners, have substantially greater financial, technical and other resources, such as larger R&D, clinical, sales and marketing and manufacturing organizations. These third parties also compete with us in recruiting and retaining qualified scientific and management personnel, establishing clinical trial sites and patient registration for clinical trials, as well as in acquiring technologies complementary to, or necessary for, the development of our products. In addition, mergers and acquisitions in the biotechnology and pharmaceutical industries may result in even more resources being concentrated among a smaller number of competitors. Our commercial opportunity could be reduced or eliminated if competitors develop and commercialize products that are safer, more effective, have fewer or less severe side effects, are more convenient or are less expensive than any product candidate that we may develop. Competitors also may obtain FDA, EMA or other regulatory approval for their products more rapidly or earlier than we may obtain approval for ours, which could result in our competitors establishing a strong market position before we are able to enter the market. Additionally, technologies developed by our competitors may render our product candidates uneconomical or obsolete, and we may not be successful in marketing our product candidates against competitors.

In addition, as a result of the expiration or successful challenge of our patent rights, we could face more litigation with respect to the validity and/or scope of patents relating to our competitors' products. The availability of our competitors' products could limit the demand, and the price we are able to charge, for any product candidate that we may develop and commercialize.

The market opportunities for our product candidates may be smaller than we anticipate.

We focus our R&D efforts on treatments for cancer and autoimmune disease. Our understanding of both the number of people who have these diseases, as well as the subset of people with these diseases who have the potential to benefit from treatment with our product candidates, is based on estimates. These estimates may prove to be incorrect and new studies may reduce the estimated incidence or prevalence of these diseases. The number of patients in the United States, the European Union and elsewhere may turn out to be lower than expected, may not be otherwise amenable to treatment with our product candidates or patients may become increasingly difficult to identify and access, all of which would adversely affect our business, financial condition, results of operations and prospects.

Further, there are several factors that could contribute to making the actual number of patients who receive our potential products, if and when approved, less than the potentially addressable market. These include, for example, the lack of widespread availability of, and limited reimbursement for, new therapies in many underdeveloped markets.

The future commercial success of our product candidates will depend upon the degree of each product candidates' market acceptance by physicians, patients, third-party payors and others in the medical community.

Our product candidates are at varying stages of development, and we may never have a product that is commercially successful. To date, we have no product authorized for marketing. Due to the inherent risk in the development of pharmaceutical products, we may never successfully complete development and commercialization of any of our product candidates. Even with the requisite approvals from the FDA, EMA and other regulatory authorities internationally, the commercial success of our product candidates will depend, in part, on the acceptance of physicians, patients and third-party payors of our product candidates as medically necessary, cost-effective and safe. Any product that we commercialize may not gain acceptance by physicians, patients, third-party payors and others in the medical community. If these products do not achieve an adequate level of acceptance, we may not generate significant product revenue and may not become profitable. Even if some product candidates achieve market acceptance, the market may not prove to be large enough to allow us to generate significant revenues. The degree of market acceptance of our product candidates, if approved for commercial sale, will depend on several factors, including:

- the effectiveness and safety of our product candidates as demonstrated in clinical trials;
- the potential and perceived advantages of our product candidates over alternative treatments;
- the availability and cost of treatment relative to alternative treatments;
- changes in the standard of care for the targeted indications for any product candidate;
- the willingness of physicians to prescribe, and the target patient population to try, new therapies;
- the prevalence and severity of any side effects;
- product labeling or product insert requirements of the FDA, EMA or other regulatory authorities, including any limitations or warnings contained in a product's approved labeling;
- the timing of market introduction of competitive products;
- sales, distribution and marketing support;
- publicity concerning our product candidates or competing products and treatments;
- potential product liability claims;
- any restrictions on the use of our products together with other medications; and
- favorable third-party payor coverage and adequate reimbursement.

Even if a potential product displays favorable clinical properties and safety profile in preclinical studies and clinical trials, market acceptance of the product will not be fully known until after it is launched.

The insurance coverage and reimbursement status of newly approved products is uncertain. Failure to obtain or maintain adequate coverage and reimbursement for our product candidates, if approved, could limit our ability to market those products.

We expect that coverage and adequate reimbursement by government and private payors will be essential for most patients to be able to afford these treatments. Accordingly, sales of our product candidates will depend substantially, both domestically and abroad, on the extent to which the costs of our product candidates will be paid by health maintenance, managed care, pharmacy benefit and similar healthcare management organizations, or will be reimbursed by government authorities, private health coverage insurers and other third-party payors. Coverage and reimbursement by a third-party payor may depend upon several factors, including the third-party payor's determination that use of a product is:

- a covered benefit under our health plan;
- safe, effective and medically necessary;
- appropriate for the specific patient;
- cost-effective; and
- neither experimental nor investigational.

Obtaining coverage and reimbursement for a product from third-party payors is a time-consuming and costly process that could require us to provide to the payor supporting scientific, clinical and cost-effectiveness data. We may not be able to provide data sufficient to gain acceptance with respect to coverage and reimbursement. If coverage and reimbursement are not available, or are available only at limited levels, we may not be able to successfully commercialize our product candidates. Even if coverage is provided, the approved reimbursement amount may not be adequate to realize a sufficient return on our investment.

There is significant uncertainty related to third-party coverage and reimbursement of newly approved products. In the United States, third-party payors, including government payors such as the Medicare and Medicaid programs, play an important role in determining the extent to which new drugs and biologics will be covered and reimbursed. The Medicare and Medicaid programs increasingly are used as models for how private payors develop their coverage and reimbursement policies. However, no uniform policy of coverage and reimbursement exists among third-party payors. Therefore, coverage and reimbursement for products can differ significantly from payor to payor. One payor's determination to provide coverage for a product does not assure that other payors will also provide coverage, and adequate reimbursement. It is difficult to predict what the Centers for Medicare and Medicaid Services, or CMS will decide with respect to coverage and reimbursement for fundamentally novel products such as ours, as there is no body of established practices and precedents for these types of products. Moreover, reimbursement agencies in the European Union may be more conservative than the CMS. For example, several cancer drugs have been approved for reimbursement in the United States and have not been approved for reimbursement in certain European Union, or EU, member states, or Member States. It is difficult to predict what third-party payors will decide with respect to the coverage and reimbursement for our product candidates.

Also, the containment of healthcare costs has become a priority of federal, state and foreign governments, and the prices of drugs have been a focus in this effort. The U.S. government, state legislatures, and foreign governments have shown significant interest in implementing cost-containment programs to limit the growth of government-paid healthcare costs, including price controls, restrictions on reimbursement and requirements for substitution of generic products for branded prescription drugs. For example, in the United States, the Patient Protection and Affordable Care Act of 2010 (as amended by the Health Care and Education Reconciliation Act of 2010), or the PPACA, contains provisions that may reduce the profitability of products, including, for example, increased rebates for products sold to Medicaid programs, extension of Medicaid rebates to Medicaid managed care plans, mandatory discounts for certain Medicare Part D beneficiaries and annual fees based on pharmaceutical companies' share of sales to federal health care programs. Further, there has been heightened governmental scrutiny over the manner in which manufacturers set prices for their marketed products, which has resulted in several recent congressional inquiries and proposed federal and state legislation designed to, among other things, bring more transparency to product pricing, contain the cost of drugs, review the relationship between pricing and manufacturer patient programs, and reform government program reimbursement methodologies for products.

Outside the United States, international operations generally are subject to extensive government price controls and other market regulations and increasing emphasis on cost-containment initiatives in the European Union, Canada and other countries may put pricing pressure on us. In many countries, the prices of medical products are subject to varying price control mechanisms as part of national health systems. In general, the prices of medicines under such systems are substantially lower than in the United States. Other countries allow companies to fix their own prices for medical products but monitor and control company profits. Additional foreign price controls or other changes in pricing regulation could restrict the amount that we are able to charge for our product candidates. Accordingly, in markets outside the United States, the reimbursement for our product candidates may be reduced compared with the United States and may be insufficient to generate commercially reasonable product revenues.

In addition, there can be considerable pressure by governments and other stakeholders on prices and reimbursement levels, including as part of cost containment measures. Political, economic and regulatory developments may further complicate pricing negotiations, and pricing negotiations may continue after reimbursement has been obtained. Reference pricing used by various Member States and parallel distribution, or arbitrage between low-priced and high-priced Member States, can further reduce prices. To obtain reimbursement or pricing approval in some countries, we may be required to conduct a clinical trial that compares the cost-effectiveness of our product candidates to other available therapies. If reimbursement of our products is unavailable or limited in scope or amount, or if pricing is set at unsatisfactory levels, our business could be harmed.

Moreover, increasing efforts by government and third-party payors in the United States and abroad to cap or reduce healthcare costs may cause such organizations to limit both coverage and the level of reimbursement for new products approved and, as a result, they may not cover or provide adequate payment for our product candidates.

Payors increasingly are considering new metrics as the basis for reimbursement rates, such as average sales price, average manufacturer price and actual acquisition cost. The existing data for reimbursement based on some of these metrics is relatively limited, although certain states have begun to survey acquisition cost data for the purpose of setting Medicaid reimbursement rates, and CMS has begun making pharmacy National Average Drug Acquisition Cost and National Average Retail Price data publicly available on at least a monthly basis. Therefore, it may be difficult to project the impact of these evolving reimbursement metrics on the willingness of payors to cover product candidates that we or our partners are able to commercialize. We expect to experience pricing pressures in connection with the sale of any of our product candidates due to the trend toward managed healthcare, the increasing influence of health maintenance organizations and additional legislative changes. The downward pressure on healthcare costs in general, particularly prescription drugs and surgical procedures and other treatments, has become intense. As a result, increasingly high barriers are being erected to the entry of new products such as ours.

Risks Related to Our Intellectual Property

Our rights to develop and commercialize our product candidates are subject to the terms and conditions of licenses granted to us by others. If we fail to comply with our obligations under our existing and any future intellectual property licenses with third parties, we could lose license rights that are important to the business.

We are heavily reliant upon licenses and sublicenses from Lonza and Novimmune to certain patent rights and proprietary technology that are important or necessary to the development of our technology and product candidates, including the patents and know-how relating to manufacture. These and other licenses may not provide exclusive rights to use such intellectual property and technology or may not provide exclusive rights to use such intellectual property and technology in all relevant fields of use and in all territories in which we may wish to develop or commercialize our technology and product candidates in the future. As a result, we may not be able to prevent competitors from developing and commercializing competitive products, including in territories covered by our licenses.

In some circumstances, we may not have the right to control the preparation, filing and prosecution of patent applications, or to maintain the patents, covering technology that we license from third parties. If our licensors fail to maintain such patents or patent applications, or lose rights to those patents or patent applications, the rights we have licensed may be reduced or eliminated and our right to develop and commercialize any of our product candidates that are the subject of such licensed rights could be adversely affected. In addition to the foregoing, the risks associated with patent rights that we license from third parties will also apply to patent rights we may own in the future.

Licenses to additional third-party technology and materials that may be required for our development programs, including additional technology and materials owned by any of our current licensors, may not be available in the future or may not be available on commercially reasonable terms, or at all, which could have an adverse effect on our business and financial condition.

If we are unable to obtain and maintain patent protection for our current product candidates, any future product candidates we may develop and our technology, or if the scope of the patent protection obtained is not sufficiently broad, our competitors could develop and commercialize products and technology similar or identical to ours.

Our success depends, in large part, on our ability to seek, obtain and maintain patent protection in the United States and other countries with respect to our product candidates and to future innovation related to our manufacturing technology. Our licensors have sought, and we intend to seek to protect our proprietary position by filing patent applications in the United States, the United Kingdom and elsewhere, related to certain technologies and our product candidates that are important to our business. Our current patent portfolio contains a limited number of patent applications, all of which are in-licensed from third parties and relate to either composition of matter, formulation, method of use or process of manufacturing Foralumab and a fully human anti-interleukin-6 receptor, or IL-6r, mAb. However, the risks associated with patent rights generally apply to patent rights that we in-license now or in the future, as well as patent rights that we may own in the future. Moreover, the risks apply with respect to patent rights and other intellectual property applicable to our product candidates, as well as to any intellectual property rights that we may acquire in the future related to future product candidates, if any. Tiziana was granted a new patent by USPTO in June 2020 covering lyophilized formulation of Foralumab.

The patent prosecution process is expensive, time-consuming, and complex, and we may not be able to file, prosecute, maintain, enforce or license all necessary or desirable patent applications at a reasonable cost or in a timely manner.

In some cases, the work of certain academic researchers in the oncology and immunology fields has entered the public domain, which we believe precludes our ability to obtain patent protection for certain inventions relating to such work.

Consequently, we will not be able to assert any such patents to prevent others from using our technology for, and developing and marketing competing products to treat, these indications. It is also possible that we will fail to identify patentable aspects of our R&D output before it is too late to obtain patent protection.

Our existing license agreements impose, and we expect that future license agreements will impose, various due diligence, development and commercialization timelines, insurance, milestone payments, royalties, and other obligations on us. See the description in the section titled “Business-Collaboration and License Agreements” herein. If we fail to comply with our obligations under these agreements, or we are subject to a bankruptcy, or, in some cases, under other circumstances, the licensor may have the right to terminate the license, in which event we would not be able to market product candidates covered by the license. In addition, certain of these license agreements are not assignable by us without the consent of the respective licensor, which may have an adverse effect on our ability to engage in certain transactions.

The patent position of biotechnology and pharmaceutical companies generally is highly uncertain, involves complex legal and factual questions and has, in recent years, been the subject of much litigation. As a result, the issuance, scope, validity, enforceability and commercial value of any patent rights are highly uncertain. Our licensed patent applications may not result in patents being issued which protect our technology or product candidates, effectively prevent others from commercializing competitive technologies and product candidates or otherwise provide any competitive advantage. In fact, patent applications may not issue as patents at all. Even assuming patents issue from patent applications in which we have rights, changes in either the patent laws or interpretation of the patent laws in the United States and other countries may diminish the value of our patents or narrow the scope of our patent protection.

Other parties have developed technologies that may be related or competitive to our own and such parties may have filed or may file patent applications, or may have received or may receive patents, claiming inventions that may overlap or conflict with those claimed in our own patent applications or issued patents. We may not be aware of all third-party intellectual property rights potentially relating to our current and future product candidates.

Publications of discoveries in the scientific literature often lag behind the actual discoveries, and patent applications in the United States and in other jurisdictions are typically not published until 18 months after filing, or, in some cases, not at all. Therefore, we cannot know with certainty whether the inventors of our licensed patents and applications were the first to make the inventions claimed in those patents or pending patent applications, or that they were the first to file for patent protection of such inventions. Similarly, should we own any patents or patent applications in the future, we may not be certain that we were the first to file for patent protection for the inventions claimed in such patents or patent applications. As a result, the issuance, scope, validity and commercial value of our patent rights cannot be predicted with any certainty.

The degree of patent protection we require to successfully compete in the marketplace may be unavailable or severely limited in some cases and may not adequately protect our rights or permit us to gain or keep any competitive advantage. We cannot provide any assurances that any of our licensed patents have, or that any of our pending licensed patent applications that mature into issued patents will include, claims with a scope sufficient to protect our product candidates or otherwise provide any competitive advantage. In addition, the laws of foreign countries may not protect our rights to the same extent as the laws of the United States. Furthermore, patents have a limited lifespan. In the United States, the natural expiration of a patent is generally 20 years after it is filed. Various extensions may be available; however, the life of a patent, and the protection it affords, is limited. Given the amount of time required for the development, testing and regulatory review of new product candidates, patents protecting such candidates might expire before or shortly after such candidates are commercialized. As a result, our licensed patent portfolio may not provide us with adequate and continuing patent protection sufficient to exclude others from commercializing products similar to our product candidates, including “highly similar,” or biosimilar, versions of such products. In addition, the intellectual property portfolio licensed to us by Novimmune may be used by them or licensed to third parties, and such third parties may have certain enforcement rights. Thus, patents licensed to us could be put at risk of being invalidated or interpreted narrowly in litigation filed by or against our licensors or another licensee or in administrative proceedings brought by or against our licensors or another licensee in response to such litigation or for other reasons.

Even if we acquire patent protection that we expect should enable us to maintain some competitive advantage, third parties, including competitors, may challenge the validity, enforceability or scope thereof, which may result in such patents being narrowed, invalidated or held unenforceable. In litigation, a competitor could claim that our patents, if issued, are not valid for several reasons. If a court agrees, we would lose our rights to those challenged patents.

The issuance of a patent is not conclusive as to its inventorship, scope, validity or enforceability and our licensed patents may be challenged in courts or patent offices in the United States and abroad. For example, we may be subject to a third-party submission of prior art to the USPTO challenging the validity of one or more claims of our licensed patents. Such submissions may also be made prior to a patent’s issuance, precluding the granting of a patent based on one of our pending licensed patent applications. We may become involved in opposition, derivation, re-examination, inter partes review, post-grant review or interference proceedings challenging the patent rights of others from whom we have obtained licenses to such rights. Competitors may claim that they invented the inventions claimed in our licensed issued patents or patent applications prior to the inventors of such patents or applications. A competitor who can establish an earlier filing or invention date may also claim that we are infringing their patents and that we therefore cannot practice our technology as claimed under our licensed patents, if issued. Competitors may also contest our licensed patents, if issued, by showing that the invention was not patent-eligible, was not novel, was obvious or that the patent claims failed any other requirement for patentability.

An adverse determination by former employees or consultants asserting ownership rights to our patents may result in loss of exclusivity or freedom to operate or in patent claims being narrowed, invalidated or held unenforceable, in whole or in part, which could limit our ability to stop others from using or commercializing similar technology and therapeutics, without payment to us, or could limit the duration of the patent protection covering our technology and product candidates. Such challenges may also result in our inability to manufacture or commercialize our product candidates without infringing third-party patent rights. In addition, if the breadth or strength of protection provided by our patents and patent applications is threatened, it could dissuade companies from collaborating with us to license, develop or commercialize current or future product candidates.

Even if they are unchallenged, our licensed patents and pending patent applications, if issued, may not provide us with any meaningful protection or prevent competitors from designing around our patent claims to circumvent our licensed patents by developing similar or alternative technologies or therapeutics in a non-infringing manner. For example, a third party may develop a competitive therapeutic that provides benefits similar to one or more of our product candidates but that uses a different antibody or molecular active ingredient that falls outside the scope of our patent protection. If the patent protection provided by the patents and patent applications we hold or pursue with respect to our product candidates is not sufficiently broad to impede such competition, our ability to successfully commercialize our product candidates could be negatively affected, which would harm our business.

Our intellectual property licenses with third parties may be subject to disagreements over contract interpretation, which could narrow the scope of our rights to the relevant intellectual property or technology or increase our financial or other obligations to our licensors.

We currently depend, and will continue to depend, on our license agreements whereby we obtain rights in certain patents and patent applications owned by them. Further development and commercialization of our current product candidates may, and development of any future product candidates will, require us to enter into additional license or collaboration agreements. The agreements under which we currently license intellectual property or technology from third parties are complex, and certain provisions in such agreements may be susceptible to multiple interpretations. The resolution of any contract interpretation disagreement that may arise could narrow what we believe to be the scope of our rights to the relevant intellectual property or technology, or increase what we believe to be our financial or other obligations under the relevant agreement, either of which could have an adverse effect on our business, financial condition, results of operations and prospects.

If any of our licenses or material relationships or any in-licenses upon which our licenses are based are terminated or breached, we may:

- lose our rights to develop and market our product candidates;
- lose patent protection for our product candidates;
- experience significant delays in the development or commercialization of our product candidates;
- not be able to obtain any other licenses on acceptable terms, if at all; or
- incur liability for damages.

In addition, a third party may in the future bring claims that our performance under our license agreements, including our sponsoring of clinical trials, interferes with such third party's rights under its agreement with one of our licensors. If any such claim were successful, it may adversely affect our rights and ability to advance our product candidates as clinical candidates or subject us to liability for monetary damages, any of which would have an adverse effect on our business, financial condition, results of operations and prospects.

These risks apply to any agreements that we may enter into in the future for our current or any future product candidates. If we experience any of the foregoing, it could have a negative impact on our business, financial condition, results or operations and prospects.

If we fail to comply with our obligations in the agreements under which we license intellectual property rights from third parties or otherwise experience disruptions to our business relationships with our licensors, we could lose license rights that are important to our business.

We have entered into license agreements with third parties and may need to obtain additional licenses from one or more of these same third parties or from others to advance our research or allow commercialization of our product candidates. It is possible that we may be unable to obtain additional licenses at a reasonable cost or on reasonable terms, if at all. In that event, we may be required to expend significant time and resources to redesign our product candidates or the methods for manufacturing them or to develop or license replacement technology, all of which may not be feasible on a technical or commercial basis. If we are unable to do so, we may be unable to develop or commercialize our product candidates, which would harm our business. We cannot provide any assurances that third-party patents or other intellectual property rights do not exist which might be enforced against our current product candidates or future product candidates, resulting in either an injunction prohibiting our manufacture or sales, or, with respect to our sales, an obligation on our part to pay royalties and/or other forms of compensation to third parties.

In each of our existing license agreements, and we expect in our future agreements, patent prosecution of our licensed technology is controlled solely by the licensor, and we may be required to reimburse the licensor for their costs of patent prosecution. If our licensors fail to obtain and maintain patent or other protection for the proprietary intellectual property we license from them, we could lose our rights to the intellectual property, or our exclusivity with respect to those rights, and our competitors could market competing products using the intellectual property. Our license agreement with Novimmune also requires us to meet development thresholds to maintain the license, including establishing a set timeline for developing and commercializing product candidates. Disputes may arise regarding intellectual property subject to a licensing agreement, including:

- the scope of rights granted under the license agreement and other interpretation-related issues;
- the extent to which our technology and processes infringe on intellectual property of the licensor that is not subject to the licensing agreement;
- the sublicensing of patent and other rights pursuant to our collaborative development relationships;
- our diligence obligations under the license agreements and what activities satisfy those diligence obligations;
- the inventorship or ownership of inventions and know-how resulting from the joint creation or use of intellectual property by our licensors and us and our partners; and
- the priority of invention of patented technology.

If disputes over intellectual property that we have licensed prevent or impair our ability to maintain our current licensing arrangements on acceptable terms, we may be unable to successfully develop and commercialize our product candidates.

We may not be successful in obtaining or maintaining necessary rights to our product candidates through acquisitions and in-licenses.

We currently have certain rights to the intellectual property, through licenses from third parties, to develop our product candidates. Because our programs may require the use of additional proprietary rights held by these or other third parties, the growth of our business likely will depend, in part, on our ability to acquire, in-license or use these proprietary rights. We may be unable to acquire or in-license any compositions, methods of use, processes or other intellectual property rights from third parties that we identify as necessary for our product candidates. The licensing or acquisition of third-party intellectual property rights is a competitive area, and several more established companies may pursue strategies to license or acquire third-party intellectual property rights that we may consider attractive. These established companies may have a competitive advantage over us due to their size, capital resources and greater clinical development and commercialization capabilities. In addition, companies that perceive us to be a competitor may be unwilling to assign or license rights to us. We also may be unable to license or acquire third-party intellectual property rights on terms that would allow us to make an appropriate return on our investment.

We may collaborate with non-profit and academic institutions to accelerate our preclinical R&D under written agreements with these institutions. These institutions may provide us with an option to negotiate a license to any of the institution's rights in technology resulting from the collaboration. Regardless of such option, we may be unable to negotiate a license within the specified timeframe or under terms that are acceptable to us. If we are unable to do so, the institution may offer the intellectual property rights to other parties, potentially blocking our ability to pursue our program.

If we are unable to successfully obtain rights to required third-party intellectual property or maintain the existing intellectual property rights we have, we may have to abandon development of our product candidates and our business, financial condition, results of operations and prospects could suffer. Moreover, to the extent that we seek to develop other product candidates in the future, we will likely require acquisition or in-license of additional proprietary rights held by third parties.

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

Periodic maintenance fees, renewal fees, annuity fees and various other government fees on patents and/or applications will be due to be paid to the USPTO and various government patent agencies outside of the United States over the lifetime of our licensed patents and/or applications and any patent rights we may own in the future. We rely on our outside counsel or our licensing partners to pay these fees due to non-U.S. patent agencies. The USPTO and various non-U.S. government patent agencies require compliance with several procedural, documentary, fee payment and other similar provisions during the patent application process. We employ reputable law firms and other professionals to help us comply and we are also dependent on our licensors to take the necessary action to comply with these requirements with respect to our licensed intellectual property. In many cases, an inadvertent lapse can be cured by payment of a late fee or by other means in accordance with the applicable rules. There are situations, however, in which non-compliance can result in abandonment or lapse of the patent or patent application, resulting in partial or complete loss of patent rights in the relevant jurisdiction. In such an event, potential competitors might be able to enter the market and this circumstance could have an adverse effect on our business.

We may not be able to protect our intellectual property rights throughout the world.

Filing, prosecuting and defending patents on product candidates in all countries throughout the world would be prohibitively expensive, and our intellectual property rights in some countries outside the United States could be less extensive than those in the United States. In some cases, we may not be able to obtain patent protection for certain licensed technology outside the United States. In addition, the laws of some foreign countries do not protect intellectual property rights to the same extent as federal and state laws in the United States, even in jurisdictions where we do pursue patent protection. Consequently, we may not be able to prevent third parties from practicing our inventions in all countries outside the United States, even in jurisdictions where we do pursue patent protection or from selling or importing products made using our inventions in and into the United States or other jurisdictions.

Competitors may use our technologies in jurisdictions where we have not pursued and obtained patent protection to develop their own products and, further, may export otherwise infringing products to territories where we have patent protection, but enforcement is not as strong as that in the United States. These products may compete with our product candidates, and our patents or other intellectual property rights may not be effective or sufficient to prevent them from competing.

Many companies have encountered significant problems in protecting and defending intellectual property rights in foreign jurisdictions. The legal systems of certain countries, particularly certain developing countries, do not favor the enforcement of patents, trade secrets and other intellectual property protection, particularly those relating to biotechnology products, which could make it difficult for us to stop the infringement of our patents, if pursued and obtained, or marketing of competing products in violation of our proprietary rights generally. Moreover, many countries have compulsory licensing laws under which a patent owner may be compelled to grant licenses to third parties. Many countries limit the enforceability of patents against government agencies or government contractors. In these countries, the patent owner may have limited remedies, which could materially diminish the value of such patent. If we or any of our licensors is forced to grant a license to third parties with respect to any patents relevant to our business, our competitive position may be impaired, and our business and results of operations may be adversely affected.

In addition, proceedings to enforce our patent rights in foreign jurisdictions could result in substantial costs and divert our efforts and attention from other aspects of our business, could put our patents at risk of being invalidated or interpreted narrowly and our patent applications at risk of not issuing and could provoke third parties to assert claims against us. We may not prevail in any lawsuits that we initiate, and the damages or other remedies awarded, if any, may not be commercially meaningful. Accordingly, our efforts to enforce our intellectual property rights around the world may be inadequate to obtain a significant commercial advantage from the intellectual property that we develop or license.

We may not be able to protect our trade secrets in court.

In addition to the protection afforded by patents, we rely on trade secret protection and confidentiality agreements to protect proprietary know-how that is not patentable or that we elect not to patent, processes for which patents are difficult to enforce and any other elements of our product candidate discovery and development processes that involve proprietary know-how, information or technology that is not covered by patents. However, trade secrets can be difficult to protect and some courts inside and outside the United States are less willing or unwilling to protect trade secrets. We seek to protect our proprietary technology and processes, in part, by entering into confidentiality agreements with our employees, consultants, scientific advisors and contractors. However, we may not be able to prevent the unauthorized disclosure or use of our technical know-how or other trade secrets by the parties to these agreements, despite the existence generally of confidentiality agreements and other contractual restrictions.

Monitoring unauthorized uses and disclosures is difficult and we do not know whether the steps we have taken to protect our proprietary technologies will be effective. If any of the collaborators, scientific advisors, employees and consultants who are parties to these agreements breach or violate the terms of any of these agreements, we may not have adequate remedies for any such breach or violation. As a result, we could lose our trade secrets.

We cannot guarantee that we have entered into such agreements with each party that may have or have had access to our trade secrets or proprietary technology and processes. We also seek to preserve the integrity and confidentiality of our data and trade secrets by maintaining physical security of our premises and physical and electronic security of our information technology systems. While we have confidence in these individuals, organizations and systems, agreements and security measures, they may still be breached, and we may not have adequate remedies for any breach.

In addition, our trade secrets may otherwise become known or be independently discovered by competitors. Competitors could purchase our product candidates and attempt to replicate some or all of the competitive advantages we derive from our development efforts, willfully infringe our intellectual property rights, design around our protected technology or develop their own competitive technologies that fall outside of our intellectual property rights. If any of our trade secrets were to be lawfully obtained or independently developed by a competitor, we would have no right to prevent them, or those to whom they communicate such trade secrets, from using that technology or information to compete with us. If our trade secrets are not adequately protected so as to protect our market against competitors' therapeutics, our competitive position could be adversely affected, as could our business.

Third parties may initiate legal proceedings alleging that we are infringing their intellectual property rights.

Our commercial success depends upon our ability and the ability of our future collaborators to develop, manufacture, market and sell our product candidates and use our proprietary technologies without infringing the proprietary rights and intellectual property of third parties. The biotechnology and pharmaceutical industries are characterized by extensive and complex litigation regarding patents and other intellectual property rights. We may in the future become party to, or be threatened with, adversarial proceedings or litigation regarding intellectual property rights with respect to our product candidates and technology, including interference proceedings, post grant review and inter partes review before the USPTO. Our competitors or other third parties may assert infringement claims against us, alleging that our therapeutics, manufacturing methods, formulations or administration methods are covered by their patents. Given the vast number of patents in our field of technology, we cannot be certain or guarantee that we do not infringe existing patents or that we will not infringe patents that may be granted in the future. Since this area is competitive and of strong interest to pharmaceutical and biotechnology companies, there will likely be additional patent applications filed and additional patents granted in the future, as well as additional R&D programs expected in the future. Furthermore, because patent applications can take many years to issue, may be confidential for 18 months or more after filing and can be revised before issuance, there may be applications now pending which may later result in issued patents that may be infringed by the manufacture, use, sale or importation of our product candidates and we may or may not be aware of such patents. If a patent holder believes the manufacture, use, sale or importation of one of our product candidates infringes its patent, the patent holder may sue us even if we have licensed other patent protection for our technology. Moreover, we may face patent infringement claims from non-practicing entities that have no relevant product revenue and against whom our licensed patent portfolio may therefore have no deterrent effect.

It is also possible that we have failed to identify relevant third-party patents or applications. For example, applications filed before November 29, 2000 and certain applications filed after that date that will not be filed outside the United States may remain confidential until patents issue. Moreover, it is difficult for industry participants, including us, to identify all third-party patent rights that may be relevant to our product candidates and technologies because patent searching is imperfect due to differences in terminology among patents, incomplete databases and the difficulty in assessing the meaning of patent claims. We may fail to identify relevant patents or patent applications or may identify pending patent applications of potential interest but incorrectly predict the likelihood that such patent applications may issue with claims of relevance to our technology. In addition, we may be unaware of one or more issued patents that would be infringed by the manufacture, sale or use of a current or future product candidate, or we may incorrectly conclude that a third-party patent is invalid, unenforceable or not infringed by our activities. Additionally, pending patent applications that have been published can, subject to certain limitations, be later amended in a manner that could cover our technologies, our product candidates or the use of our product candidates.

Third parties may assert infringement claims against us based on existing patents or patents that may be granted in the future, regardless of their merit. There is a risk that third parties may choose to engage in litigation with us to enforce or to otherwise assert their patent or other intellectual property rights against us. Even if we believe such claims are without merit, a court of competent jurisdiction could hold that these third-party patents are valid, enforceable and infringed, which could adversely affect our ability to commercialize our product candidates. In order to successfully challenge the validity of any such U.S. patent in federal court, we would need to overcome a presumption of validity. As this burden is a high one requiring us to present clear and convincing evidence as to the invalidity of any such U.S. patent claim, there is no assurance that a court of competent jurisdiction would invalidate the claims of any such U.S. patent. Similarly, there is no assurance that a court of competent jurisdiction would find that product candidates or our technology did not infringe a third-party patent.

Patent and other types of intellectual property litigation can involve complex factual and legal questions, and their outcome is uncertain. If we are found or believe there is a risk that we may be found, to infringe a third party's valid and enforceable intellectual property rights, we could be required or may choose to obtain a license from such third party to continue developing, manufacturing and marketing our product candidates and technology. However, we may not be able to obtain any required license on commercially reasonable terms or at all. Even if we were able to obtain a license, it could be non-exclusive, thereby giving our competitors and other third parties access to the same technologies licensed to us, and it could require us to make substantial licensing and royalty payments. We could be forced, including by court order, to cease developing, manufacturing and commercializing the infringing technology or product candidate. In addition, we could be found liable for monetary damages, including treble damages and attorneys' fees, if we are found to have willfully infringed a patent or other intellectual property right. A finding of infringement could prevent us from manufacturing and commercializing our product candidates or force us to cease some or all of our business operations, which could harm our business. Claims that we have misappropriated the confidential information or trade secrets of third parties could have a similar negative impact on our business, financial condition, results of operations and prospects.

Intellectual property litigation could cause us to spend substantial resources and distract our personnel from their normal responsibilities.

Litigation or other legal proceedings relating to intellectual property claims, with or without merit, are unpredictable and generally expensive and time-consuming. Competitors may infringe our patents or the patents of our licensing partners, should such patents issue, or we may be required to defend against claims of infringement. To counter infringement or unauthorized use claims or to defend against claims of infringement can be expensive and time consuming. Even if resolved in our favor, litigation or other legal proceedings relating to intellectual property claims may cause us to incur significant expenses and could distract our technical and management personnel from their normal responsibilities. Furthermore, because of the substantial amount of discovery required in connection with intellectual property litigation, there is a risk that some of our confidential information could be compromised by disclosure during this type of litigation. In addition, there could be public announcements of the results of hearings, motions or other interim proceedings or developments and if securities analysts or investors perceive these results to be negative, it could have a substantial adverse effect on us. Such litigation or proceedings could substantially increase our operating losses and reduce the resources available for development activities or any future sales, marketing or distribution activities.

We may not have sufficient financial or other resources to adequately conduct such litigation or proceedings. Some of our competitors may be able to sustain the costs of such litigation or proceedings more effectively than we can because of their greater financial resources and more mature and developed intellectual property portfolios.

Accordingly, despite our efforts, we may not be able to prevent third parties from infringing, misappropriating or successfully challenging our intellectual property rights. Uncertainties resulting from the initiation and continuation of patent litigation or other proceedings could have a negative impact on our ability to compete in the marketplace.

We may be subject to claims asserting that our employees, consultants or advisors have wrongfully used or disclosed alleged trade secrets of their current or former employers or claims asserting ownership of what we regard as our own intellectual property.

Certain of our employees, consultants or advisors are currently, or were previously, employed at universities or other biotechnology or pharmaceutical companies, including our competitors or potential competitors, as well as our academic partners. Although we try to ensure that our employees, consultants and advisors do not use the proprietary information or know-how of others in their work for us, we may be subject to claims that these individuals or we have used or disclosed intellectual property, including trade secrets or other proprietary information, of any such individual's current or former employer. Litigation may be necessary to defend against these claims. If we fail in defending any such claims, in addition to paying monetary damages, we may lose valuable intellectual property rights. An inability to incorporate such technologies or features would harm our business and may prevent us from successfully obtaining necessary regulatory approvals and commercializing our product candidates. In addition, we may lose personnel as a result of such claims, and any such litigation or the threat thereof may adversely affect our ability to hire employees or contract with independent contractors. A loss of key personnel or their work product could hamper or prevent our ability to obtain necessary regulatory approvals and commercialize our product candidates, which would have an adverse effect on our business, results of operations and financial condition. Even if we are successful in defending against such claims, litigation could result in substantial costs and be a distraction to management.

In addition, while it is our policy to require our employees and contractors who may be involved in the conception or development of intellectual property to execute agreements assigning such intellectual property to us, we may be unsuccessful in executing such an agreement with each party who, in fact, conceives or develops intellectual property that we regard as our own. Moreover, even when we obtain agreements assigning intellectual property to us, the assignment of intellectual property rights may not be self-executing or the assignment agreements may be breached, and we may be forced to bring claims against third parties, or defend claims that they may bring against us, to determine the ownership of what we regard as our intellectual property. Furthermore, individuals executing agreements with us may have pre-existing or competing obligations to a third party, such as an academic institution, and thus an agreement with us may be ineffective in perfecting ownership of inventions developed by that individual. Disputes about the ownership of intellectual property that we may own may have an adverse effect on our business.

Changes in U.S. patent law could diminish the value of patents in general, thereby impairing our ability to protect our product candidates.

Recent patent reform legislation could increase the uncertainties and costs surrounding the prosecution of patent applications and the enforcement or defense of issued patents. On September 16, 2011, the Leahy-Smith America Invents Act, or the Leahy-Smith Act, was signed into law. The Leahy-Smith Act includes several significant changes to U.S. patent law. These include provisions that affect the way patent applications are prosecuted and also may affect patent litigation. These also include provisions that switched the United States from a "first-to-invent" system to a "first-to-file" system, allow third-party submission of prior art to the USPTO during patent prosecution and set forth additional procedures to attack the validity of a patent through various post-grant proceedings administered by the USPTO. Under a first-to-file system, assuming the other requirements for patentability are met, the first inventor to file a patent application generally will be entitled to the patent on an invention regardless of whether another inventor had made the invention earlier. The USPTO developed new regulations and procedures to govern administration of the Leahy-Smith Act, and many of the substantive changes to patent law associated with the Leahy-Smith Act, and in particular, the first-to-file provisions, only became effective on March 16, 2013.

Accordingly, it is not clear what, if any, impact the Leahy-Smith Act will have on the operation of our business. However, the Leahy-Smith Act and its implementation could increase the uncertainties and costs surrounding the prosecution of our patent applications and the enforcement or defense of our issued patents, all of which could have a negative impact effect on our business, financial condition, results of operations and prospects.

Additionally, the U.S. Supreme Court has ruled on several patent cases in recent years, either narrowing the scope of patent protection available in certain circumstances or weakening the rights of patent owners in certain situations. In addition to increasing uncertainty with regard to our ability to obtain patents in the future, the combination of new federal legislation, federal court decisions, and guidance from the USPTO has created uncertainty with respect to the value of patents, once obtained. Depending on the decisions by the U.S. Congress, federal courts, and the USPTO, the laws and regulations governing patents could change in unpredictable ways that would weaken our ability to obtain new patents or enforce our existing patents and patents we might obtain in the future.

If our trademarks and trade names are not adequately protected, then we may not be able to build name recognition in our markets of interest.

We do not currently have any registered trademarks and we have not filed any trademark applications to date. Any trademark applications in the United States, Europe and in other foreign jurisdictions where we may file may not be allowed or may subsequently be opposed. Once filed and registered, our trademarks or trade names may be challenged, infringed, circumvented or declared generic or determined to be infringing on other marks. As a means to enforce our trademark rights and prevent infringement, we may be required to file trademark claims against third parties or initiate trademark opposition proceedings. This can be expensive and time-consuming, particularly for a company of our size. We may not be able to protect our rights to these trademarks and trade names, which we need to build name recognition among potential partners or customers in our markets of interest. At times, competitors may adopt trade names or trademarks similar to ours, thereby impeding our ability to build brand identity and possibly leading to market confusion. In addition, there could be potential trade name or trademark infringement claims brought by owners of other registered trademarks or trademarks that incorporate variations of our registered or unregistered trademarks or trade names. Over the long term, if we are unable to establish name recognition based on our trademarks and trade names, then we may not be able to compete effectively and our business may be adversely affected. Our efforts to enforce or protect our proprietary rights related to trademarks, trade secrets, domain names, copyrights or other intellectual property may be ineffective and could result in substantial costs and diversion of resources.

Intellectual property rights and regulatory exclusivity rights do not necessarily address all potential threats.

The degree of future protection afforded by our intellectual property rights is uncertain because intellectual property rights have limitations and may not adequately protect our business or permit us to maintain our competitive advantage. For example:

- others may be able to make products that are similar to our product candidates but that are not covered by the claims of the patents that we license or may own in the future;
- we, or our license partners or future collaborators, might not have been the first to make the inventions covered by the issued patent or pending patent applications that we license or may own in the future;
- we, or our license partners or future collaborators, might not have been the first to file patent applications covering certain of our or their inventions;
- others may independently develop similar or alternative technologies or duplicate any of our technologies without infringing our owned or licensed intellectual property rights;
- others may circumvent our regulatory exclusivities, such as by pursuing approval of a competitive product candidate via the traditional approval pathway based on their own clinical data, rather than relying on the abbreviated pathway provided for biosimilar applicants;
- it is possible that our pending licensed patent applications or those that we may own in the future will not lead to issued patents;
- issued patents that we hold rights to now or in the future may be held invalid or unenforceable, including as a result of legal challenges by our competitors;
- others may have access to the same intellectual property rights licensed to us on a non-exclusive basis;
- our competitors might conduct R&D activities in countries where we do not have patent rights and then use the information learned from such activities to develop competitive products for sale in our major commercial markets;
- we may not develop additional proprietary technologies that are patentable;
- the patents or other intellectual property rights of others may have an adverse effect on our business; or
- we may choose not to file a patent for certain trade secrets or know-how, and a third party may subsequently file a patent covering such intellectual property.

Should any of these events occur, they could significantly harm our business, financial condition, results of operations and prospects.

Risks Related to Government Regulation

Even if we complete the necessary clinical trials, we cannot predict when, or if, we will obtain regulatory approval to commercialize our product candidates and the approval may be for a narrower indication than we seek.

We cannot commercialize a product candidate until the appropriate regulatory authorities have reviewed and approved the product candidate. The FDA must review and approve any new pharmaceutical product before it can be marketed and sold in the United States. The FDA regulatory review and approval process, which includes evaluation of preclinical studies and clinical trials of a product candidate and proposed labeling, as well as the evaluation of the manufacturing process and manufacturers' facilities, all of which is lengthy, expensive and uncertain. To obtain approval, we must, among other things, demonstrate with substantial evidence from well-controlled clinical trials that the product candidate is both safe and effective for each indication where approval is sought. Even if our product candidates meet the FDA's safety and effectiveness endpoints in clinical trials, the FDA may not complete their review processes in a timely manner, or we may not be able to obtain regulatory approval. The FDA has substantial discretion in the review and approval process and may refuse to file our application for substantive review or may determine after review of our data that our application is insufficient to allow approval of our product candidates. The FDA may require that we conduct additional preclinical studies, clinical trials or manufacturing validation studies and submit that data before it will reconsider our application. Additional delays may result if an FDA Advisory Committee or other regulatory authority recommends non-approval or restrictions on approval. In addition, we may experience delays or rejections based upon additional government regulation from future legislation or administrative action, or changes in regulatory authority policy during the period of product development, clinical trials and the review process.

The FDA, EMA or other regulatory authorities also may approve a product candidate for more limited indications than requested or may impose significant limitations in the form of narrow indications, warnings or a REMS. These regulatory authorities may require precautions or contraindications with respect to conditions of use or may grant approval subject to the performance of costly post-marketing clinical trials. In addition, the FDA, EMA or other regulatory authorities may not approve the labeling claims that are necessary or desirable for the successful commercialization of our product candidates. Any of the foregoing scenarios could harm the commercial prospects for our product candidates and negatively impact our business, financial condition, results of operations and prospects.

Delays in obtaining regulatory approval of our manufacturing process and facility or disruptions in our manufacturing process may delay or disrupt our product development and commercialization efforts.

We do not currently operate manufacturing facilities for clinical or commercial production of our product candidates. Before we can begin to commercially manufacture our product candidates, whether in a third-party facility or in our own facility, if and when established, we must obtain regulatory approval from the FDA for our manufacturing process and facility. A manufacturing authorization must also be obtained from the appropriate European Union regulatory authorities and from other foreign regulatory authorities, as applicable. In order to obtain approval, we will need to ensure that all of our processes, methods and equipment are compliant with cGMP, and perform extensive audits of vendors, contract laboratories and suppliers. If any of our vendors, contract laboratories or suppliers are found to be non-compliant with cGMP, we may experience delays or disruptions in manufacturing while we work with these third parties to remedy the violation or while we work to identify suitable replacement vendors. The cGMP requirements govern quality control of the manufacturing process and documentation policies and procedures. In complying with cGMP, we will be obligated to expend time, money and effort in production, record keeping and quality assurance to confirm that the product meets applicable specifications and other requirements. If we fail to comply with these requirements, we would be subject to possible regulatory action and may not be permitted to sell any product candidate that we may develop.

If we or our third-party manufacturers fail to comply with applicable cGMP regulations, the FDA, EMA and other regulatory authorities can impose regulatory sanctions including, among other things, refusal to approve a pending application for a new product candidate or suspension or revocation of a pre-existing approval. Such an occurrence may cause our business, financial condition, results of operations and prospects to be harmed.

Additionally, if the supply of our products from our third-party manufacturers to us is interrupted for any reason, including due to regulatory requirements or actions (including recalls), adverse financial developments at or affecting the supplier, failure by the supplier to comply with cGMPs, contamination, business interruptions or labor shortages or disputes, there could be a significant disruption in commercial supply of our products. We do not currently have a backup manufacturer of our product candidate supply for clinical trials or commercial sale. An alternative manufacturer would need to be qualified through a supplement to its regulatory filing, which could result in further delays. The regulatory authorities also may require additional clinical trials if a new manufacturer is relied upon for commercial production. Switching manufacturers may involve substantial costs and could result in a delay in our desired clinical and commercial timelines.

If our competitors are able to obtain orphan drug exclusivity for products that constitute the same drug and treat the same indications as our product candidates, we may not be able to have competing products approved by applicable regulatory authorities for a significant period of time. In addition, even if we obtain orphan drug exclusivity for any of our products, such exclusivity may not protect us from competition.

Regulatory authorities in some jurisdictions, including the United States and the European Union, may designate products for relatively small patient populations as orphan drugs. Under the Orphan Drug Act of 1983, the FDA may designate a product candidate as an orphan drug if it is intended to treat a rare disease or condition, which is generally defined as having a patient population of fewer than 200,000 individuals in the United States, or a patient population greater than 200,000 in the United States where there is no reasonable expectation that the cost of developing the drug will be recovered from sales in the United States. In the United States, orphan drug designation entitles a party to financial incentives such as opportunities for grant funding towards clinical trial costs, tax advantages and user-fee waivers. In the European Union, the EMA's Committee for Orphan Medicinal Products grants orphan drug designation to promote the development of products that are intended for the diagnosis, prevention or treatment of a life-threatening or chronically debilitating condition affecting not more than five in 10,000 persons in the European Union. Additionally, orphan drug designation is granted for products intended for the diagnosis, prevention or treatment of a life-threatening, seriously debilitating or serious and chronic condition and when, without incentives, it is unlikely that sales of the drug in the European Union would be sufficient to justify the necessary investment in developing the drug or biologic product. In Europe, orphan drug designation entitles a party to a number of incentives, such as protocol assistance and scientific advice specifically for designated orphan medicines, and potential fee reductions depending on the status of the sponsor.

The designation as an orphan product does not guarantee that any regulatory agency will accelerate regulatory review of, or ultimately approve, that product candidate, nor does it limit the ability of any regulatory agency to grant orphan drug designation to product candidates of other companies that treat the same indications as our product candidates prior to our product candidates receiving exclusive marketing approval.

Generally, if a product candidate with an orphan drug designation receives the first marketing approval for the indication for which it has such designation, the product is entitled to a period of marketing exclusivity, which precludes the FDA or the EMA from approving another marketing application for a product that constitutes the same drug treating the same indication for that marketing exclusivity period, except in limited circumstances. If another sponsor receives such approval before we do (regardless of our orphan drug designation), we will be precluded from receiving marketing approval for our product for the applicable exclusivity period. The applicable period is seven years in the United States and ten years in the European Union. The exclusivity period in the European Union can be reduced to six years if a product no longer meets the criteria for orphan drug designation or if the product is sufficiently profitable so that market exclusivity is no longer justified. Orphan drug exclusivity may be revoked if any regulatory agency determines that the request for designation was materially defective or if the manufacturer is unable to assure sufficient quantity of the product to meet the needs of patients with the rare disease or condition.

Even if we obtain orphan drug exclusivity for a product candidate, that exclusivity may not effectively protect the product candidate from competition because different drugs can be approved for the same condition. In the United States, even after an orphan drug is approved, the FDA may subsequently approve another drug for the same condition if the FDA concludes that the latter drug is not the same drug or is clinically superior in that it is shown to be safer, more effective or makes a major contribution to patient care. In the European Union, marketing authorization may be granted to a similar medicinal product for the same orphan indication if:

- the second applicant can establish in its application that its medicinal product, although similar to the orphan medicinal product already authorized, is safer, more effective or otherwise clinically superior;
- the holder of the marketing authorization for the original orphan medicinal product consents to a second orphan medicinal product application; or
- the holder of the marketing authorization for the original orphan medicinal product cannot supply sufficient quantities of orphan medicinal product.

Even if we obtain regulatory approval for a product candidate, our product candidates will remain subject to regulatory oversight.

Even if we obtain regulatory approval for our product candidates, they will be subject to ongoing regulatory requirements for manufacturing, labeling, packaging, storage, advertising, promotion, sampling, record-keeping and submission of safety and other post-market information. Any regulatory approvals that we receive for our product candidates may also be subject to limitations on the approved indicated uses for which the product may be marketed or to the conditions of approval, or contain requirements for potentially costly post-marketing testing, including Phase 4 clinical trials, and surveillance to monitor the quality, safety and clinical effectiveness of the product.

Some of our product candidates are classified as biologics in the United States, and therefore, can only be sold if we obtain a BLA from the FDA. The holder of an approved BLA also must submit new or supplemental applications and obtain FDA approval for certain changes to the approved product, product labeling or manufacturing process. In addition, the holder of a BLA must comply with the FDA's advertising and promotion requirements, such as those related to the prohibition on promoting products for uses or in patient populations that are not described in the product's approved labeling (known as "off-label use"). Advertising and promotional materials must comply with FDA rules and are subject to FDA review, in addition to other potentially applicable federal and state laws.

In addition, product manufacturers and their facilities are subject to payment of user fees and continual review and periodic inspections by the FDA and other regulatory authorities for compliance with cGMP requirements and adherence to commitments made in the BLA or foreign marketing application. If we, or a regulatory authority, discover previously unknown problems with a product, such as adverse events of unanticipated severity or frequency, or problems with the facility where the product is manufactured or if a regulatory authority disagrees with the promotion, marketing or labeling of that product (in addition to our being obligated as holder of a BLA to monitor and report adverse events and any failure of a product to meet the BLA specifications), a regulatory authority may impose restrictions relative to that product, the manufacturing facility or us, including requiring recall or withdrawal of the product from the market or suspension of manufacturing.

If we fail to comply with applicable regulatory requirements following approval of our product candidates, a regulatory or enforcement authority may:

- issue a warning letter asserting that we are in violation of the law;
- seek an injunction or impose administrative, civil or criminal penalties or monetary fines;
- suspend or withdraw regulatory approval;
- suspend any ongoing clinical trials;
- refuse to approve a pending BLA or comparable foreign marketing application (or any supplements thereto) submitted by us or our strategic partners;
- restrict the marketing or manufacturing of the product;
- seize or detain the product or otherwise require the withdrawal of the product from the market;
- refuse to permit the import or export of the product; or
- refuse to allow us to enter into supply contracts, including government contracts.

Any government investigation of alleged violations of law could require us to expend significant time and resources in response and could generate negative publicity. The occurrence of any event or penalty described above may inhibit our ability to commercialize our product candidates and adversely affect our business, financial condition, results of operations and prospects.

In addition, the FDA's policies, and those of the EMA and other regulatory authorities, may change and additional government regulations may be enacted that could prevent, limit or delay regulatory approval of our product candidates. We cannot predict the likelihood, nature or extent of government regulation that may arise from future legislation or administrative action, either in the United States or abroad. If we are slow or unable to adapt to changes in existing requirements or the adoption of new requirements or policies, or if we are not able to maintain regulatory compliance, we may lose any marketing approval that we may have obtained and we may not achieve or sustain profitability, which would negatively impact our business, financial condition, results of operations and prospects.

Even if we obtain and maintain approval for our product candidates in a major pharmaceutical market such as the United States, we may never obtain approval for our product candidates in other major markets.

In order to market any products in a country or territory, we must establish and comply with numerous and varying regulatory requirements of such countries or territories regarding safety and effectiveness. Clinical trials conducted in one country may not be accepted by regulatory authorities in other countries, and regulatory approval in one country does not mean that regulatory approval will be obtained in any other country. Approval procedures vary among countries and can involve additional product testing and validation and additional administrative review periods. Seeking regulatory approvals in all major markets could result in significant delays, difficulties and costs for us and may require additional preclinical studies or clinical trials, which would be costly and time consuming. Regulatory requirements can vary widely from country to country and could delay or prevent the introduction of our product candidates in those countries. For example, in many jurisdictions outside of the United States, a product candidate must be approved for reimbursement before it can be approved for sale in that jurisdiction. In some cases, the price that we intend to charge for our products would also be subject to approval. Satisfying these and other regulatory requirements is costly, time consuming, uncertain and subject to unanticipated delays. In addition, our failure to obtain regulatory approval in any country may delay or have negative effects on the process for regulatory approval in other countries. We currently do not have any product candidates approved for sale in any jurisdiction, whether in the United States, Europe or any other international markets, and we do not have experience in obtaining regulatory approval in international markets. If we fail to comply with regulatory requirements in international markets or to obtain and maintain required approvals, our target market will be reduced and our ability to realize the full market potential of our product candidates will be compromised.

We may seek a conditional marketing authorization in Europe for some or all of our current product candidates, but we may not be able to obtain or maintain such designation.

As part of its marketing authorization process, the EMA may grant marketing authorizations for certain categories of medicinal products on the basis of less complete data than is normally required, when doing so may meet unmet medical needs of patients and serve the interest of public health. In such cases, it is possible for the Committee for Medicinal Products for Human Use, or CHMP, to recommend the granting of a marketing authorization, subject to certain specific obligations to be reviewed annually, which is referred to as a conditional marketing authorization.

This may apply to medicinal products for human use that fall under the jurisdiction of the EMA, including those that aim at the treatment, the prevention, or the medical diagnosis of seriously debilitating or life-threatening diseases and those designated as orphan medicinal products.

A conditional marketing authorization may be granted when the CHMP finds that, although comprehensive clinical data referring to the safety and therapeutic utility of the medicinal product have not been supplied, all the following requirements are met:

- the risk-benefit balance of the medicinal product is positive;
- it is likely that the applicant will be in a position to provide the comprehensive clinical data;
- unmet medical needs will be fulfilled; and
- the benefit to public health of the immediate availability on the market of the medicinal product concerned outweighs the risk inherent in the fact that additional data is still required.

The granting of a conditional marketing authorization is restricted to situations in which only the clinical part of the application is not yet fully complete. Incomplete preclinical or quality data may only be accepted if duly justified and only in the case of a product intended to be used in emergency situations in response to public health threats. Conditional marketing authorizations are valid for one year, on a renewable basis. The holder will be required to complete ongoing trials or to conduct new trials with a view to confirming that the benefit-risk balance is positive. In addition, specific obligations may be imposed in relation to the collection of pharmacovigilance data.

Granting a conditional marketing authorization allows medicines to reach patients with unmet medical needs earlier than might otherwise be the case and will ensure that additional data on a product is generated, submitted, assessed and acted upon.

Healthcare legislative reform measures may have a negative impact on our business and results of operations.

In the United States and some foreign jurisdictions, there have been, and continue to be, several legislative and regulatory changes and proposed changes regarding the healthcare system that could prevent or delay marketing approval of our product candidates, restrict or regulate post-approval activities and affect our ability to profitably sell any product candidates for which we obtain marketing approval.

In the United States, the Medicare Prescription Drug, Improvement, and Modernization Act of 2003, or the MMA, changed the way Medicare covers and pays for pharmaceutical products. The MMA expanded Medicare coverage for outpatient drug purchases by adding a new Medicare Part D program and introduced a new reimbursement methodology based on average sales prices for Medicare Part B physician-administered drugs. In addition, the MMA authorized Medicare Part D prescription drug plans to limit the number of drugs that will be covered in any therapeutic class in their formularies. The MMA's cost reduction initiatives and other provisions could decrease the coverage and price that we receive for any approved products. While the MMA applies only to drug benefits for Medicare beneficiaries, private payors often follow Medicare coverage policy and payment limitations in setting their own reimbursement rates. Therefore, any reduction in reimbursement that results from the MMA may result in a similar reduction in payments from private payors. Similar regulations or reimbursement policies may be enacted in international markets, which could similarly impact our business.

In March 2010, the PPACA (as amended by the Health Care and Education Reconciliation Act of 2010) was passed, which substantially changes the way healthcare is financed by both the government and private insurers, and significantly impacts the U.S. pharmaceutical industry, it is now known as the Affordable Healthcare Act ("ACA"). The ACA, among other things: (i) addressed a new methodology by which rebates owed by manufacturers under the Medicaid Drug Rebate Program are calculated for drugs that are inhaled, infused, instilled, implanted or injected; (ii) increased the minimum Medicaid rebates owed by manufacturers under the Medicaid Drug Rebate Program and extends the rebate program to individuals enrolled in Medicaid managed care organizations; (iii) established annual fees and taxes on manufacturers of certain branded prescription drugs; (iv) expanded the availability of lower pricing under the 340B drug pricing program by adding new entities to the program; and (v) established a new Medicare Part D coverage gap discount program, in which manufacturers must agree to offer 50% point-of-sale discounts off negotiated prices of applicable brand drugs to eligible beneficiaries during their coverage gap period, as a condition for the manufacturer's outpatient drugs to be covered under Medicare Part D. Additionally, in the United States, the Biologics Price Competition and Innovation Act of 2009 created an abbreviated approval pathway for biologic products that are demonstrated to be biosimilar or "interchangeable" with an FDA-approved biologic product. This new pathway could allow competitors to reference data from biologic products already approved after 12 years from the time of approval. This could expose us to potential competition by lower-cost biosimilars even if we commercialize a product candidate faster than our competitors. Moreover, the creation of this abbreviated approval pathway does not preclude or delay a third party from pursuing approval of a competitive product candidate via the traditional approval pathway based on their own clinical trial data.

Additional changes that may affect our business include those governing enrollments in federal healthcare programs, reimbursement changes, rules regarding prescription drug benefits under the health insurance exchanges and fraud and abuse and enforcement. Continued implementation of the ACA and the passage of additional laws and regulations may result in the expansion of new programs such as Medicare payment for performance initiatives, and may impact existing government healthcare programs, such as by improving the physician quality reporting system and feedback program.

For each state that does not choose to expand its Medicaid program, there likely will be fewer insured patients overall, which could impact the sales, business and financial condition of manufacturers of branded prescription drugs. Where patients receive insurance coverage under any of the new options made available through the ACA, manufacturers may be required to pay Medicaid rebates on that resulting drug utilization.

In addition, there have been judicial and congressional challenges to certain aspects of the ACA, and we expect the current administration and Congress will likely continue to seek legislative and regulatory changes, including repeal and replacement of certain provisions of the ACA. The Trump Administration issued a proposed rule on March 10, 2025 (“Proposed Rule”) amending regulations governing insurance coverages subject to the ACA.

In conjunction with the Proposed Rule, the Centers for Medicare & Medicaid Services (“CMS”) issued a statement explaining that the proposed regulations include “critical and necessary steps to protect people from being enrolled in Marketplace coverage without their knowledge or consent, promote stable and affordable health insurance markets, and ensure taxpayer dollars fund financial assistance only for the people the ACA set out to support.” To support its position, CMS cited a report from the Paragon Health Institute suggesting “4 to 5 million people were improperly enrolled in subsidized ACA coverage in 2024, costing federal taxpayers up to \$20 billion.” The impact analysis that accompanies the Proposed Rule shows that the Proposed Rule will reduce enrollment in the ACA plans, reduce the number of people who access premium tax credits and cost-sharing reductions that make coverage more affordable, and limit benefits available to individuals.

The Proposed Rule contains a variety of key changes to the regulations governing health insurance subject to the ACA that will impact those seeking to obtain health coverage through state and federal insurance marketplaces (the “Marketplace”). In this regard, the Proposed Rule does the following:

- Allows insurers to deny coverage to individuals who have past-due premium from prior coverage, allowing insurers to consider past due premium amounts as owed as the initial premium for new coverage.
- Excludes persons who are Deferred Action for Childhood Arrivals (“DACA”) from eligibility to enroll in a health insurance plans offered on the Marketplace or access premium tax credits and cost-sharing reductions.
- Requires CMS to apply a “preponderance of the evidence” standard before terminating an agent for cause as to their agreement with CMS to solicit and sell Marketplace coverage.
- Eliminates the ability of an individual to certify to their income when applying for premium tax credits and cost-sharing reductions, instead requiring income determinations be reconciled with tax filing or other information potentially creating coverage delays and administrative barriers. In addition, if an individual does not file a Federal income tax return for two years, the individual will not be eligible for premium tax credits and cost-sharing reductions.
- Institutes income eligibility verifications for premium tax credits and cost-sharing reductions and charges people auto-reenrolled into zero-premium plans a small monthly payment until they confirm their eligibility information.
- Adjusts the automatic enrollment hierarchy for individuals.

- Shortens the annual open enrollment period from the current period, November 15 to January 15, reducing it by one month, to November 15 to December 15.
- Removes the monthly special enrollment period (“SEP”) for qualified individuals who become eligible for premium tax credits and cost-sharing reductions because their projected household income falls to or below 150% of the federal poverty level, which means that these individuals will have to wait before they can access premium tax credits and cost sharing reductions.
- Changes de minimis thresholds for the actuarial value for plans subject to essential health benefits (“EHB”) requirements and for income-based cost-sharing reduction plan variations.
- Updates the annual premium adjustment percentage methodology to establish a premium growth measure that according to the Proposed Rule reflects premium growth in all affected markets, increasing the cost of coverage.
- Prohibiting insurance companies subject to ACA requirements from providing coverage for services related to a sex-trait modification as an essential health benefit.

We expect that the ACA, as well as other healthcare reform measures that may be adopted in the future, may result in more rigorous coverage criteria and in additional downward pressure on the price that we receive for any approved product. Any reduction in reimbursement from Medicare or other government programs may result in a similar reduction in payments from private payors. The implementation of cost containment measures or other healthcare reforms may prevent us from being able to generate revenue, attain profitability, or commercialize our products.

We expect that additional state and federal healthcare reform measures will be adopted in the future, any of which could limit the amounts that federal and state governments will pay for healthcare products and services, which could result in reduced demand for our product candidates or additional pricing pressures.

We are subject to governmental regulation and other legal obligations related to privacy, data protection and data security. Our actual or perceived failure to comply with such obligations could harm our business.

We are subject to diverse laws and regulations relating to data privacy and security in the UK and EU, including the EU and UK GDPR. New global privacy rules are being enacted and existing ones are being updated and strengthened. We are likely to be required to expend capital and other resources to ensure ongoing compliance with these laws and regulations.

The EU and UK GDPR applies extraterritorially and implements stringent operational requirements for controllers and processors of personal data. For example, the EU and UK GDPR: (i) require detailed disclosures to data subjects; (ii) require disclosure of the legal basis on which personal data is processed; (iii) make it harder to obtain valid consent for processing; (iv) require the appointment of a data protection officers where sensitive personal data (i.e. health data) is processed on a large scale; (v) provide more robust rights for data subjects; (vi) introduce mandatory data breach notification through the EU and in the UK; (vii) impose additional obligations when contracting with service providers; and (viii) require an appropriate privacy governance framework to be implemented including policies, procedures, training and data audit. The EU GDPR permits Member State derogations for certain issues and, accordingly, we are also subject to EU national laws relating to the processing of certain data such as genetic data, biometric data and data concerning health. Complying with these numerous, complex and often changing regulations is expensive and difficult. Failure by us, or our partners or service providers, to comply with the EU and/or UK GDPR could result in regulatory investigations, enforcement notices and/ or fines of up to the higher of 20,000,000 Euros/17,500,000 GBP or up to 4% of our total worldwide annual turnover. In addition to the foregoing, any breach of privacy laws or data security laws, particularly those resulting in any security incident or breach involving the misappropriation, loss or other unauthorized use or disclosure of sensitive or confidential patient or consumer information, could have a material adverse effect on our business, reputation and financial condition.

As a data controller, we are accountable for any third-party data service providers we engage to process personal data on our behalf. We attempt to address the associated risks by performing security assessments, detailed due diligence and regularly performing privacy and security reviews of its vendors and requiring all such third-party providers with data access to sign agreements, including business associate agreements, and where required under EU or UK law, obligating them to only process data according to our instructions and to take sufficient security measures to protect such data. There is no assurance that these contractual measures and our own privacy and security-related safeguards will protect us from the risks associated with the third-party processing, storage and transmission of such information. Any violation of data or security laws by our third-party processors could have a material adverse effect on our business and result in the fines and penalties outlined above. We are also subject to evolving European privacy laws on electronic marketing and cookies. The UK is also updating its data protection law via the Data (Use and Access) Bill 2025 that is currently being considered by the UK Parliament. This is expected to be passed in Q2 of 2025 assuming no major legislative delays. While certain provisions may require secondary legislation for implementation, the core reforms are likely to take effect within months of the Bill's approval and will modify certain aspects of the UK GDPR and Data Protection Act 2018. These proposed changes will require us to modify certain aspects of our data protection compliance program.

We are subject to the U.K. Bribery Act, the U.S. Foreign Corrupt Practices Act and other anti-corruption laws, as well as export control laws, import and customs laws, trade and economic sanctions laws and other laws governing our operations.

Our operations are subject to anti-corruption laws, including the U.K. Bribery Act 2010, or the U.K. Bribery Act, the U.S. Foreign Corrupt Practices Act of 1977, or the FCPA, the U.S. domestic bribery statute contained in 18 §201, the U.S. Travel Act, and other anti-corruption laws that apply in countries where we do business. The U.K. Bribery Act, the FCPA and these other laws generally prohibit us and our employees and intermediaries from authorizing, promising, offering, or providing, directly or indirectly, improper or prohibited payments, or anything else of value, to government officials or other persons to obtain or retain business or gain some other business advantage. Under the U.K. Bribery Act, we may also be liable for failing to prevent a person associated with us from committing a bribery offense. We and our commercial partners operate in a number of jurisdictions that pose a high risk of potential U.K. Bribery Act or FCPA violations, and we participate in collaborations and relationships with third parties whose corrupt or illegal activities could potentially subject us to liability under the U.K. Bribery Act, FCPA or local anti-corruption laws, even if we do not explicitly authorize or have actual knowledge of such activities. In addition, we cannot predict the nature, scope or effect of future regulatory requirements to which our international operations might be subject or the manner in which existing laws might be administered or interpreted.

We are also subject to other laws and regulations governing our international operations, including regulations administered by the governments of the United Kingdom and the United States, and authorities in the European Union, including applicable export control regulations, economic sanctions and embargoes on certain countries and persons, anti-money laundering laws, import and customs requirements and currency exchange regulations, collectively referred to as the Trade Control laws.

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

Our relationships with customers, physicians and third-party payors will be subject, directly or indirectly, to federal and state healthcare fraud and abuse laws, false claims laws, health information privacy and security laws and other healthcare laws and regulations. If we are found in violation of these laws and regulations, we may be required to pay a penalty or be suspended from participation in federal or state healthcare programs, which may adversely affect our business, financial condition and results of operations.

If we obtain FDA approval for our product candidates and begin commercializing them in the United States, our operations will be directly, or indirectly through our prescribers, customers and purchasers, subject to various federal and state fraud and abuse laws and regulations, including, without limitation, the federal Anti-Kickback Statute, the federal civil and criminal laws and Physician Payments Sunshine Act of 2010 and regulations. These laws will impact, among other things, our proposed sales, marketing and educational programs. In addition, we may be subject to patient privacy laws by both the U.S. federal government and the states in which we conduct our business. The laws that will affect our operations include, but are not limited to:

- the federal Anti-Kickback Statute, which prohibits, among other things, persons or entities from knowingly and willfully soliciting, receiving, offering or paying any remuneration (including any kickback, bribe or rebate), directly or indirectly, overtly or covertly, in cash or in kind, in return for either the referral of an individual, or the purchase, leasing, furnishing or arranging for the purchase, lease or order of a good, facility, item or service reimbursable under a federal healthcare program, such as the Medicare and Medicaid programs. This statute has been interpreted to apply to arrangements between pharmaceutical manufacturers on the one hand, and prescribers, purchasers and formulary managers on the other. The PPACA amended the intent requirement of the federal Anti-Kickback Statute, such that a person or entity no longer needs to have actual knowledge of this statute or specific intent to violate it;
- federal civil and criminal false claims laws and civil monetary penalty laws which prohibit, among other things, individuals or entities from knowingly presenting, or causing to be presented, claims for payment or approval from Medicare, Medicaid or other government payors that are false or fraudulent. The PPACA provides, and recent government cases against pharmaceutical and medical device manufacturers support the view that federal Anti-Kickback Statute violations and certain marketing practices, including off-label promotion, may implicate the False Claims Act of 1863;

- the federal Health Insurance Portability and Accountability Act of 1996, or HIPAA, which created new federal criminal statutes that prohibit, among other things, a person from knowingly and willfully executing a scheme or from making false or fraudulent statements to defraud any healthcare benefit program, regardless of the payor (e.g., public or private);
- HIPAA (as amended by the Health Information Technology for Economic and Clinical Health Act of 2009), and their implementing regulations, which impose certain requirements relating to the privacy, security and transmission of individually identifiable health information without appropriate authorization by entities subject to the rule, such as health plans, health care clearinghouses and health care providers, and their respective business associates that perform certain functions or activities that involve the use or disclosure of protected health information on their behalf;
- federal transparency laws, including the federal Physician Payment Sunshine Act, that require certain manufacturers of drugs, devices, biologics and medical supplies for which payment is available under Medicare, Medicaid or the Children's Health Insurance Program, with specific exceptions, to report annually to the CMS information related to: (i) payments or other "transfers of value" made to physicians and teaching hospitals and (ii) ownership and investment interests held by physicians and their immediate family members;
- federal consumer protection and unfair competition laws, which broadly regulate marketplace activities and activities that potentially harm consumers; and
- state and foreign law equivalents of each of the above federal laws, state and local laws that require drug manufacturers to report information related to payments and other transfers of value to physicians and other healthcare providers or marketing expenditures, and state and foreign laws governing the privacy and security of health information in certain circumstances, many of which differ from each other in significant ways and may not have the same effect, thus complicating compliance efforts.

Efforts to ensure that our business arrangements with third parties will comply with applicable healthcare laws and regulations will involve substantial costs. Because of the breadth of these laws and the narrowness of the statutory exceptions and safe harbors available, it is possible that some of our business activities could be subject to challenge under one or more of such laws. It is possible that governmental authorities will conclude that our business practices may not comply with current or future statutes, regulations or case law involving applicable fraud and abuse or other healthcare laws and regulations. If our operations are found to be in violation of any of these laws or any other governmental regulations that may apply to us, we may be subject to significant criminal, civil and administrative sanctions including monetary penalties, damages, fines, disgorgement, individual imprisonment, and exclusion from participation in government funded healthcare programs, such as Medicare and Medicaid, additional reporting requirements and oversight if we become subject to a corporate integrity agreement or similar agreement to resolve allegations of non-compliance with these laws, reputational harm, and we may be required to curtail or restructure our operations, any of which could adversely affect our ability to operate our business and our results of operations.

The risk of our being found in violation of these laws is increased by the fact that many of them have not been fully interpreted by the regulatory authorities or the courts, and their provisions are open to a variety of interpretations. Any action against us for violation of these laws, even if we successfully defend against it, could cause us to incur significant legal expenses and divert our management's attention from the operation of our business. The shifting compliance environment and the need to build and maintain robust and expandable systems to comply with multiple jurisdictions with different compliance and/or reporting requirements increases the possibility that a healthcare company may run afoul of one or more of the requirements.

If we fail to comply with environmental, health and safety laws and regulations, we could become subject to fines or penalties or incur substantial costs.

We are subject to numerous environmental, health and safety laws and regulations, including those governing laboratory procedures and the generation, handling, use, storage, treatment, manufacture, transportation and disposal of, and exposure to, hazardous materials and wastes, as well as laws and regulations relating to occupational health and safety. We contract with third parties that conduct operations on our behalf that involve the use of hazardous and flammable materials, including chemicals and biologic materials. Our contractors also produce and dispose of hazardous waste products. We cannot eliminate the risk of contamination or injury from these materials. In the event of contamination or injury resulting from our contractors' use of hazardous materials, we could be held liable for any resulting damages and any liability could exceed our resources, and our clinical trials or regulatory approvals could be suspended. We also could incur significant costs associated with civil or criminal fines and penalties. Our third-party contractors may not carry specific biological or hazardous waste insurance coverage, and their property, casualty and general liability insurance policies specifically exclude coverage for damages and fines arising from biological or hazardous waste exposure or contamination.

Although we maintain workers' compensation insurance for certain costs and expenses, we may incur due to injuries to our employees resulting from the use of hazardous materials or other work-related injuries, this insurance may not provide adequate coverage against potential liabilities. We do not maintain insurance for toxic tort claims that may be asserted against us in connection with our storage or disposal of biologic, hazardous or radioactive materials.

In addition, we may incur substantial costs in order to comply with current or future environmental, health and safety laws and regulations, which have tended to become more stringent over time. These current or future laws and regulations may impair our research, development or production efforts. Failure to comply with these laws and regulations also may result in substantial fines, penalties or other sanctions or liabilities, which could adversely affect our business, financial condition, results of operations and prospects.

Risks Related to our Business Operations

We may not be successful in our efforts to identify or discover additional product candidates and may fail to capitalize on programs or product candidates that may be a greater commercial opportunity or for which there is a greater likelihood of success.

The success of our business depends upon our ability to identify, develop and commercialize product candidates. Research programs to identify new product candidates require substantial technical, financial and human resources. Although a substantial amount of our efforts will focus on the continued preclinical and clinical testing and potential approval of our product candidates, a key element of our long-term growth strategy is to develop and market additional products and product candidates. However, we may fail to identify other potential product candidates for clinical development for several reasons. For example, our research may be unsuccessful in identifying potential product candidates or our potential product candidates may be shown to have harmful side effects, may be commercially impracticable to manufacture or may have other characteristics that may make the products unmarketable or unlikely to receive marketing approval.

Additionally, because we have limited resources, we may forego or delay pursuit of opportunities with certain programs or product candidates or for indications that later prove to have greater commercial potential. Our spending on current and future R&D programs may not yield any commercially viable products. If we do not accurately evaluate the commercial potential for a particular product candidate, we may relinquish valuable rights to that product candidate through strategic collaboration, licensing or other arrangements in cases in which it would have been more advantageous for us to retain sole development and commercialization rights to such product candidate. Alternatively, we may allocate internal resources to a product candidate in a therapeutic area in which it would have been more advantageous to enter into a partnering arrangement.

Our long-term growth strategy to develop and market additional products and product candidates is heavily dependent on precise, accurate and reliable scientific data to identify, select and develop promising pharmaceutical product candidates and products. Our business decisions may therefore be adversely influenced by improper or fraudulent scientific data sourced from third parties. Any irregularities in the scientific data used by us to determine our focus in R&D of product candidates and products could have a material adverse effect on our business, prospects, financial condition and results of operations.

If any of these events occur, we may be forced to abandon our development efforts with respect to a particular product candidate or fail to develop a potentially successful product candidate, which could have a negative impact on our business, financial condition, results of operations and prospects.

Our future success depends on our ability to retain key employees, consultants and advisors and to recruit, retain and motivate qualified personnel.

Our ability to compete in the highly competitive biotechnology and pharmaceutical industries depends upon our ability to attract and retain highly qualified managerial, scientific and medical personnel. While we have entered into employment agreements with each of our executive officers, any of them could leave our employment at any time. We currently do not have "key person" insurance on any of our employees. The loss of the services of one or more of our current employees might impede the achievement of our research, development and commercialization objectives.

Recruiting and retaining other qualified employees, consultants and advisors for our business, including scientific and technical personnel, also will be critical to our success. We may not be able to attract and retain personnel on acceptable terms given the competition among numerous pharmaceutical and biotechnology companies and academic institutions for individuals with similar skill sets. In addition, failure to succeed in preclinical studies or clinical trials or applications for marketing approval may make it more challenging to recruit and retain qualified personnel. The inability to recruit, or loss of services of certain executives, key employees, consultants or advisors, may impede the progress of our research, development and commercialization objectives and have an adverse effect on our business, financial condition, results of operations and prospects.

If we are unable to manage expected growth in the scale and complexity of our operations, our performance may suffer.

At December 31, 2024, we had 2 full-time employees, who were engaged in R&D activities. If we are successful in executing our business strategy, we will need to expand our managerial, operational, financial and other systems and resources to manage our operations, continue our R&D activities and, in the longer term, build a commercial infrastructure to support commercialization of any of our product candidates that are approved for sale. Future growth would impose significant added responsibilities on members of management and, to a potentially significant extent, divert our management and business development resources away from their current uses. It is likely that our management, finance, development personnel, systems and facilities currently in place may not be adequate to support this future growth. Our need to effectively manage our operations, growth and any future product candidates requires that we continue to develop more robust business processes and improve our systems and procedures in each of these areas, to attract and retain sufficient numbers of talented employees and to expand the group of contractors we use.

We may be unable to successfully implement these tasks on a larger scale and, accordingly, may not achieve our research, development and growth goals.

Our employees, principal investigators, consultants and commercial partners may engage in misconduct or other improper activities, including non-compliance with regulatory standards and requirements and insider trading, which could have a material adverse impact on our business.

We are exposed to the risk of fraud or other misconduct by our employees, principal investigators, consultants and commercial partners. Misconduct by these parties could include intentional failures to: comply with FDA or EMA regulations or the regulations applicable in other jurisdictions, provide accurate information to the FDA, EMA and other regulatory authorities, comply with healthcare fraud and abuse laws and regulations in the United States and abroad, report financial information or data accurately or disclose unauthorized activities to us. In particular, sales, marketing and business arrangements in the healthcare industry are subject to extensive laws and regulations intended to prevent fraud, misconduct, kickbacks, self-dealing and other abusive practices. These laws and regulations restrict or prohibit a wide range of pricing, discounting, marketing and promotion, sales commission, customer incentive programs and other business arrangements. Such misconduct also could involve the improper use of information obtained in the course of clinical trials or interactions with the FDA, EMA or other regulatory authorities, which could result in regulatory sanctions and cause serious harm to our reputation. Additionally, we are subject to the risk that a person could allege fraud or other misconduct, even if none occurred. We have adopted a code of conduct applicable to all of our employees, but it is not always possible to identify and deter employee misconduct, and the precautions we take to detect and prevent these activities may not be effective in controlling unknown or unmanaged risks or losses or in protecting us from government investigations or other actions or lawsuits stemming from a failure to comply with these laws or regulations. If any such actions are instituted against us, and we are not successful in defending ourselves or asserting our rights, those actions could have a significant impact on our business, financial condition, results of operations and prospects, including the imposition of significant criminal, civil and administrative sanctions, such as monetary penalties, damages, fines, disgorgement, individual imprisonment, and exclusion from participation in government funded healthcare programs, such as Medicare and Medicaid, additional reporting requirements and oversight if we become subject to a corporate integrity agreement or similar agreement to resolve allegations of non-compliance with these laws, reputational harm, and we may be required to curtail or restructure our operations. We are also subject to the data privacy regime in the EU, which imposes obligations and restrictions on the collection and use of personal data relating to individuals located in the EU and includes the General Data Protection Regulation, or the GDPR, and any national laws implementing or supplementing the GDPR. If we do not comply with our obligations under the EU privacy regime, we could be exposed to significant fines and we may be the subject of litigation and/or adverse publicity, which could have a material adverse effect on our reputation and business.

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

We face an inherent risk of product liability exposure related to the testing of our current and future product candidates in clinical trials and may face an even greater risk if we commercialize any product candidate that we may develop. For example, we may be sued if our current or future product candidates cause or are perceived to cause injury or are found to be otherwise unsuitable during clinical testing, manufacturing, marketing or sale. Any such product liability claims may include allegations of defects in manufacturing, defects in design, a failure to warn of dangers inherent in the product, negligence, strict liability or a breach of warranties. Claims could also be asserted under state consumer protection acts. If we cannot successfully defend ourselves against product liability claims, we could incur substantial liabilities. Regardless of merit or eventual outcome, liability claims may result in:

- decreased demand for any product candidate that we may develop;
- loss of revenue;

- substantial monetary awards to trial participants or patients;
- significant time and costs to defend the related litigation;
- withdrawal of clinical trial participants;
- the inability to commercialize any product candidates that we may develop; or
- injury to our reputation and significant negative media attention.

Although we maintain product liability insurance coverage, such insurance may not be adequate to cover all liabilities that we may incur. We anticipate that we will need to increase our insurance coverage each time we commence a clinical trial and if we successfully commercialize any product candidate. Insurance coverage is increasingly expensive. We may not be able to maintain insurance coverage at a reasonable cost or in an amount adequate to satisfy any liability that may arise.

Macroeconomic, Geopolitical and Global Risks beyond our control.

Geopolitical conflicts, terrorist attacks and international instability could disrupt global markets, supply chains and our operations.

Wars, terrorist attacks and regional conflicts can destabilize economies, disrupt supply chains and drive up energy and raw material costs. The Russia-Ukraine war, ongoing since February 2022, has led to sanctions, trade restrictions and heightened regional uncertainty. Any expansion of the conflict could further impact our European operations and increase costs. In October 2023, the Israel-Hamas war escalated tensions in the Middle East, creating regional instability and market uncertainty. Although we have no direct operations in either country, the conflict remains ongoing and its longterm economic and regional geopolitical effects are unpredictable. Such conflicts, along with future geopolitical crises, could disrupt financial markets, weaken supply chains and increase political and social instability. These risks may also amplify the impact of other uncertainties outlined in this Annual Report, further affecting our business, operations and financial performance.

Global economic uncertainty, rising interest rates, geopolitical conflicts, trade restrictions and U.S. tariffs on imported goods could adversely impact our business, financial condition and results of operations.

Our operations are subject to global economic volatility, including inflation, high energy costs and tightening monetary policies. Since 2022, central banks in the U.S., U.K. and Eurozone have raised interest rates significantly, increasing financing costs and limiting access to capital. This could affect our ability to invest in R&D or fund expansion initiatives. We are exposed to trade policy risks, including tariffs and import restrictions. If the U.S. government imposes new tariffs, duties or trade barriers on life sciences products, raw materials or components our costs could increase and our business could be impacted.

Retaliatory tariffs from other countries could further disrupt supply chains. These risks may necessitate supplier diversification or production adjustments, all of which could increase operational complexity and costs.

Geopolitical conflicts, such as the wars in Ukraine and the Middle East, have heightened supply chain disruptions and increased energy and material costs. Trade restrictions and export controls, as seen during the Russia-Ukraine war, could further restrict the flow of goods and impact our ability to source critical materials.

A reduction in U.S. government funding or automatic budget cuts (sequestration) could also delay or reduce spending by universities, government laboratories and private foundations that rely on grants from agencies such as the U.S. National Institutes of Health (NIH).

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

Owing to the international scope of our operations, fluctuations in exchange rates, particularly between Pounds Sterling and the U.S. dollar, may adversely affect us. Although we are based in the United Kingdom, we may source R&D, manufacturing, consulting and other services from the United States and the European Union. Further, potential future revenue may be derived from abroad, particularly from the United States. As a result, our business and the potential value of our Common shares may be affected by fluctuations in foreign exchange rates not only between the Pounds Sterling and the U.S. dollar, but also the euro, which may have a significant impact on our results of operations and cash flows from period to period. Currently, we do not have any exchange rate hedging arrangements in place.

Risks Related to Artificial Intelligence (AI) Adoption and Compliance

The integration of Artificial Intelligence (AI) in our operations and products presents regulatory, cyber security, liability and competitive risks that could adversely affect our business, financial condition and results of operations. We are increasingly leveraging Artificial Intelligence (AI) and machine learning (ML) technologies in our products, services and internal operations, including in bioinformatics, molecular diagnostics, clinical decision support, automation and supply chain optimization. The deployment of AI presents several regulatory, legal, cyber security and ethical risks that could materially and adversely impact our business. Regulatory authorities, including the U.S. Food and Drug Administration (FDA), the European Medicines Agency (EMA) and other global agencies, are evolving their oversight of AI-driven medical and diagnostic technologies. The lack of clear or harmonized regulations across jurisdictions could result in delays in product approvals, increased compliance costs or the need for additional clinical validation of AI-based products. If regulators impose new AI transparency, validation or algorithm explainability requirements, we may be required to modify or revalidate our AI-based solutions, which could increase costs and delay time-to-market. AI technologies rely on large datasets, including genomic, clinical and patient data, making them susceptible to privacy, security and compliance risks under regulations such as the General Data Protection Regulation (GDPR), the U.S. Health Insurance Portability and Accountability Act (HIPAA) and China's Data Security Law. A breach, misuse or misinterpretation of AI-generated results could lead to regulatory penalties, litigation and reputational harm. Additionally, the risk of cyber security threats, including AI-driven cyberattacks, data poisoning or adversarial manipulation, could compromise the integrity of our AI models and the security of our systems. AI algorithms can also exhibit bias, errors or inaccuracies if not properly trained or validated. If our AI-based diagnostics or research tools generate false positives, false negatives or unreliable results, this could expose us to liability claims, regulatory scrutiny or loss of customer confidence. AI-based products may also face challenges in intellectual property protection, as evolving laws and patent eligibility criteria for AI-generated inventions may impact our ability to protect proprietary AI models. Furthermore, we rely on third-party AI providers and cloud computing infrastructure for certain AI applications. Any failure, breach or misalignment in AI development partnerships could lead to disruptions in our operations or loss of competitive advantage. Additionally, the rapid evolution of AI in healthcare and life sciences could increase competition from technology firms, startups and established industry players, potentially impacting our market position. If we fail to effectively manage these AI-related risks, including regulatory compliance, data security, algorithmic transparency and liability concerns, our ability to develop and commercialize AI-driven solutions could be limited, which may have a material adverse effect on our business, financial condition and results of operations.

We rely on secure communication and information systems and are subject to evolving privacy and data security laws.

Any disruption, breach or failure could adversely affect our business, financial condition and reputation. We depend on secure information systems to conduct business, storing intellectual property, proprietary business data and personally identifiable information (PII) of customers, employees and business partners in our data centers, networks and cloud-based systems. Despite significant investments in cyber security awareness, modernized tools and ongoing updates to security processes, we cannot eliminate the risk of cyber threats. We occasionally experience minor cyber security incidents, with phishing attacks posing a growing threat to customers and employees. Unauthorized access to our systems could result in data theft, intellectual property loss, financial fraud or operational disruptions. Cyber risks include hacker intrusions, ransomware, malware, software failures and cyber terrorism, with an increased threat from state-sponsored cyberattacks due to ongoing geopolitical tensions, such as the Russia-Ukraine war. Russian ransomware groups, for example, have threatened critical infrastructure and organizations involved in retaliatory actions against Russia, increasing the risk of cyber incidents.

A significant security breach could lead to business disruptions, regulatory penalties, reputational damage and legal liability. Additionally, we are subject to complex and rapidly evolving data privacy laws across multiple jurisdictions. These include:

- U.S. state privacy laws, such as the California Consumer Privacy Act (CCPA) and similar laws in Virginia and Colorado, that impose data processing, consumer rights and breach notification requirements;
- European privacy regulations, such as the General Data Protection Regulation (GDPR), which restrict data transfers and mandate strict security measures; and
- Potential new regulations, including comprehensive federal data privacy legislation in the U.S. and additional international privacy laws, which could further complicate compliance.

As privacy laws evolve, we may face new compliance obligations, higher operational costs and restrictions on data transfers. Failure to comply with these laws could result in regulatory fines, lawsuits and reputational harm, negatively impacting our business operations and strategic growth plans.

Risks Related to the Ownership of Our Securities

The prices of our common shares may be volatile and fluctuate substantially, which could result in substantial losses for holders of our common shares.

The market prices of our common shares on the Nasdaq Capital Market may be volatile and fluctuate substantially. The stock market in general and the market for smaller pharmaceutical and biotechnology companies in particular have experienced extreme volatility that has often been unrelated to the operating performance of particular companies. As a result of this volatility, holders of our common shares may not be able to sell their common shares at or above the price at which they were purchased. The market price for the common shares may be influenced by many factors, including:

- the success of competitive products or technologies;
- results of clinical trials of Foralumab, anti-IL6R mAb (TZLS-501) and any other future product candidate that we develop;
- results of clinical trials of product candidates of our competitors;
- changes or developments in laws or regulations applicable to Foralumab, anti-IL6R mAb (TZLS-501) and any other future product candidates that we develop;
- our entry into, and the success of, any collaboration agreements with third parties;
- developments or disputes concerning patent applications, issued patents or other proprietary rights;
- the recruitment or departure of key personnel;
- the level of expenses related to any of our product candidates or clinical development programs;
- the results of our efforts to discover, develop, acquire or in-license additional product candidates, products or technologies;
- actual or anticipated changes in estimates as to financial results, development timelines or recommendations by securities analysts;
- variations in our financial results or those of companies that are perceived to be similar to us;
- market conditions in the biotechnology and pharmaceutical sectors;
- general economic, industry and market conditions;
- the trading volume of our common shares on the Nasdaq Capital Market; and
- the other factors described in this “Risk Factors” section.

Our common shares may be delisted from The Nasdaq Capital Market if we fail to comply with continued listing standards.

If we fail to meet any of the continued listing standards of The Nasdaq Capital Market, our common shares could be delisted from The Nasdaq Capital Market. These continued listing standards include specifically enumerated criteria, such as:

- a \$1.00 minimum closing bid price;
- stockholders' equity of \$2.5 m;
- 500,000 shares of publicly-held common stock with a market value of at least \$1 m;
- 300 round-lot stockholders; and
- compliance with Nasdaq's corporate governance requirements, as well as additional or more stringent criteria that may be applied in the exercise of Nasdaq's discretionary authority.

On June 14, 2022, we received a written notice (the "Notice") from the Nasdaq Stock Market LLC ("Nasdaq") notifying us that we were not in compliance with Nasdaq Listing Rule 5550(a)(2) (the "Rule"), as the minimum bid price of the Company's common shares has been below \$1.00 per share for 30 consecutive business days. On December 13, 2022, Nasdaq notified us that we were eligible for an additional 180 calendar day period, or until June 12, 2023, to regain compliance.

On April 21, 2023, we received notice from Nasdaq that we had regained compliance with the minimum bid price requirement for continued listing on The Nasdaq Capital Market.

On July 19, 2023, we received a written notice from Nasdaq notifying us that we were not in compliance with the Rule, as the minimum bid price of the Company's common shares has been below \$1.00 per share for 30 consecutive business days. On January 22, 2024, Nasdaq notified us that we were eligible for an additional 180 calendar day period, or until July 15, 2024, to regain compliance, which condition was duly met.

On January 29, 2025, we received a written notice from Nasdaq notifying us that we were not in compliance with the Rule, as the minimum bid price of the Company's common shares has been below \$1.00 per share for 30 consecutive business days. On March 13, 2025, we received notice from Nasdaq that we had regained compliance with the minimum bid price requirement for continued listing on The Nasdaq Capital Market.

If we fail to comply with Nasdaq's continued listing standards, we may be delisted and our common shares will trade, if at all, only on the over-the-counter market, such as the OTC Bulletin Board or OTCQX market, and then only if one or more registered broker-dealer market makers comply with quotation requirements. In addition, delisting of our common shares could depress our stock price, substantially limit liquidity of our common shares and materially adversely affect our ability to raise capital on terms acceptable to us, or at all. Finally, delisting of our common shares could result in our common shares becoming a "penny stock" under the Exchange Act.

Because we are a foreign corporation, you may not have the same rights as a shareholder in a U.S. corporation.

We are a Bermuda exempted company. Our Memorandum of Association and Bye-laws and the Companies Act 1981 of Bermuda (the "Companies Act") govern our affairs. While many provisions of the Companies Act resemble provisions of the corporation laws of a number of states in the United States, Bermuda law may not as clearly establish your rights and the fiduciary responsibilities of our directors as do statutes and judicial precedent in some U.S. jurisdictions. In addition, apart from three non-executive directors, our directors and officers are not resident in the United States and all or substantially all of our assets are located outside of the United States. As a result, investors may have more difficulty in protecting their interests and enforcing judgments in the face of actions by our management, directors or controlling shareholders than would shareholders of a corporation incorporated in a U.S. jurisdiction.

In addition, you should not assume that courts in the country in which we are incorporated or where our assets are located would enforce judgments of U.S. courts obtained in actions against us based upon the civil liability provisions of applicable U.S. federal and state securities laws or would enforce, in original actions, liabilities against us based on those laws.

Shareholders of Bermuda exempted companies such as the Company also have no general rights under Bermuda law to inspect corporate records and accounts other than rights to review the Company's memorandum of association and bye-laws, financial statements, minutes of the shareholder meetings and the shareholder register. This could make it more difficult for you to obtain the information needed to establish any facts necessary for a shareholder motion or to solicit proxies from other shareholders in connection with a proxy contest.

As a result of all of the above, public shareholders might have more difficulty in protecting their interests in the face of actions taken by management, members of the board of directors or controlling shareholders than they would as public shareholders of a U.S. company.

U.S. persons who own our securities may have more difficulty in protecting their interests than U.S. persons who are shareholders of a U.S. corporation.

The Companies Act, which applies to the Company, differs in some material respects from laws generally applicable to U.S. corporations and their shareholders. These differences include, but are not limited to, the manner in which directors must disclose transactions in which they have an interest, the rights of shareholders to bring class action and derivative lawsuits, the scope of indemnification available to directors and officers and provisions relating to amalgamations, mergers and acquisitions and takeovers. Holders of our common shares may therefore have more difficulty protecting their interests than would shareholders of a corporation incorporated in a jurisdiction within the U.S.

Generally, the duties of directors and officers of a Bermuda company are owed to the company and not, in the absence of special circumstances, to the shareholders as individuals. Shareholders of Bermuda companies typically do not have rights to take action against directors or officers of the company and may only do so in limited circumstances. Class actions and derivative actions are typically not available to shareholders under Bermuda law. The Bermuda courts, however, would ordinarily be expected to permit a shareholder to commence an action in the name of a company to remedy a wrong to the company where the act complained of is alleged to be beyond the corporate power of the company or illegal, or would result in the violation of the company's memorandum of association or bye-laws.

Certain common shares previously sold under our Sales Agreement with respect to our At-the-Market Offering may have been sold in violation of federal and state securities laws and may be subject to rescission rights and other penalties, requiring us to repurchase shares sold thereunder.

In connection with our Sales Agreement, we became aware that our shelf registration statement on Form F-3 (file number 333-237368) (the "Prior Registration Statement") expired on March 3, 2025. Prior to becoming aware of the expiration, we sold an aggregate of 2,600,942 common shares following the expiration of the Prior Registration Statement and through March 6, 2025 at an average price of approximately \$1.38 per share for aggregate gross proceeds of approximately \$3.6 million under the Prior Registration Statement pursuant to the Sales Agreement (the "Sales"). Because the Prior Registration Statement had already expired, the Sales could be determined to be unregistered sales of securities and, in accordance with Sections 5 and 12(a)(1) of the Securities Act, direct purchasers in the Sales may have rescission rights pursuant to which they may be entitled to recover the amount paid for such shares, plus statutory interest, upon returning the shares to us within one year from the transaction date. In addition, we could be subject to enforcement actions or penalties and fines by federal and/or state regulatory authorities. We cannot predict the likelihood of any claims or actions being brought against us or the amount of any penalties or fines in connection with the Sales.

Certain Other Bermuda Law Considerations.

All Bermuda "exempted companies" are exempt from certain Bermuda laws restricting the percentage of share capital that may be held by non-Bermudians. However, exempted companies may not participate in certain business transactions, including (1) the acquisition or holding of land in Bermuda except that required for their business and held by way of lease or tenancy for a term not exceeding 50 years or, with the consent of the Minister of Economic Development (the "Minister") granted in his discretion by way of lease or tenancy for a term not exceeding 21 years in order to provide accommodation or recreational facilities for officers and employees of the Company, (2) the taking of mortgages on land in Bermuda to secure an amount in excess of \$50,000 without the consent of the Minister, (3) the acquisition of any bonds or debentures secured by any land in Bermuda, other than certain types of Bermuda government securities or securities issued by Bermuda public authorities or (4) the carrying on of business of any kind in Bermuda, except in furtherance of business carried on outside Bermuda or under license granted by the Minister.

All Bermuda companies must comply with the provisions of the Companies Act regulating the payment of dividends and making distributions from contributed surplus. A company may not declare or pay a dividend, or make a distribution out of contributed surplus, if there are reasonable grounds for believing that: (a) the company is, or would after the payment be, unable to pay its liabilities as they become due; or (b) the realizable value of the company's assets would thereby be less than its liabilities.

Bermuda Exchange Control Regulation. The permission of the Bermuda Monetary Authority is required, under the provisions of the Exchange Control Act 1972 of Bermuda and related regulations, for all issuances and transfers of shares (which includes our common shares) of Bermuda companies to or from a non-resident of Bermuda for exchange control purposes, other than in cases where the Bermuda Monetary Authority has granted a general permission. The Bermuda Monetary Authority, in its notice to the public dated June 1, 2005, has granted a general permission for the issue and subsequent transfer of any securities of a Bermuda company from and/or to a non-resident of Bermuda for exchange control purposes for so long as any "Equity Securities" of the company (which include our common shares) are listed on an "Appointed Stock Exchange" (which include Nasdaq). In granting the general permission the Bermuda Monetary Authority accepts no responsibility for our financial soundness or the correctness of any of the statements made or opinions expressed in this annual report.

Although the Company is incorporated in Bermuda, as an exempted company, the Company is classified as a non-resident of Bermuda for exchange control purposes by the Bermuda Monetary Authority. Other than transferring Bermuda Dollars out of Bermuda, there are no restrictions on the Company's ability to transfer funds into and out of Bermuda or to pay dividends in currency other than Bermuda Dollars to nonresidents of Bermuda who are holders of our common shares.

If we engage in future acquisitions or strategic partnerships, this may increase our capital requirements, dilute our shareholders, cause us to incur debt or assume contingent liabilities and subject us to other risks.

We intend to continue to evaluate various acquisitions and strategic partnerships, including licensing or acquiring complementary drugs, intellectual property rights, technologies or businesses. Any potential acquisition or strategic partnership may entail numerous risks, including:

- increased operating expenses and cash requirements;
- the assumption of additional indebtedness or contingent liabilities;
- assimilation of operations, intellectual property and drugs of an acquired company, including difficulties associated with integrating new personnel;
- the diversion of our management’s attention from our existing drug programs and initiatives in pursuing such a strategic partnership, merger or acquisition;
- retention of key employees, the loss of key personnel and uncertainties in our ability to maintain key business relationships;
- risks and uncertainties associated with the other party to such a transaction, including the prospects of that party and their existing drugs or drug candidates and regulatory approvals; and
- our inability to generate revenue from acquired technology and/or drugs sufficient to meet our objectives in undertaking the acquisition or even to offset the associated acquisition and maintenance costs.

As an FPI, we are exempt from a number of rules under the U.S. securities laws and are permitted to file less information with the SEC than U.S. public companies.

We are an FPI, as defined in the SEC rules and regulations and, consequently, we are not subject to all of the disclosure requirements applicable to companies organized within the United States. For example, we are exempt from certain rules under the Exchange Act, that regulate disclosure obligations and procedural requirements related to the solicitation of proxies, consents or authorizations applicable to a security registered under the Exchange Act. In addition, our officers and directors are exempt from the reporting and “short-swing” profit recovery provisions of Section 16 of the Exchange Act and related rules with respect to their purchases and sales of our securities. Moreover, we are not required to file periodic reports and financial statements with the SEC as frequently or as promptly as U.S. public companies. Accordingly, there may be less publicly available information concerning our company than there is for U.S. public companies.

As an FPI, we will file an annual report on Form 20-F within four months of the close of each fiscal year ended December 31 and reports on Form 6-K relating to certain material events promptly after we publicly announce these events. However, because of the above exemptions for FPIs, our common shareholders will not be afforded the same protections or information generally available to investors holding shares in public companies organized in the United States.

While we are an FPI, we are not subject to certain Nasdaq corporate governance rules applicable to U.S. listed companies.

We are entitled to rely on a provision in Nasdaq’s corporate governance rules that allows us to follow our home country corporate law and the Companies Act with regard to certain aspects of corporate governance. This allows us to follow certain corporate governance practices that differ in significant respects from the corporate governance requirements applicable to U.S. companies listed on Nasdaq.

For example, we are exempt from Nasdaq regulations that require a listed U.S. company to (i) have a majority of the board of directors consist of independent directors, (ii) require non-management directors to meet on a regular basis without management present and (iii) promptly disclose any waivers of the code for directors or executive officers that should address certain specified items.

In accordance with our Nasdaq listing, our audit committee is required to comply with the provisions of Section 301 of the Sarbanes-Oxley Act and Rule 10A-3 of the Exchange Act, both of which are also applicable to Nasdaq-listed U.S. companies. Because we are an FPI, however, our audit committee is not subject to additional Nasdaq requirements applicable to listed U.S. companies, including an affirmative determination that all members of the audit committee are “independent,” using more stringent criteria than those applicable to us as an FPI. Furthermore, Nasdaq’s corporate governance rules require listed U.S. companies to, among other things, seek shareholder approval for the implementation of certain equity compensation plans and issuances of ordinary shares, which we are not required to follow as an FPI.

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

As an FPI, we are not required to comply with all of the periodic disclosure and current reporting requirements of the Exchange Act applicable to U.S. domestic issuers. In order to maintain our current status as an FPI, either (a) a majority of our Common shares must be either directly or indirectly owned of record by non-residents of the United States or (b)(i) a majority of our executive officers or directors cannot be U.S. citizens or residents, (ii) more than 50% of our assets must be located outside the United States and (iii) our business must be administered principally outside the United States. If we lose our status as an FPI, we would be required to comply with the Exchange Act reporting and other requirements applicable to U.S. domestic issuers, which are more detailed and extensive than the requirements for FPIs. We may also be required to make changes in our corporate governance practices in accordance with various SEC and Nasdaq rules. The regulatory and compliance costs to us under U.S. securities laws if we are required to comply with the reporting requirements applicable to a U.S. domestic issuer may be significantly higher than the cost we would incur as an FPI. As a result, we expect that a loss of FPI status would increase our legal and financial compliance costs and is likely to make some activities highly time consuming and costly. We also expect that if we were required to comply with the rules and regulations applicable to U.S. domestic issuers, it would make it more difficult and expensive for us to obtain director and officer liability insurance, and we may be required to accept reduced coverage or incur substantially higher costs to obtain coverage. These rules and regulations could also make it more difficult for us to attract and retain qualified members of our board of directors.

As of December 31, 2023, we were no longer an emerging growth company within the meaning of the Securities Act of 1933, but still remain a smaller reporting company, and will take advantage of certain reduced reporting requirements.

As of December 31, 2023, we were no longer an “emerging growth company”, as defined in the Jumpstart Our Business Startups (JOBS) Act. While we were an emerging growth company, we took advantage of exemptions from various reporting requirements that are applicable to other public companies that are not EGCs, including not being required to comply with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act, or Section 404. Even though we are no longer an emerging growth company, we remain exempt from the auditor attestation requirements of Section 404 pursuant to the rules of the SEC, as we remain a non-accelerated filer. We will cease to be a non-accelerated filer if (a) the aggregate market value of our outstanding Ordinary Shares held by non-affiliates as of the last business day of our most recently completed second fiscal quarter is \$75m or more and we reported annual net revenues of greater than \$100m for our most recently completed fiscal year or (b) the aggregate market value of our outstanding Ordinary Shares held by non-affiliates as of the last business day of our most recently completed second fiscal quarter is \$700 m or more, regardless of annual net revenues. If we cease to be a non-accelerated filer, we would be subject to the requirement for an annual attestation report by our independent registered public accounting firm on the effectiveness of our internal control over financial reporting.

We remain a “smaller reporting company”, as defined in Rule 405 under the Securities Act, which means that we are not an investment company, an asset-backed issuer, or a majority-owned subsidiary of a parent company that is not a “smaller reporting company” which allows us to take advantage of many of the same exemptions from disclosure requirements, including this Annual Report on Form 20-F. In addition, we are eligible to remain a smaller reporting company for so long as we have a public float of less than \$250m measured as of the last business day of our most recently completed second fiscal quarter or a public float of less than \$700m as of such date and annual revenues of less than \$100m during the most recently completed fiscal year. We cannot predict if investors will find our common shares less attractive because we may rely on these exemptions. If some investors find our common shares less attractive as a result, there may be a less active trading market for our common shares and the price of our common shares may be more volatile in the event that we decide to make an offering of our common shares.

If we fail to establish and maintain proper internal controls, our ability to produce accurate financial statements or comply with applicable regulations could be impaired.

Section 404(a) of the Sarbanes-Oxley Act, or Section 404(a), requires that beginning with our second annual report following our IPO, management assess and report annually on the effectiveness of our internal control over financial reporting and identify any material weaknesses in our internal control over financial reporting. Although Section 404(b) of the Sarbanes-Oxley Act, or Section 404(b), requires our independent registered public accounting firm to issue an annual report that addresses the effectiveness of our internal control over financial reporting, we have opted to rely on the exemptions provided as a non-accelerated filer, and consequently will not be required to comply with SEC rules that implement Section 404(b) until such time as we are no longer a non-accelerated filer.

Pursuant to Section 404, we will be required to furnish a report by our senior management on our internal control over financial reporting. However, while we remain a non-accelerated filer, we will not be required to include an attestation report on internal control over financial reporting issued by our independent registered public accounting firm. To prepare for eventual compliance with Section 404, once we no longer qualify as a non-accelerated filer, we will be engaged in a process to document and evaluate our internal control over financial reporting, which is both costly and challenging.

In this regard, we will need to continue to dedicate internal resources, potentially engage outside consultants and adopt a detailed work plan to assess and document the adequacy of internal control over financial reporting, continue steps to improve control processes as appropriate, validate through testing that controls are functioning as documented and implement a continuous reporting and improvement process for internal control over financial reporting. Despite our efforts, there is a risk that we will not be able to conclude, within the prescribed timeframe or at all, that our internal control over financial reporting is effective as required by Section 404. If we identify one or more material weaknesses, it could result in an adverse reaction in the financial markets due to a loss of confidence in the reliability of our financial statements.

We have identified a material weakness in our internal control over financial reporting. Failure to maintain effective internal controls could cause our investors to lose confidence in us and adversely affect the market price of our common stock. If our internal controls are not effective, we may not be able to accurately report our financial results or prevent fraud.

Effective internal control over financial reporting is necessary for us to provide reliable financial reports in a timely manner. In connection with the preparation of our consolidated financial statements for the year ended December 31, 2024, we concluded that there was a material weakness in our internal control over financial reporting related to our failure to timely develop and communicate an employee handbook for employees to consult in the event an issue arises. A material weakness is a deficiency, or a combination of deficiencies, in internal control over financial reporting such that there is a reasonable possibility that a material misstatement of our annual or interim consolidated financial statements will not be prevented or detected on a timely basis.

If we identify additional material weaknesses in our internal control over financial reporting, we may not detect errors on a timely basis and our consolidated financial statements may be materially misstated. Moreover, in the future we may engage in business transactions, such as acquisitions, reorganizations or implementation of new information systems that could negatively affect our internal control over financial reporting and result in material weaknesses.

Our independent registered public accounting firm did not perform an evaluation of our internal control over financial reporting during any period in accordance with the provisions of the Sarbanes-Oxley Act. Had our independent registered public accounting firm performed an evaluation of our internal control over financial reporting in accordance with the provisions of the Sarbanes-Oxley Act, additional control deficiencies amounting to material weaknesses might have been identified. If we identify new material weaknesses in our internal control over financial reporting, if we are unable to comply with the requirements of Section 404 of the Sarbanes-Oxley Act in a timely manner, if we are unable to assert that our internal control over financial reporting is effective, or if our independent registered public accounting firm is unable to express an opinion as to the effectiveness of our internal control over financial reporting, we may be late with the filing of our periodic reports, investors may lose confidence in the accuracy and completeness of our financial reports and the market price of our common shares could be negatively affected. As a result of such failures, we could also become subject to investigations by the stock exchange on which our securities are listed, the SEC, or other regulatory authorities, and become subject to litigation from investors and stockholders, which could harm our reputation, financial condition or divert financial and management resources from our core business.

Our 10% or more stockholders and management own a significant percentage of our stock and are able to exercise significant influence over matters subject to stockholder approval.

As of the date of this annual report, our executive officers, directors and 10% or more stockholders, together with their respective affiliates, owned approximately 39% of our outstanding securities. Accordingly, this group of security holders will be able to exert a significant degree of influence over our management and affairs and over matters requiring security holder approval, including the election of our Board of Directors, future issuances of our securities, declaration of dividends and approval of other significant corporate transactions. As a result, if these shareholders were to choose to act together, they would be able to exert significant influence over matters submitted to our shareholders for approval, as well as our management and affairs. For example, these persons, if they choose to act together, would exercise sufficient voting power to influence the election of directors and approve any merger, consolidation or sale of all or substantially all of our assets. This concentration of ownership control may:

- delay, defer or prevent a change in control;
- entrench our management and board of directors; or
- impede a merger, consolidation, takeover or other business combination involving us that other shareholders may desire.

Claims of U.S. civil liabilities may not be enforceable against us.

We are incorporated under Bermudan law. The United States and Bermuda do not currently have a treaty providing for recognition and enforcement of judgments in civil and commercial matters. Consequently, a final judgment for payment given by a court in the United States, whether or not predicated solely upon U.S. securities laws, would not automatically be recognized or enforceable in Bermuda. In addition, uncertainty exists as to whether the courts of Bermuda would entertain original actions brought in Bermuda against us or our directors or senior management predicated upon the securities laws of the United States or any state in the United States. Any final and conclusive monetary judgment for a definite sum obtained against us in U.S. courts would be treated by the courts of Bermuda as a cause of action in itself and sued upon as a debt at common law so that no retrial of the issues would be necessary, provided that certain requirements are met. The courts of Bermuda will not automatically accept that the foreign court had jurisdiction and was properly seized of the matter. For a Bermuda court to enforce or recognize a foreign judgment either at common law or under the Judgments (Reciprocal Enforcement) Act 1958 of Bermuda, the foreign court must have had jurisdiction according to Bermuda Conflict of Law principles. Whether these requirements are met in respect of a judgment based upon the civil liability provisions of the U.S. securities laws, including whether the award of monetary damages under such laws would constitute a penalty, is an issue for the court making such decision. If a Bermuda court gives judgment for the sum payable under a U.S. judgment, the Bermuda judgment will be enforceable by methods generally available for this purpose. These methods generally permit the Bermuda court discretion to prescribe the manner of enforcement.

In addition, U.S. investors may not be able to enforce against us or our senior management, certain of our board of directors or certain experts named herein (who are residents of countries other than the United States) any judgments obtained in U.S. courts in civil and commercial matters, including judgments under the U.S. federal securities laws.

If we are a passive foreign investment company, there could be adverse U.S. federal income tax consequences to U.S. holders.

Under the Internal Revenue Code of 1986, as amended, or the Code, we will be a PFIC for any taxable year in which (1) 75% or more of our gross income consists of passive income or (2) 50% or more of the average quarterly value of our assets consists of assets that produce, or are held for the production of, passive income. For purposes of these tests, passive income includes dividends, interest, gains from the sale or exchange of investment property and certain rents and royalties. In addition, for purposes of the above calculations, a non-U.S. corporation that directly or indirectly owns at least 25% by value of the shares of another corporation is treated as if it held its proportionate share of the assets and received directly its proportionate share of the income of such other corporation. If we are a PFIC for any taxable year during which a U.S. Holder (as defined below under “Material Income Tax Considerations-Material U.S. Federal Income Tax Considerations for U.S. Holders”) holds our shares, the U.S. Holder may be subject to adverse tax consequences regardless of whether we continue to qualify as a PFIC, including ineligibility for any preferred tax rates on capital gains or on actual or deemed dividends, interest charges on certain taxes treated as deferred, and additional reporting requirements.

We believe that we were a PFIC for our taxable year ended December 31, 2024 but cannot provide any assurances regarding our PFIC status for any past, current or future taxable years. The determination of whether we are a PFIC is a fact-intensive determination made on an annual basis applying principles and methodologies which in some circumstances are unclear and subject to varying interpretation. In particular, the characterization of our assets as active or passive may depend in part on our current and intended future business plans, which are subject to change. In addition, for our current and future taxable years, the total value of our assets for PFIC testing purposes may be determined in part by reference to the market price of our common shares from time to time, which may fluctuate considerably. Under the income test, our status as a PFIC depends on the composition of our income which will depend on the transactions we enter into in the future and our corporate structure. The composition of our income and assets may also be affected by how, and how quickly, we spend the cash we raise in any offering.

In certain circumstances, a U.S. Holder of shares in a PFIC may alleviate some of the adverse tax consequences described above by making a qualified electing fund, or QEF, election to include in income its pro rata share of the corporation’s income on a current basis. However, a U.S. Holder may make a QEF election with respect to our common shares only if we agree to furnish such U.S. Holder annually with a PFIC annual information statement as specified in the applicable U.S. Treasury Regulations. We currently do not intend to prepare or provide the information that would enable U.S. Holders to make a QEF election if we are treated as a PFIC for any taxable year, and prospective investors should assume that a QEF election will not be available.

For further discussion of the PFIC rules and the adverse U.S. federal income tax consequences in the event we are classified as a PFIC, see the section of this report entitled “Material Income Tax Considerations-Material U.S. Federal Income Considerations For U.S. Holders.”

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

As a U.K. tax resident trading entity, we are subject to U.K. corporate taxation. Due to the nature of our business, we have generated losses since inception. As of December 31, 2024, we had cumulative carryforward tax losses of \$17 m. Subject to any relevant restrictions, we expect these to be available to carry forward and offset against future operating profits. As a company that carries out extensive research and development activities, we benefit from the U.K. research and development tax credit regime for small and medium-sized companies, whereby we are able to surrender the trading losses that arise from our qualifying research and development activities for a payable tax credit of up to 33.35% of eligible research and development expenditures. Qualifying expenditures largely comprise employment costs for research staff, consumables and certain internal overhead costs incurred as part of research projects. Certain subcontracted qualifying research expenditures are eligible for a cash rebate of up to 21.67%. The majority of our pipeline research, clinical trials management and manufacturing development activities are eligible for inclusion within these tax credit cash rebate claims. Our ability to continue to claim payable research and development tax credits in the future may be limited because we may no longer qualify as a small or medium-sized company.

We may benefit in the future from the United Kingdom's "patent box" regime, which allows certain profits attributable to revenues from patented products to be taxed at an effective rate of 10%. We are the exclusive licensee or owner of several patent applications which, if issued, would cover our product candidates, and accordingly, future upfront fees, milestone fees, product revenues and royalties could be taxed at this tax rate. When taken in combination with the enhanced relief available on our research and development expenditures, we expect a long-term lower rate of corporation tax to apply to us. If, however, there are unexpected adverse changes to the U.K. research and development tax credit regime or the "patent box" regime, or for any reason we are unable to qualify for such advantageous tax legislation, or we are unable to use net operating loss and tax credit

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

Our tax position could be adversely impacted by changes in tax rates, tax laws, tax practice, tax treaties or tax regulations or changes in the interpretation thereof by the tax authorities in the United Kingdom, the United States and other jurisdictions as well as being affected by certain changes currently proposed by the Organization for Economic Co-operation and Development and their action plan on Base Erosion and Profit Shifting. Such changes may become more likely as a result of recent economic trends in the jurisdictions in which we operate, particularly if such trends continue.

Our actual effective tax rate may vary from our expectation and that variance may be material. A number of factors may increase our future effective tax rates, including: (1) the jurisdictions in which profits are determined to be earned and taxed; (2) the resolution of issues arising from any future tax audits with various tax authorities; (3) changes in the valuation of our deferred tax assets and liabilities; (4) increases in expenses not deductible for tax purposes, including transaction costs and impairments of goodwill in connection with acquisitions; (5) changes in the taxation of share-based compensation; (6) changes in tax laws or the interpretation of such tax laws, and changes in generally accepted accounting principles; and (7) challenges to the transfer pricing policies related to our structure.

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

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

ITEM 4: INFORMATION ON THE COMPANY

A. History and Development of the Company

We were originally incorporated under the laws of England and Wales on February 11, 1998, with the goal of leveraging the expertise of our management team as well as Napoleone Ferrara, M.D., Arun Sanyal, M.D., Howard Weiner, M.D. and Kevan Herold, M.D., and to acquire and exploit certain intellectual property in biotechnology. We subsequently changed our name to Tiziana Life Sciences plc in April 2014 as a result of the acquisition of Tiziana Pharma Limited in April 2014. On August 20, 2021 we announced that we had formally commenced a strategic plan to change our corporate structure by establishing Tiziana Life Sciences Ltd, a Bermuda-incorporated company, to become the ultimate parent company of the Tiziana Group. The reorganization was performed under a scheme of arrangement under Part 26 of the UK Companies Act 2006 and became effective on October 20, 2021, at which point all shareholders became shareholders in the new Bermuda company.

Our registered office is located at Clarendon House, 2 Church Street, Hamilton HM 11, Bermuda and our telephone number is +44 20 7495 2379.

The SEC maintains an Internet site that contains reports, proxy and information statements, and other information regarding issuers, such as we, that file electronically, with the SEC at www.sec.gov. Our website address is www.tizianalifesciences.com. The reference to our website is an inactive textual reference only and the information contained in, or that can be accessed through, our website is not a part of this annual report.

Our agent for service of process in the United States is Tiziana Therapeutics, Inc, 420 Lexington Ave, Suite 1402, New York, NY 10170.

B. Business Overview

Overview

We are a NASDAQ listed (NASDAQ:TLSA) clinical stage biotechnology company that specializes in the developing transformative therapies for neurodegenerative and neuroinflammatory diseases. Our clinical pipeline includes drug assets for Secondary Progressive Multiple Sclerosis, Alzheimer's, and ALS. Tiziana is led by a team of highly qualified executives with extensive drug development and commercialization experience.

Our mission is to design and deliver next generation immunotherapies for neurodegenerative and neuroinflammatory diseases.

We employ a lean and virtual research and development, or R&D, model using highly experienced teams of experts for each business function to maximize value accretion by focusing resources on the drug discovery and development processes.

Our lead immunotherapeutic candidate, Foralumab (TZLS-401), is being developed for Non-Active Secondary Progressive Multiple Sclerosis, Alzheimer's and other CNS indications. Foralumab is the only fully human anti-CD3 monoclonal antibody under clinical development and is expected to minimize adverse immune responses in patients. We in-licensed the intellectual property from Novimmune SA, or Novimmune, in December 2014, as a potential treatment for neurodegenerative diseases such as Secondary Progressive Multiple Sclerosis (SPMS), Alzheimer's disease and ALS. On November 10, 2022, Tiziana announced a short-term focus on administration of intranasal foralumab for treatment of neurodegenerative diseases, especially SPMS, based on positive clinical findings of Expanded Access (EA) SPMS patients at Brigham and Women's Hospital treated with intranasal foralumab for up to 1 year. As the only fully human engineered human anti-CD3 mAb in clinical development, Foralumab has significant potential advantages such as a shorter treatment duration and reduced immunogenicity. We believe intranasal administration of Foralumab has the potential to reduce inflammation while minimizing the toxicity and related side effects.

Foralumab is being developed as both an immunosuppressive and immunomodulatory agent, with therapeutic benefits of rendering T-cells unable to orchestrate an immune response and induction of immune tolerance via maintenance of regulatory T-cells. There is further potential for Foralumab to be combined with the Company's TZLS-501, a fully human anti-IL-6R mAb in development to target autoimmune and inflammatory diseases.

As announced in 2022, all other assets have been temporarily deprioritized to focus resources on Tiziana's lead asset.

Our Competitive Strengths

Our mission is to design and deliver next generation therapeutics and diagnostics for oncology and immune diseases of high unmet medical need by combining deep understanding of disease biology with clinical development expertise. We believe the following strengths will allow us to continue to pursue this mission:

- **Advanced, novel pipeline.** We have an advanced pipeline of novel and proprietary drug candidates, including antibodies and small molecules, to address high unmet medical needs in the inflammation, autoimmune and oncology markets with significant commercial potential.
- **Proprietary technology.** Our proprietary technology enables the development of alternative routes of administration of antibodies, including oral delivery. We believe that oral and nasal routes of delivery will alleviate the significant time and cost burden associated with other routes of administration, including intravenous delivery.
- **Broad and engaged network of experts.** Our strong relationships with key opinion leaders contribute to our clinical development efforts and position us well to support our products, if approved. Dr. Napoleone Ferrara, Dr. Arun Sanyal, Dr. Kevan Herold, and Dr. Howard Weiner are among the thought leaders on our scientific advisory committee.
- **Specialized expertise and focus on oncology and inflammation.** Our management team has considerable experience translating technologies from bench to market, and managing the global administration of clinical trials.
- **Strong intellectual property and know-how.** We believe our proprietary intellectual property portfolio, in-licensed from Novimmune, provides us with a substantial competitive advantage for the commercial development of small molecule NCEs, and biologics, as well as expanded possibilities for new development programs in the future. We have retained the worldwide development and commercialization rights to all of our product candidates. We have submitted additional patent applications to further strengthen our intellectual property.
- **Lean research and development model, designed to maximize value.** We employ a lean and virtual R&D model using highly experienced teams of experts for each business function to maximize value accretion by focusing resources on the drug discovery and development processes.

Our Strategy

Our goal is to become a leading biotechnology company focused on developing and delivering therapies and related diagnostics in both oncology and immunology. The key elements of our strategy to achieve this goal are to:

- Advance the clinical development of intranasally-administered Foralumab for treatment of neurodegenerative diseases, particularly SPMS, and potentially including Alzheimer’s Disease, ALS and intracerebral hemorrhage (hemorrhagic stroke). Tiziana will continue to supply foralumab for intranasal treatment of up to 10 EA patients at Brigham and Women’s Hospital and initiated a multisite Phase 2 trial for treatment of SPMS patients in Q3 2023.

The following programs have been deprioritised to focus Tiziana’s clinical development efforts on intranasal foralumab for treatment of SPMS and other neurodegenerative disease.

- Development of our product candidate, TZLS-501, a fully human mAb targeting the IL-6 receptor (a biological mAb which may control the proteins involved in cell signaling relevant to many inflammatory diseases and cancers), for treatment of inflammatory and oncology indications especially SSc-ILD. Additional cGMP manufacturing and IND-enabling GLP safety toxicology studies in Cynomolgus monkeys, have been completed evaluation/qualification of hand-held nebulizers for pulmonary administration of TZLS-501 for SSc-ILD treatment have been completed.
- Clinical development and obtain regulatory approval for our lead oncology product candidate, Milciclib, as a combination therapy for the treatment of refractory solid tumors (being cancers which are non-responsive or become resistant to treatment), especially NSCLC. An IND was filed on December 15, 2022. The IND was withdrawn in January 2023 to refocus clinical activities on use of foralumab for treatment of neurodegenerative diseases.

The following activities will continue to be pursued aggressively:

- Continue development of platform drug delivery technologies that provide competitive advantage over existing approved products, e.g. inhalation delivery and nasal delivery of mAbs.
- Continue to leverage relationships with key opinion leaders to promote clinical trial success and enhance future commercialization.
- Opportunistically identify and acquire or in-license complimentary product and technology candidates.
- Seek orphan drug, fast track or breakthrough designation for our product candidates where warranted.

Our Product Candidates

Our product candidate pipeline is set forth below:

DEVELOPMENT PIPELINE

Intranasal Foralumab Pipeline



Foralumab (TZLS-401 formerly known as NI-0401)

We believe Foralumab is the only fully human anti-CD3 mAb in clinical development, in contrast to the previous non-human or humanized anti-CD3 mAbs. Foralumab targets the CD3 epsilon (CD3 ϵ) receptor, which is a recognized approach for modulating T-Cell response and achieving immunosuppression. We believe Foralumab could have broad application to autoimmune and inflammatory diseases, such as inflammatory bowel disease such as MS, Crohn's disease type-1 diabetes (T1D) psoriasis and rheumatoid arthritis, where modulation of a T-cell response is desirable. In July 2017, we announced publication of a research article in, *Clinical Immunology*, entitled: "Oral treatment with Foralumab, a fully human anti-CD3 mAb, prevents skin xenograft rejection in humanized mice." We believe this is the first-ever published report demonstrating the potential of oral therapy with Foralumab for inflammatory diseases and is based on the landmark discovery by Prof. Howard Weiner of Harvard University, one of our Scientific Advisory Committee members.

On April 16, 2018, Tiziana entered into an exclusive license agreement with The Brigham and Women's Hospital, Inc. relating to a novel formulation of Foralumab dosed in a medical device for nasal administration. An investigational new drug application (IND) for the first-in-human evaluation of the nasal administration of Foralumab in healthy volunteers for progressive multiple sclerosis indication was filed in the second quarter of 2018. Subsequent to IND approval, a single-site, double-blind, placebo-controlled, dose-ranging Phase 1 trial with nasally administered Foralumab at 10, 50 and 250 μ g per day, consecutively for 5 days to evaluate biomarkers of immunomodulation of clinical responses was initiated in November 2018. The trial conducted at the Brigham and Women's Hospital, Harvard Medical School, Boston, MA, in healthy volunteers. 18 subjects received Foralumab treatment and 9 patients received placebo. The study was completed in September 2019. Phase 1 clinical data demonstrated that nasally administered Foralumab, was well-tolerated and no drug-related safety issues were reported at any of the doses. No drug-related changes were observed in vital signs among subjects at predose, during treatment and at discharge. The mean blood pressure (BP) during the 5 days of treatment were; Cohort A (10 μ g/d):124/73, Cohort B (50 μ g/d): 119/67 and Cohort C (250 μ g/d):113/65 compared to placebo:118/67). Heart rates, respiratory rates and oral temperatures were unchanged among the 3 cohorts compared to the placebo. Nasally administered Foralumab at the 50 μ g dose suppressed cytotoxic CD8+ as well as perforin secreting CD8+ cells, which have been implicated in neurodegeneration in multiple sclerosis (MS). Treatment at 50 mg stimulated production of anti-inflammatory cytokine IL-10 and suppressed production of pro-inflammatory cytokine IFN- γ . Taken together, the treatment showed significant positive effects on the biomarkers for activation of mucosal immunity, which are capable of inducing site-targeted immunomodulation to elicit anti-inflammatory effects. Based on the results we intend to conduct a Phase 2 trial in secondary progressive MS (SPMS) patients starting in Q3 2023.

An enteric-coated capsule formulation using a proprietary and novel technology has been developed for oral administration of Foralumab. cGMP manufacturing of clinical trial materials for a Phase 1 study has been completed and an IND was submitted in March 2019.

On September 9, 2019, the FDA granted approval to initiate the Phase 1 clinical trial to evaluate the safety and pharmacokinetics of a novel enteric-coated capsule formulation of oral Foralumab at 1.25, 2.5 and 5.0 mg/day as a single ascending dose study. The study was completed in December 2019 at Brigham and Women's Hospital (Boston, MA USA). A total of 12 subjects were enrolled; 9 received the single dose of foralumab and 3 received placebo. The median age (range) for the oral foralumab subjects was 23 (21 – 55) years, and for the placebo subjects it was 34 (27 – 51). Of the foralumab subjects, 6 were male and 3 were female. All 3 of the placebo subjects were female. No subjects discontinued the study. Formulated Foralumab powder blend encapsulated in enteric-coated capsules was well-tolerated at all doses tested and there were no drug-related safety issues observed even at the highest dose of 5 mg in this trial.

Tiziana initiated a Phase 1b clinical trial in Crohn's disease patients to evaluate oral capsules of foralumab, a fully human anti-CD3 monoclonal antibody. The revised protocol allowed for the study of a broader patient population and a shorter dosing period. These protocol amendments or revisions were intended to expedite patient enrollment with study completion targeted for the fourth quarter of 2022. This study was to be the first multiple-dose study with orally administered enteric-coated capsules of foralumab in patients with Crohn's disease. Due to the refocus of the company subsequent to the first six months of 2022, this study has been withdrawn to focus on nasal administration studies for SPMS indication.

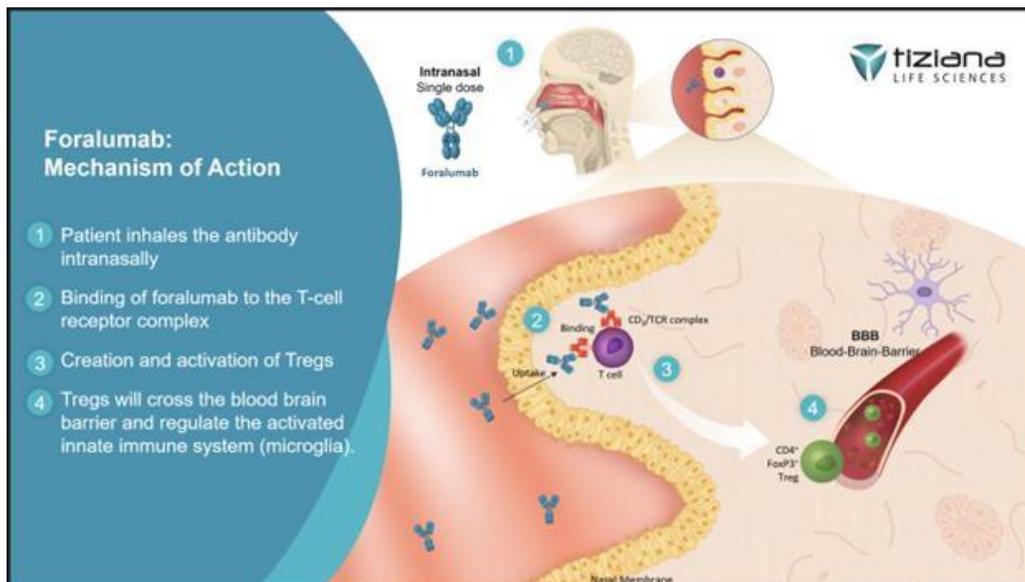
A collaborative clinical study was initiated on November 2, 2020, investigating nasally administered Foralumab either alone or in combination with orally administered dexamethasone in COVID-19 patients in Brazil. In view of the importance and urgency, scientific teams at the Harvard Medical School, Santa Casa de Misericórdia de Santos Hospital (Jabaquara, Santos, Brazil) and at our company closely collaborated to facilitate initiation of this study in expedited time frames. The clinical trial was coordinated by the team at INTRIALS, a leading, full-service Latin America Clinical Research Organization, (CRO) based in Sao Paulo City, Brazil. The trial was completed in January 2021. This trial, the first-ever trial on nasal administration of Foralumab for treatment of COVID-19, is of enormous significance because the underlying scientific approach is to modulate immune system, which is dysregulated and crippled to protect against the virus. The results of the trial were All treatments were well-tolerated. There were no grade 3 or 4 severe adverse events ("SAEs") in any of the cohorts. The CT scans of the lungs showed the improvement was approximately double that shown in patients treated with Foralumab as compared to those in the control group. The results of the study were published in the peer-reviewed journal, *Frontiers in Immunology* entitled "Nasal Administration of Anti-CD3 Monoclonal Antibody (Foralumab) Reduces Lung Inflammation and Blood Inflammatory Biomarkers in Mild to Moderate COVID-19 Patients: A Pilot Study" in August 2021. The study served as "proof of concept" that nasal administration of foralumab could be used to treat systemic inflammatory response related to COVID infection and could be used for treatment of other systemic inflammatory diseases. The Company has refocused development of Foralumab for treatment of Crohn's disease (oral treatment) and progressive MS (nasal treatment) utilizing site specific delivery technologies to limit systemic exposure of foralumab which achieving local delivery to inflamed tissue. Further development has been paused because of the Company's refocus on administration of nasal foralumab for SPMS and other neurodegenerative diseases.

Multiple Sclerosis

MS is an inflammatory-mediated demyelinating disease of the human central nervous system. The disease develops in young adults with a complex predisposing genetic trait and most likely involves an environmental insult such as a viral infection to trigger the disease. The activation of CD4+ autoreactive T cells and their differentiation are crucial initial steps in the progression of this disease. The therapeutic use of monoclonal antibodies was initially viewed with great skepticism owing to the high rates of sensitization against mouse proteins, their pharmacokinetic properties, and the difficulties in their production. However, most of these problems have been overcome, and monoclonal antibodies are now among the most promising therapies for MS.

The innate immune system plays a central role in the chronic central nervous system inflammation that drives neurological disability in progressive forms of multiple sclerosis, for which there are few effective treatments. The mucosal immune system is a unique tolerogenic organ that provides a physiological approach for the induction of regulatory T cells. Nasal administration of CD3-specific antibody ameliorates disease in a progressive animal model of multiple sclerosis. This effect is IL-10-dependent and is mediated by the induction of regulatory T cells that share a similar transcriptional profile to Tr1 regulatory cells and that suppress the astrocyte inflammatory transcriptional program. Treatment results in an attenuated inflammatory milieu in the central nervous system decreased microglia activation, reduced recruitment of peripheral monocytes, stabilization of the blood-brain barrier, less neurodegeneration, and decreased accumulation of neurologic disability (Mayo, 2016). Patients with non-active secondary progressive MS, demonstrate increased microglial activation that drives disease progression. These nonclinical findings suggest foralumab may be a new therapeutic approach for the treatment of progressive forms of multiple sclerosis. Based on this work, we hypothesize that nasal foralumab will slow disability accumulation and microglial activation measured by PET imaging in non-active secondary progressive multiple sclerosis. Two patients with non-active SPMS have been treated for 12 or more months with a suggestion of clinical improvement and no clinically significant adverse events.

Binding of foralumab to the T-cell receptor complex, through the nasal, results in suppression of effector T-cells involved in various inflammatory and autoimmune diseases along with a reduction in inflammatory cytokines and increase in Tregs anti inflammatory cytokines resulting in site-targeted immunomodulation.



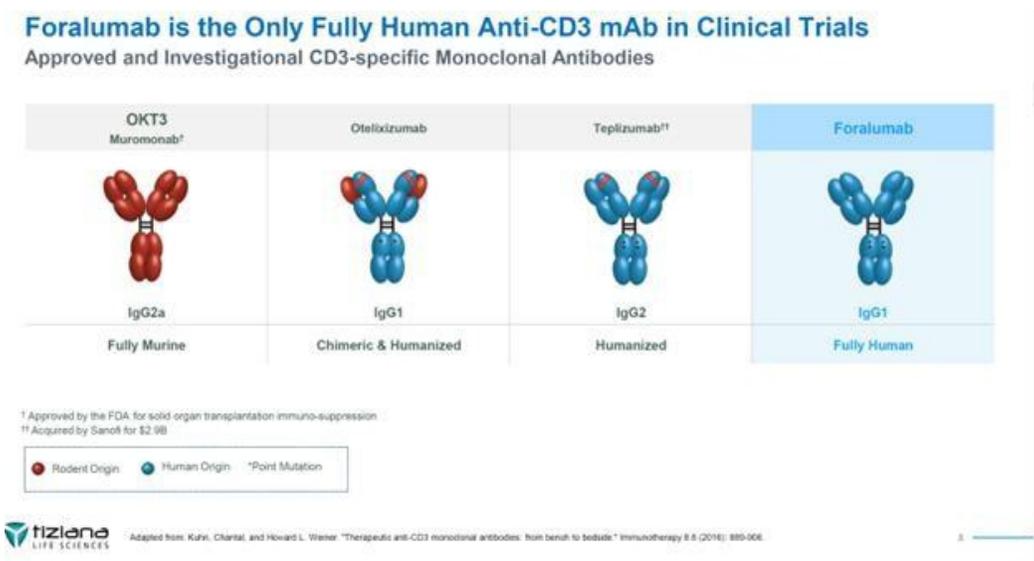
Autoimmune and Inflammatory Diseases

Autoimmune diseases are primarily due to a malfunction when the immune system attacks certain cells in the body as foreign invaders. This can result in irreparable damage to critical organs and tissues eventually resulting in autoimmune diseases.

In humans, CD3-epsilon is encoded by the CD3ε gene on Chromosome 11. The CD3ε molecule, along with four other membrane-bound polypeptides (CD3-gamma, -delta, -zeta, and -eta) form the CD3 complex, which is associated with the T-cell receptor. Upon antigen bindings, the CD3 complex sends signals through the cell membrane to the cytoplasm inside the T-cell. This leads to activation of the T-cell that rapidly divides to produce new T-cells sensitized to fight the particular antigen to which the TCR was exposed. While T-cell activation is critical for the human immune system to properly fight bacterial, viral or parasitic infections, abnormal T-cell induction can cause and worsen numerous human diseases, including T-cell lymphoma and leukemia, human malignancies, autoimmune disorders, cardiovascular disease and transplant rejection.

Our Solution

We believe Foralumab is the only fully human anti-CD3 mAb in clinical development. Since the discovery of the hybridoma technology, a method to generate large quantities of a single (monoclonal) antibody, the production and manufacture of mAbs has become widely available showing promise in several autoimmune and inflammatory disease clinical trials and therapeutic utility in animal models. The first murine anti-CD3 mAb (IgG2a) was developed and approved by the FDA in 1985 under the name of muromonab, OKT3, (Ortho Kung T3; Orthoclone®) to treat allograft rejection in kidney, liver and heart transplantation by exerting its potent immunosuppressive effects, mainly due to depletion of T-cells in tissues and thereby preventing rejection of the allografts. Subsequently, OKT3 was administered in clinical trials to patients with MS, T1D, inflammatory bowel disease, rheumatoid arthritis and NASH. Although showing promise to alleviate the disease process, the mAb being of murine origin and extremely immunogenic in humans, was associated with a wide range of side effects that included the typical Cytokine Release Syndrome (CRS) or flu-like syndrome, limiting its clinical development. The side effect profile of OKT3 is a consequence of T-cell activation resulting in the release of numerous cytokines into the systemic circulation. These shortcomings of the murine OKT3 led to the development of a new generation of anti-CD3 mAbs using genetic engineering of the mAb structure, as depicted below.



Foralumab dosed intravenously has been observed to alter T-cell function via antigenic modulation, that is, removal of the CD3/TCR complex from the T-cell surface. Modulation has two therapeutic benefits:

- It transiently renders the T-cells incapable of recognizing an antigen and thus unable to orchestrate an immune response such as an allograft rejection; and
- It has a favorable long-term effect on generation and maintenance of regulatory T-cells, a specialized subset of T-cells that promote immunological tolerance.

In comparison with the two other anti-CD3 mAbs evaluated in patients with T1D (otelixizumab and teplizumab), Foralumab, being fully human, was less mitogenic (capable of causing cell division), therefore allowing re-treatment, and to have a better risk/benefit profile. As such, Foralumab was previously developed by Novimmune as an intravenous formulation for the treatment of autoimmune indications: Crohn's disease and in renal allograft recipients.

Further, recent data from studies conducted in the laboratories of our Scientific Advisory Committee members, Prof. Howard Weiner of Harvard University and Prof. Kevan Herold of Yale University, suggest that oral administration of Foralumab has the potential for therapeutic utility while minimizing toxicity associated with intravenous administration, such as Cytokine Release Syndrome (CRS). Importantly, recent clinical studies conducted by Prof. Yaron Ilan with oral administration of anti-CD3 (OKT3; murine mAb) in HCV infected patients (non-respondents) and in NASH patients suggested that the treatment was well-tolerated and produced immunologic effects consistent with potential clinical benefits.

In addition, increasing appreciation for the gut-liver cross-talk and of its role in the initiation of NASH-associated inflammation and fibrogenesis has led to the understanding that systemic inflammatory processes can be alleviated by modulating the gut immune system, without inducing generalized immunosuppression. This has been achieved in multiple approaches, including oral administration of fatty liver-derived proteins, anti-CD3 antibodies, TNF, fusion protein, anti-lipopolysaccharide antibodies, glucosylceramide, delayed-release mercaptopurine and soy-derived extracts. Several of these compounds were shown to be effective in patients with NASH.

Orally administered OKT3 was evaluated in a Phase 2 trial in 36 patients with NASH and type 2 diabetes and was found to be well tolerated. Increases in regulatory T-cell markers consistent with induction of regulatory T-cells was observed as well as increases in other anti-inflammatory markers. Although not powered sufficiently to evaluate efficacy endpoints, positive trends were observed including lowering of liver enzymes and lowering of glucose levels (Lalazar et.al, J. Clin. Immunol. (2015) 34 (4):399-407).

More recent animal studies conducted separately by Prof. Howard Weiner and Prof. Kevan Herold demonstrated therapeutic utility of orally administered Foralumab for immune-inflammatory diseases. Our strategy is to build on these findings to develop orally administered Foralumab for the treatment of Crohn's disease and other autoimmune diseases. We believe Foralumab may also be combined with our other product candidate, TZLS-501, a fully human anti-IL-6R mAb, for the treatment of rheumatoid arthritis and other diseases.

An enteric-coated capsule formulation using a proprietary and novel technology has been developed for oral administration of Foralumab. cGMP manufacturing of clinical trial materials for a Phase 1 study has been completed and an IND was submitted in March 2019.

On September 9, 2019, the FDA granted approval to initiate the Phase I clinical trials to evaluate the safety and pharmacokinetics of oral Foralumab at 1.25, 2.5 and 5.0 mg/day as a single ascending dose study. The study was completed in December 2019 at Brigham and Women's Hospital (Boston, MA USA). Formulated Foralumab powder blend encapsulated in enteric-coated capsule was well-tolerated at all doses tested and there were no drug-related safety issues observed even at the highest dose of 5 mg in this trial.

Tiziana initiated a Phase 1b clinical trial in Crohn's disease patients to evaluate oral capsules of foralumab, a fully human anti-CD3 monoclonal antibody. The revised protocol allowed for the study of a broader patient population and a shorter dosing period. These protocol amendments or revisions were intended to expedite patient enrollment with study completion targeted for the fourth quarter of 2022. This study was the first multiple-dose study with orally administered enteric-coated capsules of foralumab in patients with Crohn's disease. Due to the refocus of the company subsequent to the first six months of 2022, this study has been withdrawn.

Clinical Development Plan

Phase 1a Clinical Trial for Oral Foralumab in Healthy Volunteers

This Phase 1a trial, conducted at the Brigham and Women's Hospital, Harvard Medical School, Boston, MA, USA, was a single-site, double-blind, placebo-controlled, single ascending dose ("SAD") study in healthy subjects in which Foralumab was orally administered at 1.25, 2.5 and 5.0 mg per dose as enteric-coated capsules. The primary endpoint of the Phase 1 study is safety and tolerability of Foralumab in humans. Each cohort comprised of 4 subjects, of whom 3 received Foralumab treatment and 1 received a placebo capsule. All subjects completed the trial without any safety concerns at any of the doses.

Phase 1 Clinical Trial of Nasally-Administered Foralumab for Treatment of Secondary Progressive Multiple Sclerosis

This Phase 1 trial, conducted at the Brigham and Women’s Hospital, Harvard Medical School, Boston, MA, was a single-site, double-blind, placebo-controlled, dose-ranging study with nasally administered Foralumab at 10, 50 and 250 µg per day, consecutively for 5 days in healthy volunteers for the treatment of progressive multiple sclerosis (pMS). 18 subjects received Foralumab treatment and 9 patients received placebo. All nasal doses were well tolerated. Biomarker analysis showed significant positive immune effects, that were most prominent in the 50 µg cohort with minimal immunomodulatory effects at the 10 µg and 250 µg doses. Prominent results included:

- Treatment was well-tolerated and no drug-related safety issues were reported at any of the doses.
- No drug-related changes were observed in vital signs among subjects at predose, during treatment and at discharge. The mean blood pressure (BP) during the 5 days of treatment were; Cohort A (10 µg/d):124/73, Cohort B (50 µg/d): 119/67 and Cohort C (250 µg/d):113/65 compared to placebo:118/67). Heart rates, respiratory rates and oral temperatures were unchanged among the 3 cohorts compared to the placebo.
- Nasally administered Foralumab at the 50 µg dose suppressed cytotoxic CD8+ as well as perforin secreting CD8+ cells, which have been implicated in neurodegeneration in multiple sclerosis (MS).
- Treatment at 50 µg stimulated production of anti-inflammatory cytokine IL-10 and suppressed production of pro-inflammatory cytokine IFN-γ.
- Taken together, these results suggest stimulation of Tregs that are needed to provide clinical benefits

Treatment of Expanded Access SPMS Patients at Brigham and Women’s Hospital (Boston) with Nasally-Administered Foralumab

On May 25, 2021 the Company announced that the first expanded access (EA) patient with secondary progressive multiple sclerosis (SPMS) was dosed with nasally administered Foralumab at the Brigham and Women’s Hospital (BWH), Harvard Medical School, Boston, MA. Nasal Foralumab 50 mcg (25 mcg/nosril) was administered in 3-week cycles, with 3 times/week dosing for the first 2 weeks followed by 1 week of rest period. This first-ever clinical study in SPMS patients, under an Individual Patient Expanded Access IND, was to continue for six months to evaluate routine safety, tolerability, and neurological behaviors. The study also examined microglial activation, by positron emission tomography (PET), immunological and neurodegenerative markers to assess clinical responses following the dosing regimen

On March 10, 2022, the Company reported positive clinical data in the first SPMS EA patient following completion of six months of treatment with intranasally administered foralumab, at the Brigham and Women’s Hospital (BWH), Harvard University, Boston, MA. In addition to being well-tolerated, both biological and clinical improvements were seen in this patient using Tiziana’s novel immunotherapy technology, which, importantly effected immunomodulation in the brain using nasal administration.

Foralumab was given to an SPMS patient intranasally into each nostril on a regimen of M-W-F for two weeks followed by one week off therapy for a period of six months. This regimen was well-tolerated with associated beneficial clinical and biomarker changes. Importantly, the PET imaging data indicated inhibition of microglial cell activation observed at 3 months following treatment initiation and was sustained at 6 months after treatment start (see Table 1). The reduction in microglial activation was seen in all parts of brain.

Table 1. Percent Reduction* in Activated Microglial Cells (AMCs) PET Signal After Starting Intranasal Foralumab as Compared to Baseline, in Whole Brain and Selected Brain Regions

	<u>WHOLE BRAIN</u>	<u>CEREBRAL CORTEX</u>	<u>THALAMUS</u>	<u>WHITE MATTER</u>	<u>CEREBELLUM</u>
3 MONTHS	-23%	-23%	-20%	-25%	-22%
6 MONTHS	-38%	-38%	-50%	-36%	-38%

* Percent reduction is based on changes from baseline in SUVR-1, a surrogate index for PET binding potential. SUVR=Standardized Uptake Value Ratio, calculated with reference to a pseudo reference region in cerebral white matter that showed minimal change in PET SUV, across time points.

Consistent with clinical and PET observations, intranasally administered foralumab also downregulated serum levels of pro-inflammatory cytokines, including interferon-gamma (IFN-g), interleukin (IL-18), IL-1 β and IL-6, which are associated with multiple sclerosis pathogenesis and progression. Clinical evaluation showed improvement in Timed 25-Foot Walk Test (T25FW), 9-Hole Peg Test (9HPT) and Symbol Digit Modality Test (SDMT). Other published PET studies have shown an increase in activated microglial cells (AMCs) in patients with secondary progressive MS (SPMS), and the increase in AMCs associated with higher scores on the Expanded Disability Status Scale (EDSS), a widely-used scale to measure disability^{1,2}. Several FDA-approved drugs, such as TYSABRI[®], MAYZENT[®] and ZEPOSIA[®] have been shown to suppress microglial activation and exert neuroprotective effects in the central nervous system (CNS) in animal studies but longitudinal assessment of drug effects on microglial activation in exclusive cohorts of SPMS patients are lacking.

Prior to treatment, this patient had continued to experience worsening disease progression despite several MS therapies, including B cell depletion. The patient's gait and limb strength had been deteriorating over the prior two years. The patient then started on intranasal foralumab, which stabilized his disease course. Tiziana also received FDA authorization to continue treating this patient for an additional 6 months to determine if 12 months of consistent treatment maintains clinical stabilization and provides sustained clinical benefits.

On January 20, 2022, FDA allowed enrollment of a second EA SPMS patient for treatment with intranasal foralumab.

These data were presented in a virtual Key Opinion Leader (KOL) event hosted by Tiziana on March 14th, 2022, entitled "Foralumab Clinical Update in Multiple Sclerosis; A Landmark Study with Intranasal Immunotherapy" featuring four Key Opinion Leaders and a live Q&A session. The company plans to continue treatment of EA SPMS patients at Brigham and Women's Hospital and elsewhere and continue evaluation of foralumab treatment.

On April 5, 2022, Tiziana announced that FDA granted permission to enroll up to eight additional (SPMS) Intermediate Size Patient Population EAP with intranasal foralumab. As part of the original treatment plan, the foralumab dose will remain 50 mcg three times a week (MWF), which is the same dose administered previously to the first two SPMS patients. The dosing regimen in this IND also has a provision for dose escalation up to 100 mcg three times a week (MWF) as an option to improve clinical benefit, if needed.

Data from a Secondary Progressive Multiple Sclerosis patient treated with intranasal foralumab were presented on June 2, 2022 at the consortium of multiple sclerosis centers (CMSC) 2022 annual meeting. Dr. Tanuja Chitnis, MD, Professor of Neurology and the Principal investigator of the clinical study at the at the Brigham and Women's Hospital (BWH), Boston, MA., presented a poster discussing clinical data from a patient with SPMS, who was treated with intranasal foralumab for six months.

On June 8, 2022, Tiziana announced positive clinical results for the second patient (EA2) in the non-active SPMS Expanded Access (EA) Program following three months of dosing with intranasal foralumab. These results confirm the previously reported data, from the first non-active SPMS patient (EA1) that after three months of treatment, intranasal foralumab was well-tolerated and improved clinical and PET imaging analyses. The second patient was diagnosed with SPMS in 2014. Since then, the disease has been progressive, resulting in an accumulation of disability. Patient EA2 started ocrelizumab in 2018 and stopped this treatment in 2021. During this time EA2's non-active SPMS progressed as measured by EDSS worsening from 3.5 in 2018 to 6.0 in 2021. At this point in time EA2 needed a cane to walk 100 meters. Patient EA2 was subsequently enrolled in the intranasal foralumab expanded access program. On September 2022, 8 months after starting treatment with intranasal foralumab, EA2 was able to walk 100 meters without a cane or need to rest. This improved the EDSS from 6.0 to 5.5. EA2's pyramidal score remained stable during this time. In December 2022, 11 months after starting treatment with intranasal foralumab, EA2 was able to walk 200 meters without a cane or need to rest, resulting in further improvement in EDSS from 5.5 to 5.0. EA2's pyramidal score continued to remain stable. Lastly preliminary reading of EA2's 11-month PET Scan (December 2022) demonstrated improvement in microglial activation over baseline.

On September 20, 2022, Tiziana announced that the second patient (“EA2”) with non-active secondary progressive multiple sclerosis (SPMS) receiving intranasal foralumab had shown additional clinical improvements as measured by the Expanded Disability Status Scale (EDSS), a standard clinical assessment.

On October 12, 2022, Tiziana announced that it planned to submit an Investigational New Drug Application (IND) for a Phase 1 Trial of intranasal foralumab in Alzheimer’s disease patients after receiving an affirmative written response from the FDA on a Pre-Investigational New Drug Application (PIND). Tiziana plans on filing the IND for Alzheimer’s disease by the third quarter of 2023 upon the completion of requested toxicology studies, then starting its Phase 1 program by the end of 2023.

On November 2, 2022, Tiziana announced the completion of enrollment of the first patient cohort in its Intermediate Size Patient Population Expanded Access Program to evaluate foralumab in non-active SPMS patients.

On November 10, 2022, Tiziana announced its near-term focus on developing intranasal foralumab for inflammatory diseases of the Central Nervous System (CNS) such as non-active SPMS, Alzheimer’s disease and amyotrophic lateral sclerosis (ALS).

On November 23, 2022, Tiziana announced publication of a scientific article in the peer-reviewed journal *Frontiers in Immunology* entitled “**Nasal administration of anti-CD3 monoclonal antibody modulates effector CD8+ T cell function and induces a regulatory response in T cells in human subjects**”. The study was completed by researchers at the Brigham and Womens Hospital (BWH) and Harvard Medical School. The goal of the study was to assess safety and the immune effects of an entirely human, previously uncharacterized nasal anti-CD3 mAb (foralumab) in humans and its *in vitro* stimulatory properties. The findings support Tiziana’s intranasal foralumab platform as a new modality for the treatment of autoimmune and CNS diseases.

On January 3, 2023, Tiziana announced that the second patient (“EA2”) with na-SPMS receiving intranasal foralumab exhibited additional clinical improvements since their last reported improvement in September 2022. The improvements were measured by EDSS. Before foralumab treatment, EA2’s non-active SPMS disability had progressed and EDSS worsened from 3.5 in 2018 to 6.0 in 2021 despite ocrelizumab therapy. Ocrelizumab was discontinued in 2021. At this point, EA2 required a cane to walk 100 meters. EA2 was subsequently enrolled in the intranasal foralumab Expanded Access program in January 2022. In September 2022, 8 months after starting treatment with nasal foralumab, EA2 was able to walk 100 meters without a cane. EDSS score improved from 6.0 to 5.5. EA2’s pyramidal score remained stable during this time. In December 2022, 11 months after starting treatment with intranasal foralumab, EA2 was able to walk 200 meters without a cane, resulting in an even greater improvement in EDSS; with EDSS falling from a score of 5.5 to 5.0. EA2’s pyramidal score continued to remain stable.

On March 8, 2023, Tiziana announced a publication in the preeminent¹ journal, *Proceedings of the National Academy of Sciences* (PNAS), that illustrates the immunological basis of the mechanism of action (MoA) for intranasal foralumab.

On March 28, 2023, Tiziana announced it has received feedback based on the U.S. Food and Drug Administration (FDA) Type C meeting minutes related to the Phase 2 clinical trial of intranasal foralumab in patients with na-SPMS. Tiziana plans to accept the FDA’s recommendations and intends to start a Phase 2 study in the third quarter of 2023.

On April 4, 2023, Tiziana announced pre-clinical data on the effects of intranasal anti-CD3 monoclonal antibody in a model of intracerebral hemorrhage (hemorrhagic stroke) demonstrating a behavioral outcome improvement at one month. The data showed that modulation of neuroinflammation by induction of FoxP3+ Tregs appeared to have beneficial effect in intracerebral hemorrhage. Dr. Saef Izzy presented this data from the podium on April 23, 2023 at the Neurocritical Care Scientific Platform Session at the prestigious Annual American Academy of Neurology (AAN) conference in Boston, MA.

On April 13, 2023, Tiziana announced its plans to investigate intranasal foralumab for the treatment of Long COVID. The work is supported by foralumab's well-established role in de-activating microglia cells, a key component in the pathogenesis of this disease. The company intends to enter into a Phase 2a, placebo-controlled trial following positive feedback from the FDA.

On April 20, 2023, Tiziana announced its plan to submit an IND for intranasal foralumab in patients with mild to moderate Alzheimer's Disease in Q2 2023. Tiziana is also seeking \$3,000,000 in non-dilutive funding from a prestigious Alzheimer's foundation to support the Phase 2a trial. It is expected that this funding application will receive a response in Q3 2023.

On June 5, 2023, Tiziana announced 3-month PET scan results from the first patient cohort in its Intermediate Size Patient Population Expanded Access Program. Data showed a reduction in microglial activation in 3 out of 4 patients confirming that previously reported in the first two EA patients. Overall, 5 of the 6 na-SPMS patients treated with intranasal foralumab in its Expanded Access program have exhibited a reduction in microglial activation.

On June 5, 2023, Tiziana announced 3-month PET scan results from the first patient cohort in its Intermediate Size Patient Population Expanded Access Program. Data showed a reduction in microglial activation in 3 out of 4 patients confirming that previously reported in the first two EA patients. Overall, 5 of the 6 na-SPMS patients treated with intranasal foralumab in its Expanded Access program have exhibited a reduction in microglial activation.

On August 15, 2023, Tiziana announced that the U.S. Food and Drug Administration (FDA) has cleared the Investigational New Drug (IND) application for intranasal foralumab to be studied in Alzheimer's disease. The clinical trial will be overseen by Brigham and Women's Hospital.

On August 24, 2023, Tiziana announced an oral presentation by Howard Weiner, MD entitled "Nasal anti-CD3 mAb induces Tregs that dampen microglial activation and treat neuroinflammatory diseases including MS, AD and ALS" at the 16th International Society of Neuroimmunology (ISNI) Congress in Quebec City, Canada, held on August 21-24, 2023.

On September 6, 2023, Tiziana announced acceptance of a publication entitled, "Nasal Administration of anti-CD3 monoclonal antibody (mAb) ameliorates disease in a mouse model of Alzheimer's disease", in the journal, *Proceedings of the National Academy of Sciences* (PNAS), validating foralumab's mechanism of action (MOA) as a potential treatment for Alzheimer's disease (AD), a difficult-to-treat neuroinflammatory disease. This was the second publication pertaining to intranasal administration of anti-CD3 monoclonal antibody in 2023 to be published in PNAS. This study shows that intranasal anti-CD3 ameliorates disease in a rodent model of AD by targeting microglial activation in the brain and brain gene expression independent of affecting amyloid beta deposition. These studies identify a novel approach to treat Alzheimer's disease.

On September 26, 2023, Tiziana announced initiation of the Phase 2a multicenter clinical trial for treatment of non-active Secondary Progressive Multiple Sclerosis (na-SPMS) patients with intranasal foralumab. Tiziana announced that it held an Investigator's Meeting with principal investigators at Brigham and Women's Hospital to begin site initiation for the clinical trial. In total, six to ten new clinical trial sites will be recruited.

On October 11, 2023, Tiziana announced a late breaking poster entitled, "Treatment Of Six Non-Active Secondary Progressive MS With Nasal Anti-CD3 Monoclonal Antibody (Foralumab): Safety, Biomarker, And Disability Outcomes", that was presented at the 39th Congress of the European Committee for Treatment and Research of Multiple Sclerosis (ECTRIMS) held in Milan, Italy, October 11-13, 2023.

On October 13, 2023, Tiziana announced that a reduction in activated microglia, as seen in six-month Positron Emission Tomography (PET) scans, was observed in a total of five of the six patients with non-active secondary-progressive multiple sclerosis treated with intranasal foralumab in its Expanded Access Program (EAP). Activated microglia play a prominent role in the pathogenesis of neuroinflammatory and neurodegenerative diseases including multiple sclerosis, Alzheimer’s disease, and amyotrophic lateral sclerosis, or ALS.

On October 16, 2023, Tiziana announced six-month data showing positive clinical improvements related to Modified Fatigue Impact Scale (MFIS) scores and similar important clinical measures of physical function in foralumab-treated, non-active Secondary Progressive Multiple Sclerosis patients participating in an Expanded Access (EA) Program. This follows on from previously announced positive six-month PET scan data which was presented atECTRIMS 2023.

The findings, which are summarized in Table 1 below, show broad-based six-month improvements across various key measures for multiple sclerosis. Secondary progressive multiple sclerosis is hallmarked by an increase of disability over time. The table below shows a stabilization or an improvement in physical function of the various clinical measures over a six-month period. Various degrees of improvement were also observed in the Expanded Disability Status Scale (EDSS), Timed 25-Foot Walk Test (T25FW), pyramidal function scores and NeuroQoL Fatigue scores in a disease state that typically shows a decline in function over time.

Table 1. Six Month Test Scores in Expanded Access na-SPMS Patients

EA Patient	EDSS	Pyramidal score	T25FW	MFIS
EA1	—	↓	—	—
EA2	↓	—	↓	↓
EA3	—	—	↓	—
EA4	↓	—	—	↓
EA5	—	↓	↓	↓
EA6	—	—	—	↓

— Denotes stabilization
 ↓ Denotes improvement

Fatigue, as measured above in MFIS, refers to an overwhelming sense of physical, mental, and emotional exhaustion that is disproportionate to the level of activity or effort exerted. It is a major, common, and often debilitating symptom experienced by many individuals with MS. It differs from the typical tiredness that everyone experiences from time to time. In the context of MS, it is called ‘primary fatigue’ and is a direct result of damage to the central nervous system. This kind of fatigue can significantly impact a person’s daily life and functioning.

On October 18, 2023, Tiziana announced that the U.S. Food and Drug Administration (FDA) had allowed multiple sclerosis patients to take home and self-administer Intranasal Foralumab. Delivery Device Training materials have been developed and refined in collaboration with the FDA, and patients trained in the use of the nasal device in accordance with these materials. Patients in the Expanded Access program that have been exposed to intranasal foralumab for more than 1 year have demonstrated acceptable tolerability and safety. At-Home Dosing is likely to Improve patient compliance to treatment and outcomes.

On November 20, 2023, Tiziana announced that the company had successfully enrolled and dosed four new patients with non-active secondary progressive multiple sclerosis in the Brigham and Women's Hospital's Expanded Access program. A total of ten patients are now being followed in the EA Program.

On December 19, 2023, Tiziana announced "first patient dosed" in its Phase 2a study comparing two doses of intranasal foralumab and placebo in patients with non-active secondary-progressive multiple sclerosis. Six investigational centers have been recruited for this double-blind, placebo-controlled trial, with up to 18 patients per treatment arm. The primary endpoint of the trial will be the change in microglial activation based on PET scans. Clinical evaluations include the Expanded Disability Status Scale (EDSS), QoL assessments, and the Modified Fatigue Impact Scale (MFIS), which assess parameters that are essential to a patient's everyday life. Novel immuno-biomarkers will be measured also and assessed for predictive relevance. Central review of PET scans and images is an integral component of this study.

On January 5, 2024, Tiziana announced the filing of a new patent application relating to composition and methods for combining GLP-1ra and foralumab, a fully human anti-CD3 antibody, to achieve further reductions in systemic and vascular inflammation associated with Type 2 Diabetes (T2D) and also in a separate population of patients with non T2D obesity.

On January 8, 2024, Tiziana announced that positive findings had been seen in a total of six out of eight Intermediate Size Patient Population Expanded Access (EA) patients. These patients had shown improvements in fatigue scores measured by the Modified Fatigue Impact Scale (MFIS). PET scan findings showing a reduction in microglial activation were also seen in the six patients with MFIS score improvement at the three-month evaluation period.

On April 18, 2024, Tiziana announced a platform presentation titled, "Treatment of PIRA with Nasal Foralumab Dampens Microglial Activation and Stabilizes Clinical Progression in Non-Active Secondary Progressive MS" at the Annual Meeting of the American Academy of Neurology in Denver, Colorado. The presentation included new, encouraging quantitative imaging data from foralumab's intermediate-size patient population Expanded Access Program. In the presentation, foralumab, a fully human anti-CD3 monoclonal-antibody showed the attenuation of microglial activation in patients with non-active secondary progressive multiple sclerosis (na-SPMS) based on positron emission tomography (PET) imaging and disease stabilization in na-SPMS patients with disease progression independent of relapse (PIRA).

The oral presentation, delivered by Tarun Singhal, M.B.B.S., M.D., Director of the PET Imaging Program in Neurologic Diseases at Brigham and Women's Hospital, a founding member of Mass General Brigham Healthcare System, and Associate Professor of Neurology at Harvard Medical School, assessed the effect of intranasal foralumab on microglial activation in na-SPMS patients with PIRA as measured by positron emission tomography (PET) imaging via [F-18]PBR06-PET, a novel, long-half-life ligand used in PET scanning. The study is designed to be open-label and part of the Expanded-Access Program evaluating foralumab in na-SPMS patients that is currently underway.

Five of six patients (83%, 95% confidence interval 44%-97%) showed a qualitative reduction on [F-18]PBR06-PET in multiple brain regions after both 3 and 6 months of nasal foralumab treatment, which implies that there is in vivo evidence for reduced microglial activation and neuroinflammation following treatment with nasal foralumab. White matter z-scores (a measure of abnormally increased neuroinflammation) were reduced by 26-36% in the foralumab-treated group at 3 and 6 months, which was >4-5-times higher compared to 6% variability in the test-retest group. Clinically, foralumab-treated patients demonstrated a stable EDSS and improvement in the Modified Fatigue Impact Scale (MFIS). Reduction in fatigue as measured by the MFIS is clinically relevant to the lives of na-SPMS patients and will be a key monitoring parameter moving forward.

Nasal foralumab attenuated microglial activation in na-SPMS patients with PIRA at 3 and 6 months, as evaluated by [F-18]PBR06-PET and was associated with clinical symptom stability. Based on these positive results, a double-blind, placebo-controlled, dose-ranging study of nasal-foralumab in na-SPMS with [F-18]PBR06-PET as a primary endpoint with measures of EDSS and MFIS is underway. This trial (NCT06292923) is important because if the potential to slow disease progression is demonstrated this would align with early treatment intervention.

On April 22, 2024, Tiziana announced additional positive clinical results from its intermediate sized Expanded Access Program (EAP) for non-active secondary progressive multiple sclerosis (na-SPMS) patients. The data demonstrated multiple improvements in foralumab-treated patients, with 70% showing an improvement in fatigue after six months of follow-up. Fatigue is a debilitating symptom for many MS patients and is measured by the Modified Fatigue Impact Scale (MFIS).

All patients in the na-SPMS study had previously clinically progressed on ocrelizumab. They subsequently were enrolled in our EA program and received 6-months of intranasal foralumab. All 10 foralumab-treated patients stabilized or improved in key clinical measures, and seven showed clinical meaningful improvement in their fatigue at six months as measured by the MFIS. Other key clinical outcome measures included the Expanded Disability Status Scale (EDSS), Timed 25-Foot Walk Test (T25WT) and Pyramidal Scores in a disease state that typically shows a decline in function over time.

The findings, which are summarized in the table below, show broad-based six-month improvements across various key measures for multiple sclerosis. Secondary progressive multiple sclerosis is hallmarked by an increase of disability over time. The table below shows a stabilization or an improvement in physical function of the various clinical measures over a six-month period.

	EDSS	Pyramidal score	T25FW	MFIS
EA1	—	↓	—	—
EA2	↓	—	↓	↓
EA3	—	—	↓	—
EA4	↓	—	—	↓
EA5	—	↓	↓	↓
EA6	—	—	—	↓
EA7	—	—	↓	↓
EA8	↓	↓	—	↓
EA9	↓	—	—	↓
EA10	—	↓	—	—

— Denotes stabilization

↓ Denotes improvement

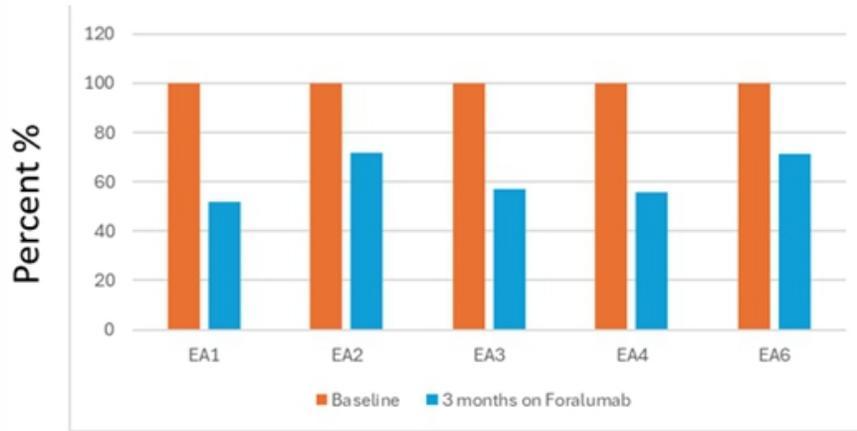
On April 23, 2024, Tiziana also announced that the U.S. Food and Drug Administration (FDA) had allowed its intranasal foralumab non-active Secondary Progressive Multiple Sclerosis (na-SPMS) Expanded Access (EA) Program to expand from 10 patients to a total of 30 patients.

Up until April, of the 10 participating patients, two patients had been dosed for more than one year and eight additional patients had been dosed for six months, all without serious side effects. All patients had either stabilized or improved on treatment with foralumab, and no patients have declined in key clinical measures. Additionally, 70% of these patients had seen a measurable improvement in fatigue. These data were the first to combine PET imaging with a novel ligand, immune-biomarkers, clinical measures and comprehensive safety data endpoints in patients receiving long-term intranasal foralumab. Patients not eligible for the Phase 2a trial may now be considered for this expanded EA program.

On April 25, 2024, Tiziana also announced for the first time, quantitative data showing improvement in White Matter Z-scores measured from PET images taken at 3 months in nasal foralumab treated patients with non-active secondary progressive multiple sclerosis (na-SPMS). White Matter Z-scores are a statistical measure used in neuroimaging studies to assess the integrity or abnormalities in structures of the brain.

Tarun Singhal, MBBS, M.D., Director of PET Imaging Program in Neurologic Diseases at Brigham and Women’s Hospital, a founding member of Mass General Brigham Healthcare System, and Associate Professor of Neurology at Harvard Medical School, presented at the American Academy of Neurology annual meeting, for the first time, quantitative [F18]PBR06-PET data showing the dampening of microglial activation, an indicator of brain inflammation, in patients with non-active Secondary Progressive Multiple Sclerosis (na-SPMS) receiving intranasal foralumab. These data came from the open-label intermediate-sized patient population Expanded Access (ISPPEA) program. We calculated White Matter Z-scores to measure the effect of intranasal foralumab on microglial activation at baseline and then after foralumab treatment for three months. We saw reductions of 28% to 48%, indicating improvement in 5 out of 6 patients, and a 36% median reduction in White Matter Z-scores compared to baseline (see Figure 1). A peer-reviewed journal has published our recent work with newer [F18]PBR06-PET quantitation approaches.https://journals.lww.com/nuclearmed/fulltext/9900/glia_activity_load_on_pet_reveals_persistent.1077.aspx

3-Month Change in White Matter Z-Scores (ON NASAL FORALUMAB)



* EA5 showed a worsening in their White Matter Z-Score at 3-months during a pseudoexacerbation with trigeminal neuralgia.

On June 6, 2024, Tiziana announced the qualitative results for all 10 non-active Secondary Progressive Multiple Sclerosis (na-SPMS) patients enrolled in the intermediate-size patient population Expanded Access (EA) Program receiving foralumab for at least six months. Qualitative improvements in PET imaging were seen in 80% of non-active Secondary Progressive Multiple Sclerosis (na-SPMS) Expanded Access patients receiving intranasal foralumab for at least 6-months.

The Company plans to continue treatment of EA SPMS patients at Brigham and Women’s Hospital and continue evaluation of foralumab treatment.

Phase 2a Clinical Trial of Nasally-Administered Foralumab for Treatment of Secondary Progressive Multiple Sclerosis

A multisite Phase 2a study evaluating intranasal foralumab for treatment of SPMS was initiated on September 26, 2023 by holding the first investigator's meeting. This is a double-blinded, placebo-controlled study of two (2) doses of foralumab nasal solution (50 µg and 100 µg) delivered intranasally compared to placebo, administered in non-active secondary progressive MS patients who are continuing to deteriorate despite standard of care therapy. The first patient was dosed on December 19, 2023. Topline results are anticipated by Q4 2025.

On July 24, 2024, Tiziana announced the U.S. Food and Drug Administration (FDA) had granted Fast Track designation for its intranasal formulation of foralumab, a fully human anti-CD3 monoclonal antibody, for the treatment of non-active Secondary Progressive Multiple Sclerosis (na-SPMS). The Fast Track designation is a significant milestone, providing an expedited review process and increased interaction with the FDA. This designation is intended to facilitate the development of and expedite the review of drugs that treat serious conditions and fill an unmet medical need. Only four Fast Track designations have been granted in 2024 by FDA's Center for Drug Evaluation and Research as of March 31, 2024.

On December 4, 2024, Tiziana announced the expansion of our Phase 2 clinical trial evaluating intranasal foralumab for non-active secondary progressive multiple sclerosis (SPMS). The trial sites include esteemed institutions across the Northeast of the United States. The additional trial sites include: Yale University, Johns Hopkins University, Cornell University, University at Buffalo (SUNY), University of Massachusetts (UMass), and Thomas Jefferson University. The Company Sponsored Investigators' Meeting was held on December 13, 2024.

Alzheimer's Disease

Emerging evidence suggests that dysregulation of neuroinflammation, particularly that orchestrated by microglia, plays a significant role in the pathogenesis of Alzheimer's disease (AD). Danger signals including dead neurons, dystrophic axons, phosphorylated tau, and amyloid plaques alter the functional phenotype of microglia from a homeostatic (M0) to a neurodegenerative or disease-associated phenotype, which in turn drives neuroinflammation and promotes disease. Thus, therapies that target microglia activation constitute a unique approach for treating AD. Here, we report that nasally administered anti-CD3 monoclonal antibody in the 3xTg AD mouse model reduced microglial activation and improved cognition independent of amyloid beta deposition. In addition, gene expression analysis demonstrated decreased oxidative stress, increased axogenesis and synaptic organization, and metabolic changes in the hippocampus and cortex of nasal anti-CD3 treated animals. The beneficial effect of nasal anti-CD3 was associated with the accumulation of T cells in the brain where they were in close contact with microglial cells. Taken together, our findings identify nasal anti-CD3 as a unique form of immunotherapy to treat.

Alzheimer's disease independent of amyloid beta targeting.

Alzheimer's disease (AD) is a neurodegenerative disease characterized by amyloid plaques, neurofibrillary tangles, and microglial activation. Therapies targeting amyloid beta have shown positive effects in subjects with AD. Nasal anti-CD3 has been shown to treat animals with a progressive form of experimental autoimmune encephalomyelitis, a model for multiple sclerosis, by inducing regulatory T cells that dampen microglial inflammation in the brain. Here, we show that nasal anti-CD3 also ameliorates disease in a murine model of AD by targeting microglial activation in the brain independent of amyloid beta deposition. These studies identify a unique approach to treat Alzheimer's disease that could also be given in combination with anti-amyloid therapy. Reference: <https://www.pnas.org/doi/full/10.1073/pnas.2309221120>

ARIA

Preclinical studies suggest possible benefit in preventing and treating Amyloid-related imaging abnormalities (ARIA). Amyloid refers to beta-amyloid, a protein that forms plaques in the brains of individuals with Alzheimer's disease. ARIA refers to abnormalities that can be detected through neuroimaging techniques, such as magnetic resonance imaging (MRI) or positron emission tomography (PET). These abnormalities are associated with the accumulation of amyloid in the brain.

There are two main types of ARIA:

ARIA-E (Edema): This type is characterized by the presence of fluid (edema) in the brain, and it is a potential side effect associated with some experimental drugs that target beta-amyloid. ARIA-E is monitored closely in clinical trials, as it may require adjustments to the dosage or discontinuation of the drug.

ARIA-H (Hemorrhage): This type involves the presence of microhemorrhages or small bleeds in the brain. Like ARIA-E, ARIA-H is closely monitored in clinical trials.

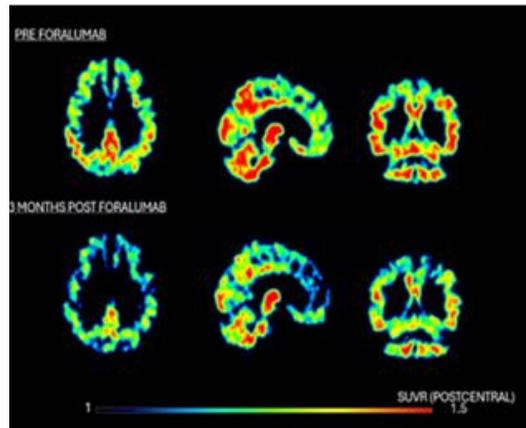
These imaging abnormalities are important considerations in the development of drugs aimed at reducing or removing beta-amyloid in the brain as a potential treatment for Alzheimer's disease. Researchers and clinicians carefully evaluate the occurrence of ARIA to better understand the safety and efficacy of experimental treatments.

Treatment of Expanded Access Moderate Alzheimer's Patient at Brigham and Women's Hospital (Boston) with Nasally-Administered Foralumab

In June 2024, Tiziana announced that the U.S. Food and Drug Administration (FDA) had allowed intranasal foralumab to be used under an Expanded Access (EA) IND in its first patient with moderate Alzheimer's disease. Expanded access IND's provide a pathway for patients to gain access to investigational drugs, biologics, and medical devices used to diagnose, monitor, or treat patients with serious diseases or conditions for which there are no comparable or satisfactory therapy options available outside of clinical trials.

On December 17, 2024, Tiziana announced a significant milestone in our clinical development program for Alzheimer's disease. We successfully dosed the first patient with moderate Alzheimer's disease using intranasal foralumab at Brigham and Women's Hospital in Boston, Massachusetts following on from their baseline PET scan.

Tiziana recently received the results of the first patient's PET scan showing a marked reduction in microglia activation associated with neuroinflammation in a patient suffering from moderate Alzheimer's disease following a three month treatment with intranasal foralumab under the expanded access program. The microglial TSPO PET scan revealed a significant decrease in microglia activation, a key indicator of neuroinflammation associated with Alzheimer's disease progression.



In the figure above, we see a decrease in the PET signal after foralumab treatment (bottom row) as compared to pre-treatment baseline (top-row). Adapted from Singhal T et al. Clinical Nuclear Medicine 2025 (in press).

The above data was presented by Howard Weiner at the 2025 AD/PD Conference in Vienna and is featured in the AlzForum. The complete report is contained in Singhal et al, "Dampening of microglial activation with nasal foralumab administration in moderate Alzheimer's Disease dementia", *Clinical Nuclear Medicine* 2025, in press.

Phase 2a Clinical Trial of Nasally-Administered Foralumab for Treatment of Moderate Alzheimer's

In August 2023, Tiziana, today announced that the U.S. Food and Drug Administration (FDA) had cleared the Investigational New Drug (IND) application for intranasal foralumab to be studied in Alzheimer's disease. A Phase 2 clinical trial is planned to commence in 2025.

Amyotrophic Lateral Sclerosis (ALS)

Phase 2a Clinical Trial of Nasally-Administered Foralumab for Treatment ALS

On November 19, 2024, Tiziana announced that its grant application to the ALS Association has been approved for funding. The grant is awarded as part of the Hoffman ALS Clinical Trial Awards Program and is titled "Modulation of ALS neuroinflammation by nasal anti-CD3 monoclonal Antibody". The Association's grant will fund a 20-patient clinical trial of two doses of Tiziana's novel and patented therapeutic candidate, intranasal foralumab, aimed at evaluating the safety and early-stage parameters of disease improvement in Amyotrophic Lateral Sclerosis (ALS), also known as Lou Gehrig's disease.

ALS is a progressive neurodegenerative disease that affects nerve cells in the brain and the spinal cord, ultimately leading to muscle weakness and paralysis. ALS is an orphan disease, but its clinical course can be rapid with marked disability even at an early stage. Over the course of the disease, people lose the ability to move, to speak, and eventually, to breathe. The disease is always fatal, usually within five years of diagnosis. Few treatment options exist, resulting in a high unmet need for new therapies to address functional deficits and disease progression.

Tiziana has filed an Investigational New Drug (IND) application to the U.S. Food and Drug Administration (FDA) for a phase 2 clinical trial in ALS. Tiziana has recently received a clinical hold letter from the FDA which was primarily focused on amendments to the proposed ALS study trial design, including the addition of a placebo arm. Tiziana welcomes these suggestions, and a response will be submitted in the forthcoming weeks. Upon FDA clearance of the IND application, Tiziana plans to commence a 20-patient placebo controlled clinical trial with a placebo arm and two dose ranging arms of Tiziana's novel and patented therapeutic candidate, intranasal foralumab, aimed at evaluating the safety and early-stage parameters of disease improvement in Amyotrophic Lateral Sclerosis (ALS). The company remains dedicated to delivering innovative solutions that can potentially improve outcomes and quality of life for ALS patients worldwide.

Pre clinical results of Nasally-Administered Foralumab in combination with semaglutide

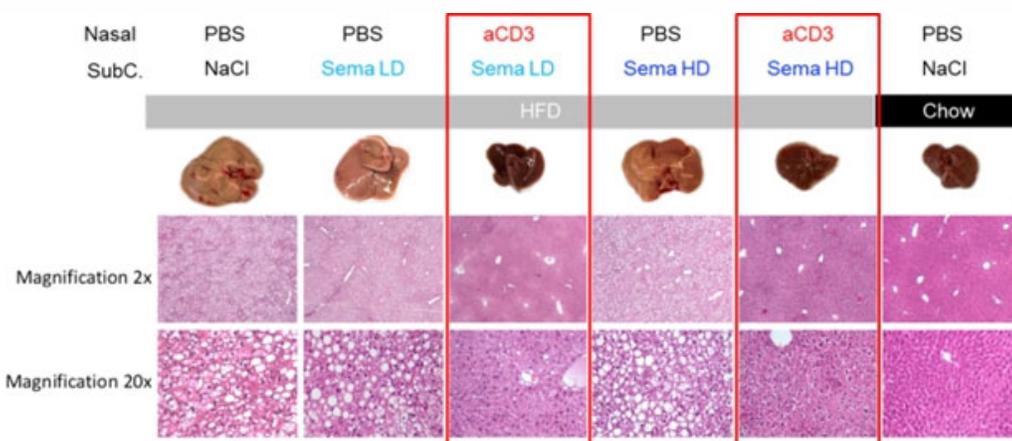
On January 5, 2024, Tiziana announced the filing of a new patent application relating to composition and methods for combining GLP-1ra and foralumab, a fully human anti-CD3 antibody, to achieve further reductions in systemic and vascular inflammation associated with Type 2 Diabetes (T2D) and also in a separate population of patients with non T2D obesity.

On October 30, 2024, Tiziana announced positive results demonstrating the anti-inflammatory potential of our anti-CD3 antibody (foralumab) in combination with semaglutide, a GLP-1 agonist marketed by Novo Nordisk (NYSE: NVO) under the brand names Ozempic and Wegovy. The data show that the combination of nasal anti-CD3 plus semaglutide improves liver homeostasis and reduces inflammation in models of diet-induced obesity (DIO), providing a potential novel approach to combat obesity-related inflammation, and liver inflammation and dysfunction.

Key Points:

- Nasal anti-CD3 in combination with semaglutide demonstrates synergistic effects in promoting liver homeostasis in preclinical models of diet-induced obesity.
- The combination significantly reduces inflammation markers, a key factor in obesity-related metabolic disorders.

Figure: Nasal anti-CD3 with Low and High Dose semaglutide promote Liver Homeostasis in DIO



In the figure above, the far-right column shows the explanted liver and histology of that liver at two magnifications for a mouse fed a low-fat chow “normal” diet (“lean mouse”). The dark and smaller liver on the right is a typical healthy liver from a lean mouse. All the mice under the gray bar in the figure were fed a high fat chow (“HFD”) resulting in diet induced obesity. As the columns outlined by red boxes demonstrate, administration of the combination of nasal anti-CD3 and semaglutide had livers that looked more like the liver from the lean mouse. The HFD mice given low dose or high dose semaglutide alone had enlarged fatty livers that were more similar to the HFD control.

In humans, nasal foralumab modulates immune responses by inducing regulatory-type T cells. semaglutide is an effective therapy for obesity and Type 2 diabetes, known for its role in enhancing insulin sensitivity and reducing body weight.

This study, conducted by Dr Howard Weiner and Selma Boulouar PhD, and a research team at Brigham and Women’s Hospital, Boston, Massachusetts, demonstrates that nasal anti-CD3 in combination with Semaglutide, helps restore liver homeostasis in diet induced obesity models where liver dysfunction and inflammation are prominent. The combination therapy led to marked reductions in pro-inflammatory cytokines and significant improvements in liver markers associated with metabolic regulation. This suggests a dual benefit in both managing obesity and preventing its associated inflammation-related complications.

We scaled back our focus on Milciclib in 2024, for which we had in-licensed the intellectual property from Nerviano Medical Sciences S.r.l., or Nerviano, in January 2015, as a potential treatment for pan KRAS mutations in NSCLC patients in order to focus our resources on Foralumab.

Anti-IL6R Fully Human mAb TZLS-501 (formerly known as NI-1201)

TZLS-501 is a fully human mAb targeting the IL-6R. We licensed the intellectual property from Novimmune in January 2017. This fully human mAb has a novel mechanism of action, binding to both the membrane-bound and soluble forms of the IL-6R and depleting circulating levels of the IL-6 in the blood. An excessive production of IL-6 is regarded as a key driver of chronic inflammation, associated with autoimmune diseases such as multiple myeloma, oncology indications and rheumatoid arthritis, and we believe that TZLS-501 may have potential therapeutic value for these indications.

In preclinical studies, TZLS-501 demonstrated the potential for overcoming the limitations of other IL-6 blocking pathway drugs. Compared to tocilizumab and sarilumab, while binding to the membrane-bound IL-6R complex, TZLS-501 has been observed to have a higher affinity for the soluble IL-6 receptor from antibody binding studies conducted in cell culture. TZLS-501 also demonstrated the potential to block or reduce IL-6 signaling in mouse models of inflammation. The soluble form of IL-6 has been implicated to have a larger role in disease progression compared to the membrane-bound form (Kallen, K.J. (2002). "The role of transsignaling via the agonistic soluble IL-6 receptor in human diseases." *Biochimica et Biophysica Acta*. 1592 (3): 323–343.).

Originally TZLS-501 clinical development was intended for treatment of "cytokine storm"-induced lung damage in COVID-19 patients by aerosol delivery to lung, however, with the increasing number of effective therapies and vaccines now available for COVID patients the Company decided to refocus TZLS-501 development for SSc-ILD indication.

On April 9, 2020 The Company announced that it had developed investigational new technology to treat COVID-19 infections, consisting of direct delivery of anti-IL-6 receptor (anti-IL-6R) monoclonal antibodies (mAbs) into the lungs using a handheld inhaler or nebulizer for treatment of patients infected with COVID-19 (SARS-CoV-2) coronavirus. On June 29, 2020 the Company announced that it was advancing GMP manufacturing of TZLS-501 with STC Biologics concurrently with the development of inhalation technology using a hand-held nebulizer with Sciarra Laboratories and safety toxicology studies in Cynomolgus monkeys with ITR Canada Laboratories. GMP batches were initiated in January 2021 and completed in March 2021. Safety inhalation toxicology studies were initiated in November 2020 and completed in March 2021. Technological assessment of nebulizers for inhalation treatment of patients was initiated in September 2020 and completed in February 2021.

An additional 250L cGMP batch of TZLS-501 drug substance was manufactured using an improved downstream process to support future development activities. An IND for a Phase 1 Clinical Trial in Healthy Subjects for treatment of interstitial lung disease associated with systemic sclerosis (SSc ILD) was filed in December 2021. This program has been temporarily paused to pursue the Company's short-term focus on clinical development of intranasal foralumab administration for treatment of SPMS patients.

Competition

The biotechnology and pharmaceutical industries are characterized by rapidly changing technologies, significant competition and a strong emphasis on intellectual property. We face substantial competition from many different sources, including large and specialty pharmaceutical and biotechnology companies, academic research institutions, government agencies and public and private research institutions.

We are aware of a number of companies focused on developing therapies in various indications. Any advances made by a competitor may be used to develop therapies that could compete against any of our product candidates.

For our specific product candidates, the main competitors include:

- We believe that Foralumab is currently the only fully human anti-CD3 mAb in clinical development for treatment of Crohn's disease, progressive MS and other autoimmune and inflammatory diseases.

Many of our potential competitors, alone or with their strategic partners, have substantially greater financial, technical and other resources than we do, such as larger R&D, clinical, marketing and manufacturing organizations. Mergers and acquisitions in the biotechnology and pharmaceutical industries may result in even more resources being concentrated among a smaller number of competitors. Our commercial opportunity could be reduced or eliminated if competitors develop and commercialize products that are safer, more effective, have fewer or less severe side effects, are more convenient or are less expensive than any products that we may develop. Competitors also may obtain FDA or other regulatory approval for their products more rapidly than we may obtain approval for ours, which could result in our competitors establishing a strong market position before we are able to enter the market. Additionally, technologies developed by our competitors may render our potential product candidates uneconomical or obsolete, and we may not be successful in marketing our product candidates against competitors.

Intellectual Property

We strive to protect and enhance the proprietary technologies, inventions and improvements that we believe are important to our business, including seeking, maintaining and defending patent rights, whether developed internally or licensed from third parties. Our policy is to seek to protect our proprietary position by, among other methods, pursuing and obtaining patent protection in the United States and in jurisdictions outside of the United States related to our proprietary technology, inventions, improvements, platforms and our product candidates that are important to the development and implementation of our business.

As of April 11, 2025, our intellectual property portfolio was made up as follows:

Family	Subject	Priority	Status	Expires	Jurisdiction
Foralumab TZLS-401	Methods of use (autoimmune or inflammatory diseases and disorders)	2004	Issued	2025	Issued: Australia, Canada, China, Hong Kong, Israel, Japan, Mexico, Norway, Singapore, South Africa, Ukraine, Armenia, Austria, Azerbaijan, Belgium, Belarus, Switzerland, Germany, Denmark, Spain, France, United Kingdom, Ireland, Italy, Kyrgyzstan, Kazakhstan, Luxembourg, Moldova, Netherlands, Norway, Portugal, Russian Federation, Sweden, Tajikistan, and Turkmenistan
	Composition and methods of use	2004	Issued/pending	2025	Issued: Australia, Armenia, Azerbaijan, Belarus, Brazil, Canada, China, Austria, Denmark, France, Germany, Hong Kong, India, Israel, Italy, Japan, Kazakhstan, Kyrgyzstan, Mexico, Moldova, Netherlands, Norway, Republic of Korea, Russian Federation, Singapore, South Africa, Spain, Switzerland, Tajikistan, Turkmenistan, U.S. United Kingdom, and Ukraine; Pending: US.
	Formulations and dosing regimen	2016	Issued/pending	2037	Issued: United States, Europe, Australia, China, Japan, Israel
	Methods of use (CNS disorders)	2017	Pending	2038	Issued: Japan Pending: Canada, Europe, Japan, United States
	Methods of use (CAR-T therapies)	2020	Pending	2041	Pending: United States, Australia, Canada, China, Europe, Israel, Japan

Family	Subject	Priority	Status	Expires	Jurisdiction
Foralumab TZLS-401	Methods of use (coronavirus)	2020	Pending	2041	Pending: United States, Australia, Canada, China, Europe, Israel, Japan, Hong Kong
	Method of administering foralumab by subcutaneous injection	2021	Pending	2042	Pending: United States, Europe
	Nasal formulations of foralumab	2022	Pending	2043	Pending: United States, Australia, Canada, Europe, Japan
	Foralumab in combination with GLP-1 agonists for treatment of obesity	2023	Pending	2044	Pending: PCT
	Foralumab in combination with GLP-1 agonists for treatment of neurological conditions	2024	Pending	2045	Pending: U.S. Provisional
	Foralumab in combination with anti-amyloid therapies	2025	Pending	2046	Pending: U.S. Provisional
	Methods of suppressing microglial activation	2021	Pending	2042	Pending: United States, Australia, Canada, China, Europe, Israel, and Japan

Family	Subject	Priority	Status	Expires	Jurisdiction
Anti IL-6/IL-6R Antibody TZLS-501	Composition of matter and methods of use	2009	Issued	2029	Issued: United States, Austria, Australia, Belgium, Canada, China, Denmark, France, Germany, India, Ireland, Israel, Italy, Japan, Luxembourg, Mexico, Netherlands, Spain, Sweden, Switzerland and United Kingdom
	Compositions of IL-6/IL-6R antibodies and methods of use thereof (coronavirus includes combinations with dactinomycin)	2020	Pending	2041	Pending: United States, Europe, Australia, Canada, China, Israel, Japan

Family	Subject	Priority	Status	Expires	Jurisdiction
Actinomycin D	Use of Actinomycin D in the treatment of acute myeloid leukemia	2015	Issued	2036	United States, Europe, Japan, Australia, Canada
		2016	Issued/pending	2037	United States (2), Australia, Japan (2) Pending: Europe, Canada

We have rights to a patent family that discloses methods of using Foralumab, licensed from NovImmune S.A. (which is further described below). This patent family includes one granted European patent and one granted Eurasian patent. This patent family also includes granted patents in Australia, Canada, China, Hong Kong, Israel, Japan, Mexico, Singapore, and South Africa. The patents in this family will expire in April 2025, excluding any patent term extensions available in several jurisdictions, such as Europe.

We also have rights to a patent family that discloses the Foralumab compound and methods of using the compound also licensed from NovImmune S.A. This patent family comprises four granted U.S. patents, one granted European patent, and one granted Eurasian patent. This patent family also includes granted patents in Australia, Brazil, Canada, China, Hong Kong, India, Israel, Japan, Mexico, Republic of Korea, Singapore, and South Africa. An application is pending in the U.S. The patents in this family will expire in June 2025, excluding any patent term adjustment in the U.S. and patent term extensions available in the U.S. and several other jurisdictions, such as Europe.

We have rights to a patent family that discloses formulations of Foralumab and dosing regimens for treating various disorders. This patent family has an issued patent in the U.S., issued patents in Australia, Europe, China, Israel and Japan, and applications pending in the U.S., Australia, Canada, China, Europe, Israel, Hong Kong, and Japan. The patents in this family will expire in August 2037, excluding any patent term adjustment and patent term extensions available in the U.S. and several other jurisdictions.

We have rights to a patent family that discloses methods of using Foralumab for treating central nervous system (CNS) disorders, licensed from Brigham and Women's Hospital, Inc. (which is further described below). This patent family comprises an issued patent in Japan and has applications pending in Canada, Europe, Japan, and the United States that, if issued as patents, will expire in June 2038, excluding any patent term adjustment and patent term extensions available in the U.S. and several other jurisdictions.

We have rights to a patent family that discloses methods of using Foralumab for microglial activation, which is co-owned with Brigham and Women's Hospital Inc. This patent family has pending applications in the U.S. and in Australia, Canada, China, Europe, Israel, and Japan. The patent applications in this family, if issued as patents, will expire in 2042, excluding any patent term adjustment and patent term extensions available in the U.S. and several other jurisdictions.

We also have rights to a patent family that discloses methods of using Foralumab in the treatment of coronavirus. This family has pending applications in the U.S., Australia, Canada, China, Europe, Hong Kong, Israel and Japan. The patent applications in this family, if issued as patents, will expire in 2041, excluding any patent term adjustment and patent term extensions available in the U.S. and several other jurisdictions.

We also have rights to a patent family that discloses methods of using Foralumab to enhance cell adoptive therapies. This family has pending applications in the U.S., Australia, Canada, China, Europe, Israel and Japan. The patent applications in this family, if issued as patents, will expire in 2041, excluding any patent term adjustment and patent term extensions available in the U.S. and several other jurisdictions.

We also have rights to a patent family that discloses methods of administering Foralumab subcutaneously for the treatment of various diseases. This family has pending applications in the U.S. and Europe. Any patents issued in this family will expire in April 2042, excluding any patent term adjustment and patent term extensions available in the U.S. and several other jurisdictions.

We also have rights to a patent family that discloses nasal formulations of Foralumab for the treatment of various diseases. This patent family has pending applications in the U.S. and in Australia, Canada, Europe, and Japan. Any patents issued in this family will expire in 2043, excluding any patent term adjustment and patent term extensions available in the U.S. and several other jurisdictions.

We have rights to a patent family that discloses compositions and methods of using TZLS-501 to treat various disorders, licensed from NovImmune S.A. This patent family includes six granted U.S. patents, one granted European patent, and granted patents in Australia, Canada, China, India, Israel, Japan, and Mexico. The patents in this family will expire in May 2029, excluding any patent term extensions available in several jurisdictions, such as Europe.

We have rights to a second patent family that discloses methods of using TZLS-501 to treat coronavirus alone and in combination with Actinomycin D. This patent family includes pending applications in the U.S., Australia, Canada, China, Europe, Israel, and Japan. The patent applications in this family, if issued as patents, will expire in March 2041, excluding any patent term extensions available in several jurisdictions.

We also have rights to two patent families related to Actinomycin D (ActD). The first family covers the use of ActD in the treatment of acute myeloid leukemia, and includes granted patents in the U.S., Australia, Canada, Japan, and Europe. The patents in this family will expire in September 2036, excluding any patent term adjustment and patent term extension in the U.S. and similar regulatory extensions available in several other jurisdictions, such as Europe.

The second ActD family covers nanoparticle formulations of ActD and the use of the same in the treatment of acute myeloid leukemia and myelodysplastic syndrome. In this family, there are two granted patents each in the U.S. and Japan, another granted patent in Australia, and pending applications in Europe and Canada. The patents and patent applications in this family, if issued as patents, will expire in September 2037, excluding any patent term adjustment and patent term extension in the U.S. and similar regulatory extensions available in several other jurisdictions, such as Europe.

We also have rights to a PCT application that discloses methods of using Foralumab in combination with GLP-1 agonists for the treatment of obesity, which is co-owned with Brigham and Women's Hospital Inc. The patent applications in this family, if issued as patents, will expire in 2044, excluding any patent term adjustment and patent term extensions available in the U.S. and several other jurisdictions.

We also have rights to a provisional patent application that discloses methods of using Foralumab in combination with GLP-1 agonists for the treatment of various neurological conditions, which is co-owned with Brigham and Women's Hospital Inc. The patent applications in this family, if issued as patents, will expire in 2045, excluding any patent term adjustment and patent term extensions available in the U.S. and several other jurisdictions.

We also have rights to a provisional patent application that discloses methods of using Foralumab in combination with anti-amyloid therapies, which is co-owned with Brigham and Women's Hospital Inc. The patent applications in this family, if issued as patents, will expire in 2046, excluding any patent term adjustment and patent term extensions available in the U.S. and several other jurisdictions.

Individual patents extend for varying periods depending on the date of filing of the patent application or the date of patent issuance and the legal term of patents in the countries in which they are obtained. Generally, patents issued for regularly filed applications in the United States are granted a term of 20 years from the earliest effective non-provisional filing date. In addition, in certain instances, a patent term can be extended to recapture a portion of the USPTO delay in issuing the patent as well as a portion of the term effectively lost as a result of the FDA regulatory review period. However, as to the FDA component, the restoration period cannot be longer than five years and the total patent term including the restoration period must not exceed 14 years following FDA approval. The duration of foreign patents varies in accordance with provisions of applicable local law, but typically is also 20 years from the earliest effective filing date. However, the actual protection afforded by a patent varies on a product by product basis, from country to country and depends upon many factors, including the type of patent, the scope of its coverage, the availability of regulatory-related extensions, the availability of legal remedies in a particular country and the validity and enforceability of the patent.

Furthermore, we rely upon trade secrets and know-how and continuing technological innovation to develop and maintain our competitive position. We seek to protect our proprietary information, in part, using confidentiality agreements with our collaborators, employees and consultants and invention assignment agreements with our employees. We also have confidentiality agreements or invention assignment agreements with our collaborators and selected consultants. These agreements are designed to protect our proprietary information and, in the case of the invention assignment agreements, to grant us ownership of technologies that are developed through a relationship with a third party. These agreements may be breached, and we may not have adequate remedies for any breach. In addition, our trade secrets may otherwise become known or be independently discovered by competitors. To the extent that our collaborators, employees and consultants use intellectual property owned by others in their work for us, disputes may arise as to the rights in related or resulting know-how and inventions.

Our commercial success will also depend in part on not infringing upon the proprietary rights of third parties. It is uncertain whether the issuance of any third-party patent would require us to alter our development or commercial strategies, or our product candidates or processes, obtain licenses or cease certain activities. Our breach of any license agreements or failure to obtain a license to proprietary rights that we may require to develop or commercialize our future product candidates may have an adverse impact on us. If third parties have prepared and filed patent applications prior to March 16, 2013 in the United States that also claim technology to which we have rights, we may have to participate in interference proceedings in the USPTO, to determine priority of invention. For more information, see "Risk Factors—Risks Related to Our Intellectual Property."

*Material Agreements**Nerviano Agreement*

In January 2015, we entered into an agreement with Nerviano, or the Nerviano Agreement, pursuant to which we obtained a worldwide, exclusive license to patents owned or controlled by Nerviano, or the Nerviano License to develop and commercialize products and services incorporating Milciclib as an active ingredient, and any product or service controlled or owned by Nerviano that is used to diagnose or assess responsiveness to Milciclib therapy or dosage. The Nerviano License confers the right on us to grant sub-licenses, and otherwise to employ third party manufacturers and distributors to produce and sell licensed products and services.

Nerviano granted us an option, or the Nerviano Option, to buy-back all the Consideration Shares for a de minimis aggregate consideration exercisable on written notice at any time after the earlier of:

- (i) an unsuccessful Phase 2 trial for HCC or breast cancer with a licensed product or service and the concomitant decision of the company, our affiliates or sub-licensees to discontinue development of a licensed product or service;
- (ii) the fifth anniversary of the Nerviano Agreement, (provided that if on such date a Phase 2 trial has commenced but has not been completed our ability to exercise the Nerviano Option shall be delayed until the outcome of the Phase 2 trial has become clear); or
- (iii) our abandonment of any licensed product or service for bona fide scientific reasons.

We exercised the Nerviano Option on 10 November 2023 being after the fifth anniversary of the Nerviano Agreement and on grounds that a successful completion of a Phase 2 trial for HCC or breast cancer with a licensed product or service, where such successful conclusion renders the licensed product or service eligible for entry into a Phase 3 trial with no further clinical study had not been achieved.

The exercise of the Nerviano Option effectively allowed us to recover the Consideration Shares, which we now hold in treasury. We remain in the process of returning drug product and intellectual property and data relating to Milciclib to Nerviano.

Novimmune CD3 Agreement

In December 2014, we entered into a license and sublicense agreement with Novimmune, or the Novimmune CD3 Agreement, pursuant to which we obtained a worldwide, exclusive license to certain patents owned or controlled by Novimmune, or the Novimmune CD3 License, together with a sublicense to certain patent licenses from Bristol-Myers Squibb Company, or BMS, or the BMS CD3 Sublicense, and any associated know-how, biologic materials, clinical data or other technology relating to CD3 receptor mAbs and their use in order to research, develop and commercialize products and services. The Novimmune CD3 License and BMS CD3 Sublicense both confer the right to us to grant sublicenses, and otherwise to employ third party manufacturers and distributors to produce and sell licensed products and services, respectively.

Pursuant to the Novimmune CD3 Agreement, Novimmune granted the BMS CD3 Sub-License to us. Novimmune effected such grant pursuant to a research and commercialization agreement between Novimmune and BMS dated September 20, 2014, or the BMS R&C Agreement, and the agreement for the exclusive commercial license for the CD3 licensed product (NI-0401) between Novimmune and BMS dated February 2005.

Under the Novimmune CD3 Agreement, we have full control and authority over the research, development and commercialization of licensed products and services, and are required to exercise commercially reasonable efforts to commercialize such licensed products and services at all times.

Upon our entry into the Novimmune CD3 Agreement we paid an upfront fee of \$750,000 to Novimmune (to be on paid by Novimmune to BMS pursuant to the terms of the BMS R&C Agreement), and a further upfront fee of \$500,000 to Novimmune. We are required to pay Novimmune installments of \$250,000 on each of the 14 month, 26 month and 38 month anniversaries of the date of the Novimmune CD3 Agreement. For the term of the Novimmune Agreement, we are obligated to pay to Novimmune a royalty of a low-single-digit percentage on net sales of licensed products and services, together with any amounts owed to BMS incurred pursuant to the BMS CD3 Sub-License.

We may terminate the Novimmune CD3 Agreement at any time on 90 days' written notice, and either party may terminate the Novimmune CD3 Agreement by written notice for a payment breach or any other breach, subject to 45 day and 120 day cure periods, respectively. Absent early termination, the Novimmune CD3 Agreement will continue until the later of, in all countries in which licensed products are marketed pursuant to the Novimmune CD3 Agreement, (a) the expiration of the last claim in an issued, unexpired patent within the licensed patents or a claim that has not been pending more than five years, subject to certain exceptions, which covers the sale of such licensed product or service, or (b) the end of any market exclusivity period granted by the relevant governmental authority in a country that prevents another party from marketing the same licensed product or service.

Novimmune IL-6r Agreement

In December 2016, we entered into a license and sublicense agreement with Novimmune, or the Novimmune IL-6r Agreement, pursuant to which we obtained a worldwide, exclusive license to certain patents owned or controlled by Novimmune, or the Novimmune IL-6r License, together with a sub-license to certain patent licenses from BMS, or the BMS IL-6r Sub-License, and any associated know-how, biologic materials, clinical data or other technology relating to IL-6r mAbs and their use in order to research, develop, commercialize products and services. The Novimmune IL-6r License and BMS IL-6r Sub-License both confer the right to us to grant sub-licenses, and otherwise to employ third party manufacturers and distributors to produce and sell licensed products and services, respectively.

Pursuant to the Novimmune IL-6r Agreement, Novimmune granted the BMS IL-6r Sub-License. Novimmune effected such grant pursuant to the BMS R&C Agreement and the agreement for the IL-6r exclusive commercial license for the IL-6r antibody licensed product (NI-1201) between Novimmune and BMS dated September 20, 2009, or the IL-6r Commercial License Agreement.

Under the Novimmune IL-6r Agreement, we have full control and authority over the research, development and commercialization of licensed products and services, and are required to exercise commercially reasonable efforts to commercialize such licensed products and services at all times.

Upon our entry into the Novimmune IL-6r Agreement we paid an upfront fee of \$100,000 to Novimmune. For the term of the Novimmune IL-6r Agreement, we are obligated to pay to Novimmune a royalty of a low-single-digit percentage on net sales of licensed products and services, or low-double-digit percentage of any sub-license royalty revenue which we receive that arises from sales of licensed products and services, together with any amounts owed to BMS incurred pursuant to the BMS IL-6r Sub-License.

The BMS R&C Agreement and the IL-6r Commercial License Agreement were amended pursuant to an agreement between Novimmune and BMS dated December 2016, or the Novimmune Amendment Agreement. Pursuant to the Novimmune Amendment Agreement, in the event that Novimmune (or, as the case may be, a sublicensee) commercializes a combination product comprising NI-1201 and NI-0401, then such product shall be subject to a single royalty.

We may terminate the Novimmune IL-6r Agreement at any time on 90 days' written notice, and either party may terminate the Novimmune IL-6r Agreement by written notice for a payment breach or any other breach, subject to 45 day and 120 day cure periods, respectively. Absent early termination, the Novimmune IL-6r Agreement will continue until the later of, in all countries in which licensed products are marketed pursuant to the Novimmune IL-6r Agreement, (a) the expiration of the last claim in an issued, unexpired patent within the licensed patents or a claim that has not been pending more than five years, subject to certain exceptions, which covers the sale of such licensed product or service, or (b) the end of any market exclusivity period granted by the relevant governmental authority in a country that prevents another party from marketing the same licensed product or service.

Brigham and Women's Hospital License

On May 29, 2018, we entered into a license agreement, or the BWH License, with BWH pursuant to which we obtained a worldwide exclusive license to a patent owned by BWH for a novel technology discovered by Dr. Howard Weiner. The patent relates to a formulation of Foralumab in a medical device developed for nasal administration of Foralumab. The BWH License extends to any associated know-how, clinical data and use in order to research, develop and commercialize products and services. The BWH License confers on us the right to grant sub-licenses, and otherwise to employ third party manufacturers and distributors to sell licensed products and services.

Under the BWH License we have full control and amnesty over the research, development and commercialization of licensed products and services and are required to exercise commercially reasonable efforts to commercialize such licensed products and services at all times.

Upon our entry into the BWH License we paid an upfront fee of \$10,000 to BWH. We are required to pay annual maintenance fees, all ongoing patent maintenance and prosecution costs and a low single-digit royalty on annual net sales (and a 12% royalty of non-royalty sub-license revenues for the life of the intellectual property). We are also obliged to make certain milestone payments of: (a) US\$300,000 within 60 days of first patient enrolled in a Phase 1 human clinical trial; (b) US\$600,000 within 60 days of first patient enrolled in a Phase 2 human clinical trial; (c) US\$1,500,000 within 60 days of first patient enrolled in a Phase 3 clinical trial; and (d) US\$3,000,000 within 60 days of first commercial sale of a licensed product.

We may terminate the BWH License at any time on 90 days' written notice, and either party may terminate the BWH License by written notice for payment or other breach, subject to a 60 day cure period. Absent early termination the BWH License will remain in effect until the date on which all patents and filed patent applications have expired or been abandoned.

C. Organizational Structure

The following table sets out details of the Company's significant subsidiaries:

Name	Principal activity	Registered address	Percentage shareholding	Country of incorporation
Tiziana Life Sciences Ltd	Clinical stage biotechnology company	107 Cheapside, London EC2V 6DN	100%	England & Wales
Tiziana Pharma Limited	Clinical stage biotechnology company	107 Cheapside, London EC2V 6DN	100%	England & Wales
Tiziana Therapeutics Inc.	Clinical stage biotechnology company	420 Lexington Ave, Suite 1402 New York, NY 10170	100%	USA
Longevia Genomics S.r.l.	Biotechnology discovery company	Via Constantinopli 42 09100- Cagliari (CA)	100%	Italy

D. Property, Plant and Equipment

The below table contains information regarding existing or planned material tangible fixed assets owned or leased by Tiziana and its subsidiaries. We believe that suitable additional or substitute space will be available as needed to accommodate any future expansion of our operations.

Location	Tenure	Principal Use	Size
14-15 Conduit Street London W1S 2XJ, United Kingdom	2-year Lease	Principal Office	821 square feet

ITEM 4A: UNRESOLVED STAFF COMMENTS

Not applicable.

ITEM 5: OPERATING AND FINANCIAL REVIEW AND PROSPECTS

You should read the following discussion and analysis of our financial condition and results of operations together with “Selected Consolidated Financial Data” and our consolidated financial statements and the related notes thereto appearing at the end of this Annual Report. We present our consolidated financial statements in U.S. dollars and in accordance with International Financial Reporting Standards, or IFRS, as issued by the International Accounting Standards Board, or IASB.

Some information included in this discussion and analysis, including statements regarding industry outlook, our expectations regarding our future performance, liquidity and capital resources and other statements regarding our plans and strategy for our business and related financing, are forward-looking statements. These forward-looking statements are subject to numerous risks and uncertainties. You should read the “Risk Factors” section of this Annual Report for a discussion of important factors that could cause actual results to differ materially from the results described in or implied by the forward-looking statements contained in the following discussion and analysis.

We maintain our books and records in Pounds Sterling, and we prepare our financial statements in accordance with IFRS as issued by the IASB. We report our financial results in U.S. dollars.

Overview

For a description of business highlights in 2024, please refer to “Item 4B. Information on the Company—Business Overview”.

We scaled back our focus on Milciclib in 2024, for which we in-licensed the intellectual property from Nerviano Medical Sciences S.r.l., or Nerviano, in January 2015, as a potential treatment for pan KRAS mutations in NSCLC patients in order to focus our resources on Foralumab.

Since our inception in March 2014, we have devoted substantially all our resources to conducting preclinical studies and clinical trials, organizing and staffing our company, business planning, raising capital and establishing our intellectual property portfolio. We do not have any products approved for sale and have not generated any revenue from product sales. We have funded our operations to date primarily with proceeds from the sale of ordinary shares. Through December 31, 2024, we had received net cash proceeds of \$123.2m from sales of our ordinary shares, issuance of convertible loans, short term loans, options and warrants.

Since our inception, we have incurred operating losses. Our net loss after taxation was \$12.0m for the year ended December 31, 2024, \$17.5m for the year ended December 31, 2023 and \$15.4m for the year ended December 31, 2022 respectively. As of December 31, 2024, we had cash and cash equivalents of \$3.7m.

We expect to continue to incur significant expenses for the foreseeable future as we advance our product candidates through preclinical and clinical development and seek regulatory approval and pursue commercialization of any approved product candidates. In addition, if we obtain marketing approval for any of our product candidates, we expect to incur significant commercialization expenses related to product manufacturing, marketing, sales and distribution.

Trend information**Recent developments****Legal proceedings**

From time to time, we may be a party to litigation or subject to claims incident to the ordinary course of business. Although the results of litigation and claims cannot be predicted with certainty, we currently believe that the final outcome of these ordinary course matters will not have a material adverse effect on our business. Regardless of the outcome, litigation can have an adverse impact on us because of defense and settlement costs, diversion of management resources and other factors. We are not currently a party to any material legal proceedings.

Foreign currency translations

Items included in the financial statements are measured using the currency of the primary economic environment in which the entity operates (the functional currency). The consolidated financial statements are presented in U.S. dollars, which is our presentation currency.

Foreign currency transactions are translated into the functional currency using exchange rates prevailing at the dates of the transactions. Foreign exchange gains and losses resulting from the settlement of foreign currency transactions and from the translation at year-end exchange rates of monetary assets and liabilities denominated in foreign currencies are recognized in the income statement.

The financial statements of overseas subsidiary undertakings are translated into U.S. dollars on the following basis:

- Assets and liabilities at the rate of exchange ruling at the year-end date.
- Profit and loss account items at the average rate of exchange for the year.

Exchange differences arising from the translation of the net investment in foreign entities, borrowings and other currency instruments designated as hedges of such investments, are taken to equity (and recognized in the statement of comprehensive income) on consolidation.

Components of Our Results of Operations**Revenues**

To date, we have not generated any revenue from product sales and do not expect to generate any revenue from the sale of products in the near future. If our development efforts for our product candidates are successful and result in regulatory approval, we may generate revenue in the future from product sales. Any ad hoc sublicensing revenues have been treated as other income.

Operating Expenses**Research and Development Expenses**

R&D expenses consist primarily of costs incurred in connection with the R&D of our product candidates and are expensed as incurred. These expenses consist of:

- expenses incurred under agreements with CROs, CMOs, as well as investigative sites and consultants that conduct our clinical trials, preclinical studies and other scientific development services;
- manufacturing scale-up expenses and the cost of acquiring and manufacturing materials for preclinical studies and clinical trial materials;

- employee-related expenses, including salaries, related benefits, travel and share-based compensation expense for employees engaged in R&D functions;
- costs related to compliance with regulatory requirements;
- facilities costs, depreciation and other expenses, which include rent and utilities; and
- fees for maintaining our third-party licensing agreements.

We recognize external development costs based on an evaluation of the progress to completion of specific tasks using information provided to us by our service providers.

Our direct R&D expenses are tracked on a program-by-program basis for our product candidates and consist primarily of external costs, such as fees paid to outside consultants, CROs and CMOs in connection with our preclinical development, manufacturing and clinical development activities. Our direct R&D expenses by program also include fees incurred under our license agreements. 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 the R&D as well as for managing our preclinical development, process development, manufacturing and clinical development activities. These employees work across multiple programs and, therefore, we do not track their costs by program.

The table below summarizes our R&D expenses incurred by program:

	Year ended December 31,			
	2024	2023	2022	2021
	(in thousands)			
Direct research and development expense by program:				
Foralumab	\$ 5,163	\$ 7,570	\$ 8,962	\$ 3,372
Miliciclib	197	80	111	1,175
TZLS-501	(176)	355	3,785	8,556
ACT-D	35	54	50	74
CAR-T	10	54	47	31
StemPrintER	-	-	-	-
Total direct research and development expense	\$ 5,229	\$ 8,113	\$ 12,955	\$ 13,208
Indirect research and development expense	-	-	-	-
Total research and development expense	\$ 5,229	\$ 8,113	\$ 12,955	\$ 13,208

R&D activities are central to our business model. 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 and related product manufacturing expenses. As a result, we expect that our R&D expenses will increase substantially over the next several years as we increase personnel costs and prepare for regulatory filings related to our product candidates. We also expect to incur additional expenses related to milestone, royalty payments and maintenance fees payable to third parties with whom we have entered into license agreements to acquire the rights related to our product candidates.

The successful development and commercialization of our product candidates is highly uncertain. At this time, we cannot reasonably estimate or know the nature, timing and costs of the efforts that will be necessary to complete the preclinical and clinical development of any of our product candidates or when, if ever, material net cash inflows may commence from any of our product candidates. This uncertainty is due to the numerous risks and uncertainties associated with development and commercialization, including the uncertainty of:

- the scope, progress, outcome and costs of our preclinical development activities, clinical trials and other R&D activities;
- establishing an appropriate safety profile with IND- and CTA-enabling studies;
- successful patient enrollment in, and the initiation and completion of, clinical trials;

- the timing, receipt and terms of any marketing approvals from applicable regulatory authorities;
- establishing commercial manufacturing capabilities or making arrangements with third-party manufacturers;
- development and timely delivery of commercial-grade drug formulations that can be used in our clinical trials and for commercial launch;
- obtaining, maintaining, defending and enforcing patent claims and other intellectual property rights;
- significant and changing government regulation;
- launching commercial sales of our product candidates, if and when approved, whether alone or in collaboration with others; and
- maintaining a continued acceptable safety profile of the product candidates following approval.

We may never succeed in achieving regulatory approval for any of our product candidates. We may obtain unexpected results from our clinical trials. We may elect to discontinue, delay or modify clinical trials.

General and Administrative Expenses

General and administrative expenses consist primarily of salaries, related benefits, travel and share-based compensation expense for personnel in executive, finance and administrative functions. General and administrative expenses also include professional fees for legal, consulting, accounting and audit services.

We anticipate that our general and administrative expenses will increase in the future as we increase our headcount to support our continued research activities and development of our product candidates. We also anticipate that we will incur increased accounting, audit, legal, regulatory, compliance, director and officer insurance costs, as well as investor and public relations expenses associated with being a public company.

Other Income (Expense)

Other expense consists of interest on a convertible loan note and income received from a partnership agreement.

Taxation

The tax income for a period represents the total of current taxation and deferred taxation. The charges in respect of current taxation are based on the estimated taxable profit for the relevant year. Taxable profit for the year is based on the profit as shown in the income statement, as adjusted for items of income or expenditure which are not deductible or chargeable for tax purposes. The current tax liability for the year is calculated using tax rates which have either been enacted or substantively enacted at the relevant balance sheet date.

Under UK tax legislation, small and medium entity R&D relief allows us to claim back up to 14.5% of our surrenderable losses as a tax cash credit.

A. Results of Operations

The results of operations that follow reflect the historic periods under review and should not be taken as indicative of future performance.

Comparison of Years Ended December 31, 2024 and 2023

The following tables summarizes our results of operations for the years ended December 31, 2024 and 2023:

	Year ended December 31,		
	2024	2023	Change
		(in thousands)	
Operating Expenses			
Research and Development	(5,229)	(8,113)	2,884
Operating expenses	(10,565)	(9,871)	(694)
Realization bonus	-	-	-
Total operating expenses	(15,794)	(17,984)	2,190
Loss from operations	(15,794)	(17,984)	2,190
Other income/(expense):			
Finance Income/(expense)	814	1,144	(330)
FV Loss on Investment	(1,766)	(402)	(1,364)
Other income	-	-	-
Total other income/(expense)	(952)	742	(1,694)
Loss from operations before income taxes	(16,746)	(17,242)	496
Income tax credit	4,883	(449)	5,332
Loss for the year	(11,863)	(17,691)	5,680
Other Comprehensive loss:			
Gain/(Loss) on currency translation	(72)	1,492	(1,564)
Comprehensive loss	(11,935)	(16,199)	4,117

Research and Development Expenses

Research and development activities were \$5.2m for the year ended December 31, 2024 compared to \$8.1m for the year ended December 31, 2023 a decrease of \$2.9m. The decrease in cost is a result of the cessation of focus on IL6-R, and a reduction in expected license fee expenditure due to renegotiations with BMS.

General and Administrative Expenses

Operating expenses were \$10.6m for the year ended December 31, 2024 as compared to \$9.8m for the year ended December 31, 2023, an increase of \$0.7m. The increase in operating expenses is a result of an increase in payroll and consulting expenses.

Other Income/(expense), net

There was finance income during the year of \$0.8m the year ended December 31, 2024 as compared to \$1.1m for the year ended December 31, 2023, a decrease of \$0.3m.

The total loss on FV of the investments increased by \$1.3m from \$1.7m the year ended December 31, 2024 as compared to \$0.4m for the year ended December 31, 2023. There was a loss of \$0.2m due to a change in fair value of the company's investment in Accustem Sciences Inc., a related party. The share price for 1.3m shares on December 31, 2024, was \$0.45 per share compared to the share price on December 31, 2023 of \$0.63. There was a net loss of \$1.1m due to a change in fair value of the company's investment in Okyo Pharma Ltd., a related party. The share price for 2.1m shares on December 31, 2024, was \$1.15 per share compared to the share price on December 31, 2023 of \$1.77 per share, resulting in a loss on fair value of \$1.3m. An additional 500,000 shares in OKYO were issued in lieu of interest during the year for a gain of \$0.2m.

Income Tax Credit

R&D tax income for 2022 and 2023 was recognized and received in the year ended December 31, 2024.

Comparison of Years Ended December 31, 2023 and 2022

The following tables summarizes our results of operations for the years ended December 31, 2021 and 2022:

	Year Ended December 31,		
	2023	2022	Change
	(in thousands)		
Operating Expenses:			
Research and development	\$ (8,113)	\$ (12,955)	\$ 4,842
General and administrative	\$ (9,871)	\$ (1,638)	\$ (8,233)
Realization bonus	-	-	-
Impairment of asset	-	-	-
Disposal of Intellectual Property	-	-	-
Total Operating Expenses	<u>\$ (17,984)</u>	<u>\$ (14,593)</u>	<u>\$ (3,391)</u>
Other Income/ (Expense)	1,144	33	1,111
Finance Income/(Expense)	(402)	(844)	442
Tax credit	(449)	-	(449)
Net Loss	<u>\$ (17,691)</u>	<u>\$ (15,404)</u>	<u>\$ (2,287)</u>
Other comprehensive loss:			
Foreign currency translation adjustment	1,492	(3,582)	5074
Total Comprehensive (Loss)	<u>\$ (16,199)</u>	<u>\$ (18,986)</u>	<u>\$ 2,787</u>

Research and Development Expenses

Research and development activities were \$8.1m for the year ended December 31, 2023 compared to \$12.9m for the year ended December 31, 2022 a decrease of \$4.8m. The decrease in cost is a result of focused expenditure on initiating a Phase 2 trial for foralumab in patients with non-active secondary progressive multiple sclerosis and developing and initiating the open label expanded access program in the same indication, offset by the absence of manufacturing costs on TZLS-501.

General and Administrative Expenses

Operating expenses were \$9.8m for the year ended December 31, 2023 as compared \$1.6m for the year ended December 31, 2022, an increase of \$8.2m. The increase in operating expenses is a result of an increase in option related expenses of \$2m due to a large number of forfeitures in 2022, an increase in public relation and investor relations expense of \$1.0m, an increase in travel expenses of \$0.3m, an increase in directors fees due to additional fees and a bonus to the chairman of \$0.2m and a \$4.7m net loss due to unfavorable foreign exchange movements.

Other income/(expense)

There was finance income during the year of \$0.74m for the year ended December 31, 2023. There was a gain of \$0.6m due to the change in fair value of the company's investment in Okyo Pharma Ltd, a related party. The share price for 2.1m shares, on December 31, 2023, was \$1.77 compared to the investment price of \$1.50. There were financing fees and interest received for Okyo Pharma Ltd. \$1.13m and Rasna Therapeutics Inc, a related party, \$0.02m. There was a loss of \$1m due to a change in fair value of the company's investment in Accustem Sciences Inc., a related party. The share price for 1.3m shares on December 31, 2023, was \$0.63 per share compared to the investment price of \$2 per share. There was lease interest paid of \$0.01m.

Income Tax Credit

A R&D tax expense was recognized for the year ended December 31, 2023 as the provisions for 2021 and 2023 were adjusted in accordance with HMRC guidance.

B. Liquidity and Capital Resources

Since our inception, we have not generated any revenue and have incurred operating losses and negative cash flows from our operations. We have funded our operations to date primarily with proceeds from the sale of ordinary shares, American Depositary Shares, or ADSs, and convertible loan notes.

As of December 31, 2024, we had cash and cash equivalents of \$3.72m.

Cash Flows

The following table summarizes our cash flows for each of the periods presented:

	Year ended December 31,		
	2024	2023	2022
Net cash used in operating activities	\$ (1,526)	(15,698)	\$ (19,615)
Net cash used in investing activities	(71)	(1,253)	(3,996)
Net cash provided by/ (used in) financing activities	4,505	40	(55)
Effect of exchange rate changes on cash and cash equivalents	(367)	(28)	(398)
Net (decrease)/increase in cash and cash equivalents	<u>\$ 2,541</u>	<u>(16,939)</u>	<u>\$ (24,064)</u>

Net Cash Used in Operating Activities

Our use of cash in each of the years ended December 31, 2024, and 2023, resulted primarily from our net losses, adjusted for non-cash charges and changes in components of working capital. Net cash used in operating activities of \$1.5 m during the year ended December 31, 2024 decreased by \$14.2m compared to the year ended December 31, 2023.

Our use of cash in each of the years ended December 31, 2023, and 2022, resulted primarily from our net losses, adjusted for non-cash charges and changes in components of working capital. Net cash used in operating activities of \$15.7 m during the year ended December 31, 2023 decreased by \$3.9 m compared to the year ended December 31, 2022.

Net Cash Used in Investing Activities

During the year ended December 31, 2024, we used \$0.07m in cash in investing activities. The Company spent \$0.05m on a share buyback scheme and \$0.02m purchasing fixed assets.

During the year ended December 31, 2023, we used \$1.3m of cash in investing activities. The Company spent \$1m investing in a related party, Okyo Pharma Ltd. where the company's loan was converted into 2,100,000 shares of OKYO for \$1.5 a share, and \$0.3m on a share buyback scheme.

Net Cash Provided by/ (used in) Financing Activities

During the year ended December 31, 2024, \$4.52m was provided by fundraising activities and \$0.14m was used in the repayment of lease expenses. There was \$0.10m consisting of net proceeds for the exercise of options.

During the year ended December 31, 2023 \$0.12m was used in the repayment of lease expenses. There was \$0.14m consisting of net proceeds for the exercise of warrants.

Funding Requirements

We expect our expenses to increase substantially in connection with our ongoing activities, particularly as we advance the preclinical activities, manufacturing and clinical trials of our product candidates and as we:

- seek regulatory approvals for any product candidates that successfully complete clinical trials;
- establish a sales, marketing and distribution infrastructure in anticipation of commercializing any product candidates for which we may obtain marketing approval and intend to commercialize on our own or jointly;
- hire additional clinical, medical and development personnel;
- expand our infrastructure and facilities to accommodate our growing employee base; and
- maintain, expand and protect our intellectual property portfolio.

We believe that our existing cash, will enable us to fund our operating expenses and capital expenditure requirements for the immediate future. 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. If we receive regulatory approval for our other product candidates, we expect to incur significant commercialization expenses related to product manufacturing, sales, marketing and distribution.

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

- the scope, progress, outcome and costs of our preclinical development activities, 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 activities, including product sales, marketing, manufacturing and distribution, for any of our product candidates for which we receive marketing approval;
- the revenue, if any, received from commercial sale of our products, should any of our product candidates receive marketing approval;
- the costs and timing of hiring new employees to support our continued 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 extent to which we acquire technologies.

Until such time, if ever, that we can generate product revenue sufficient to achieve profitability, we expect to finance our cash needs through equity offerings. To the extent that we raise additional capital through the sale of equity, your ownership interest will be diluted. If we raise additional funds through other third-party funding, collaboration agreements, strategic alliances, licensing arrangements or marketing and distribution arrangements, we may have to relinquish valuable rights to our technologies, future revenue streams, research programs or product candidates or grant licenses on terms that may not be favorable to us. If we are unable to raise additional funds through equity financings when needed, we may be required to delay, limit, reduce or terminate our product development or future commercialization efforts or grant rights to develop and market products or product candidates that we would otherwise prefer to develop and market ourselves.

C. Research and Development Expenses, Patents and Licenses, etc.

See “Item 4.B.—Intellectual Property,” “Item 4.B.—Research and Development,” and “Item 5. Operating and Financial Review and Prospects.”

D. Trend Information

See “Item 5. Operating and Financial Review and Prospects—Trend Information.”

E. Off-Balance Sheet Arrangements

We did not have during the periods presented, and we do not currently have, any off-balance sheet arrangements, as defined in the rules and regulations of the SEC.

F. Tabular Disclosure of Contractual Obligations

The following table summarizes our contractual commitments and obligations as of December 31, 2024 and 2023.

As at December 31, 2024

(in thousands)	Total	Less than 1 Year	Between 1 and 5 Years	More than 5 Years
Borrowings	\$ -	\$ -	\$ -	\$ -
Operating lease obligations	106	106	-	-
Total	\$ 106	\$ 106	\$ -	\$ -

As at December 31, 2023

(in thousands)	Total	Less than 1 Year	Between 1 and 5 Years	More than 5 Years
Borrowings	\$ -	\$ -	\$ -	\$ -
Operating lease obligations	259	148	111	-
Total	\$ 259	\$ 148	\$ 111	\$ -

Please refer to “Item 4.B. Business Overview” and “Item 10.C. Material Contracts” for further details.

G. Safe Harbor

This Annual Report on Form 20-F contains forward-looking statements within the meaning of Section 27A of the Securities Act and Section 21E of the Exchange Act and as defined in the Private Securities Litigation Reform Act of 1995. See the section titled “Cautionary Statement Regarding Forward-Looking Statements”.

ITEM 6: DIRECTORS, SENIOR MANAGEMENT AND EMPLOYEES

A. Directors and Senior Management

The following table sets forth information regarding our directors as of March 31, 2025.

Name	Age	Position
Gabriele Marco Antonio Cerrone MBA (2)	53	Executive Chairman
Ivor Elrifi	64	Executive director and Chief Executive Officer
Willy Simon (1,2,3)	73	Non-Executive Director
John Brancaccio (1), (3)	77	Non-Executive Director

(1) Remuneration Committee member

(2) Nominating Committee member

(3) Audit Committee member

The following table sets forth information regarding our senior managers as of March 31, 2025:

Name	Position
Ivor Elrifi	Chief Executive Officer
Keeren Shah	Chief Financial Officer and Chief Operating Officer
William Clementi	Chief Development Officer

Gabriele Marco Antonio Cerrone – Executive Chairman

Mr. Gabriele Marco Antonio Cerrone, is the Founder of the company and has been its Executive Chairman since April 2014. Mr. Cerrone has founded ten biotechnology companies in oncology, infectious diseases and molecular diagnostics, and has listed seven of these companies on Nasdaq two to the Main Market and AIM Market in London. Mr. Cerrone co-founded Cardiff Oncology, Inc., an oncology company and served as its Co-Chairman; he was a co-founder and served as Chairman of both Synergy Pharmaceuticals, Inc. and Callisto Pharmaceuticals, Inc. and was a Director of and led the restructuring of Siga Technologies, Inc. Mr. Cerrone also co-founded FermaVir Pharmaceuticals, Inc. and served as Chairman of the Board until its merger in September 2007 with Inhibitex, Inc. Mr. Cerrone served as a director of Inhibitex, Inc. until its US\$2.5bn sale to Bristol Myers Squibb Co in 2012. Mr. Cerrone is the Executive Chairman and Founder of Tiziana Life Sciences Ltd, an oncology focused therapeutics company; Co-Founder of Rasna Therapeutics Inc., a company focused on the development of therapeutics for leukaemias; Co-Founder of Hepion Pharmaceuticals, Inc.; Executive Chairman and Co-Founder of Gensignia Life Sciences, Inc., a molecular diagnostics company focused on oncology using microRNA technology; Non-Executive Chairman and Founder of Accustem Sciences Limited; and founder of BioVitas Capital Ltd. Mr. Cerrone graduated from New York University’s Stern School of Business with a master’s degree in business administration (MBA).

Willy Simon – Non-Executive Director

Willy Jules Simon has served as a Non-Executive Director of the company since November 2015. He is a banker and worked at Kredietbank N.V. and Citibank London before serving as an executive member of the Board of Generale Bank NL from 1997 to 1999 and as the chief executive of Fortis Investment Management from 1999 to 2002. He acted as chairman of Bank Oyens & van Eeghen from 2002 to 2004. He was chairman of AIM-traded Velox3 plc (formerly 24/7 Gaming Group Holdings plc) until 2014 and had been a director of Playlogic Entertainment Inc., a Nasdaq OTC listed company. Willy Simon has been the chairman of Bever Holdings, a company listed in Amsterdam, since 2006 and Chairman of Ducat Maritime since 2015. He is also a non-executive director of OKYO Pharma Ltd.

John Brancaccio – Non-Executive Director

John Brancaccio, a retired CPA, has served as a director of our company since July 2020. From April 2004 until May 2017, Mr. Brancaccio was the Chief Financial Officer of Accelerated Technologies, Inc., an incubator for medical device companies. Mr. Brancaccio served as a director of Callisto Pharmaceuticals, Inc. from April 2004 until its merger with Synergy Pharmaceuticals, Inc. in January 2013 and was a director of Tamir Biotechnology, Inc. (formerly Alfacell Corporation) until 2019, as well as a director of Hepion Pharmaceuticals, Inc. since December 2013, Rasna Therapeutics, Inc. since September 2016, Cardiff Oncology, Inc. from December 2005 until June 2022 and Okyo Pharma Ltd since June 2020. Mr. Brancaccio served as a director of Synergy from July 2008 until April 2019.

Ivor Elrifi – Executive Director and Chief Executive Officer

Ivor Elrifi serves as our Chief Executive Officer and Executive Director. Mr Elrifi was formerly the global head of the Patent Group at Cooley since 2014 and before that the global head of Patents at Mintz Levin from 1999 – 2014. He has counseled companies in various key industries, including pharmaceutical, biotechnology, life sciences and medical device companies, research institutions, universities, hospitals and governments throughout the world, particularly in the US and Europe. Ivor has guided clients in developing and implementing intellectual property strategies and in the prosecution, licensing and enforcement of patents. He has extensive experience in advising clients on strategic transactional work and regularly counsels’ clients with respect to investments, business development and mergers and acquisitions, including acquisition transactions involving Novartis, Eli Lilly, Biogen and Astellas.

He has received various awards throughout his career, including being named an “LMG Life Sciences: Life Science Star,” and ranked nationally in Chambers USA since 2007. Elrifi earned his B.S. and Ph.D. in Biology from Queen’s University and his J.D. from Osgoode Hall Law School.

Keeren Shah – Chief Financial Officer and Chief Operating Officer

Keeren Shah serves as our Chief Financial Officer and Chief Operating Officer. Ms Shah is also the CFO of OKYO Pharma Ltd, Accustem Sciences Limited, and Rasna Therapeutics Inc. She joined the Company in 2016 as Group Financial Controller, where she played a pivotal role in strengthening financial governance and operational efficiency across multiple businesses until her promotion in 2020. Earlier in her career, she spent a decade at Visa, Inc., where she was a senior leader in the finance organization. There, she led transformative finance initiatives, contributed to the success of Visa's landmark IPO, and oversaw critical FP&A and controller functions during a period of global expansion.

Ms Shah began her career in finance with roles at Arthur Andersen and BBC Worldwide, gaining diverse industry experience and sharpening her leadership skills. She holds a BA (Hons) in Economics and is a member of the Chartered Institute of Management Accountants.

William Clementi – Chief Development Officer

Dr. Clementi has followed a science-driven career path since completing his NIH Training Fellowship (under John L. McNay M.D. and Thomas M. Ludden Ph.D.) Upon completing his Fellowship research in drug metabolism and vascular smooth muscle relaxation, Dr. Clementi joined the University of Texas Graduate School of Biomedical Sciences (UTGBS) faculty and the College of Pharmacy faculty in Austin, Tx, in the Departments of Medicine and Pharmacology at the Health Sciences Center in San Antonio. His primary responsibilities were interdisciplinary, and he led innovative programs in the Colleges with teaching, research, and clinical commitments. Dr. Clementi directed the Clinical Pharmacokinetic Consultation Service, providing novel computer-based drug dosing to the acute care settings at two major teaching hospitals.

Dr. Clementi continued his career in the pharmaceutical industry, joining Synthelabo and the U.S. affiliate Lorex Pharmaceuticals, where he held the Worldwide Director of Market Development position. Lorex and Synthelabo launched three EMA and FDA-approved products (betaxolol, zolpidem, and alfuzosin). was on the executive team that sold URL Pharma to Takeda Pharmaceutical Company for approximately \$800M combined with over \$1B in performance-based contingent earn out payments.

Family Relationships

There are no family relationships among any of our executive officers or directors.

B. Compensation

Total Compensation for the Executive Chairman and Non-Executive Directors

The table below sets out the total remuneration received by the Executive Chairman and the Non-Executive Directors for the year ended December 31, 2024.

Name	Position	Fees earned or paid in cash (\$000)	Bonus earned or paid in cash (\$000) (2)	Options awarded (\$000) (1)	Restricted Stock Units awarded (\$000) (2)	Total (\$000)
Gabriele Cerrone	Executive Chairman	673	1,180	901	-	2,754
Ivor Elrifi	Executive Director and Chief Executive Officer		131	-	4,578	4,709
Willy Simon	Non – Executive Director	58	-	95	-	153
John Brancaccio	Non – Executive Director	58	-	95	-	153

(1) Represents the fair value of incentive stock options granted during the year to December 31, 2024 using an appropriate valuation model for computing stock-based compensation expense as of the date of grant.

(2) Represents the fair value of restricted stock units granted during the year to December 31, 2024 using an appropriate valuation model for computing stock-based compensation expense as of the date of grant.

Narrative Disclosure to the Compensation table

Gabriele Cerrone

On June 9, 2016 we entered into an agreement with our Executive Chairman, Gabriele Cerrone. Under the agreement, Mr Cerrone was to hold office as Chairman for £80,000 per annum. The agreement was to expire no earlier than 24 April 2018 and was to continue thereafter until terminated by either party giving written notice of 12 months. Mr Cerrone was also eligible to receive an annual bonus of up to 50% of his base salary, such bonus amount to be determined at the discretion of the Board of Directors.

Additionally, Mr Cerrone was also eligible to receive two realization bonuses as follows:

- (a) in the event that, either: (i) the Group raises, in one or a series of transactions, new equity capital in excess of £20,000,000 (after expenses); or (ii) there is a sale, in one or a series of transactions, of all or substantially all of the assets (calculated on the basis of book values) of the Group Companies (or a license of the same on an exclusive or non-exclusive basis), where the Enterprise Value equals or exceeds £150,000,000; or (iii) there is a change of control where the Enterprise Value equals or exceeds £150,000,000, in which case the Realization Bonus will be the amount equal to the Enterprise Value multiplied by two and a half (2.5) per cent
- (b) In the event that, during this Agreement, either: (i) there is a sale, in one or a series of transactions, of all or substantially all of the assets (calculated on the basis of book values) of the Group (or a license of the same on an exclusive or non-exclusive basis), where the Enterprise Value equals or exceeds £300,000,000 (Subsequently amended on 22 April 2024 to be expressed as US\$372,000); or (ii) there is either a change of control where the Enterprise Value equals or exceeds £300,000,000, (Subsequently amended on 22 April 2024 to be expressed as US\$372,000) the Chairman will be entitled to receive an additional Realization Bonus in the amount equal to the Enterprise Value multiplied by three and a half (3.5) per cent.

The Enterprise Value means: (i) in the case of a change of control resulting in consideration payable to the Group (for example, on a sale of its assets or licensing transaction), the total cash and non-cash consideration received by the Group; or (ii) in the case of a change of control resulting in consideration payable to the shareholders of the ordinary shares in the issued share capital of the Group from time to time, the total cash and non-cash consideration payable to the Shareholders.

The first realization bonus was satisfied on 5 August 2020, and the Chairman was unconditionally entitled to the immediate delivery of 4,763,995 new ordinary shares credited as fully paid in lieu of a cash payment. The number of shares to be issued was fixed. Due to the delayed delivery of shares, additional shares were granted in lieu of interest.

On October 9, 2020, we entered into an amended agreement with Mr Cerrone, increasing his base salary to £240,000 per annum. All other terms and conditions remained the same.

On 21 October 2021, we entered into a new agreement which superseded the original consultancy agreement dated June 9, 2016 and the amended agreement dated October 9, 2020. The duration of the consultancy agreement was fixed until December 31, 2028 and the fee remained at £240,000 per annum. All terms regarding the second realization bonus remained the same.

On 14 March, 2023, which was subsequently amended and restated on 22 April 2024, we granted Mr Cerrone a long-term realization bonus on the basis that were the Company to be sold, during the currency of his directorship or in the period of 6 years, (extended to 10 years pursuant to the amendment and restatement agreement on 22 April 2024) thereafter, for a price at, or in excess of, US\$1,000,000,000 that Mr Cerrone receive a bonus equal to 6.5% of the enterprise value of the Company (and not just the excess over US\$1,000,000,000), such bonus to be in addition to the current realization bonus contained in Mr. Cerrone's consultancy agreement dated December, 21 2022 (as amended and restated on 22 April 2024) but on the basis that were the US\$1,000,000,000 threshold to be hit, the Company would be entitled to offset any payment due under the realisation bonus contained in the December, 21 2022 Consultancy Agreement against any amount then due under this new realization bonus. The terms of the award to make appropriate provision for any "spin-off" of assets and for the eventuality that the Company be sold for non-cash consideration. In addition, it should be a clear condition that Mr Cerrone be responsible for all tax liabilities in connection with any payment of the award.

On 22nd April 2025, we entered into a new agreement which superseded the original consultancy agreement dated June 9, 2016 and the amended agreements dated October 9, 2020 and 21 October 2021. The duration of the consultancy agreement was fixed until December 31, 2030 and the fee increased to \$500,000 per annum. All terms regarding the second realization bonus and the long term realization bonus remained the same.

Mr Cerrone was awarded a stock allocation in 2024 to compensate for (i) additional salary of \$300,000 to compensate him for a salary differential with other executive staff, covering the period from August 1, 2023 to 31 July 2024, and (ii) a one-off 2024 bonus of \$100,000.

Non-Executive Director remuneration

The remuneration of our non-executive directors is determined by our board as a whole, based on independent compensation reviews. We intend to enter into service contracts with our directors for their services or amend and restate any prior service contracts in place prior to, or as soon as practicable, following the filing of this registration statement.

Outstanding Equity Awards at Fiscal Year-End

The following table provides information regarding all outstanding equity awards for our directors, executive officers, and non-executive directors, as of December 31, 2024:

Name	Ordinary Shares Underlying Options	Ordinary Shares Underlying RSU's	Exercise Price Per Ordinary Share (\$)	Grant Date	Expiration Date
Gabriele Cerrone	915,388	-	0.88	25/06/2014	25/06/2024
Gabriele Cerrone	1,629,702	-	0.70	06/05/2020	05/05/2028
Gabriele Cerrone	1,000,000	-	0.71	03/05/2024	03/05/2034
Ivor Elrifi	-	4,200,000	1.09		14/08/2034
Willy Simon	125,000	-	3.71	24/08/2020	24/08/2030
Willy Simon	75,000	-	0.57	14/03/2023	14/03/2033
Willy Simon	100,000	-	0.50	13/03/2024	13/03/2034
Willy Simon	100,000	-	1.09	14/08/2024	14/08/2034
John Brancaccio	125,000	-	3.71	24/08/2020	24/08/2030
John Brancaccio	75,000	-	0.57	14/03/2023	14/03/2033
John Brancaccio	100,000	-	0.50	13/03/2024	13/03/2034
John Brancaccio	100,000	-	1.09	14/08/2024	14/08/2034

The Tiziana Life Sciences Ltd (formerly Tiziana Life Sciences plc) Employee Share Option Plan with Non-Employee Sub-Plan and US Sub-Plan

The Tiziana Life Sciences Ltd (formerly Tiziana Life Sciences plc) Employee Share Option Plan with Non-Employee Sub-Plan and US Sub-Plan, or the 2016 Plan, was adopted by the Board on March 23, 2016 and approved by shareholders on June 30, 2016 and allows for the grant of options to eligible service providers. The material terms of the 2016 Plan are summarized below. This plan closed to new entrants on October 21, 2021 and has been superseded by the Tiziana Life Sciences Ltd 2021 Equity Incentive Plan.

Eligibility and Administration

Prior to October 21, 2021, our employees, consultants and directors, and employees and consultants of our subsidiaries were eligible to receive options under the 2016 Plan. The 2016 Plan was administered by our board of directors, which may delegate its duties and responsibilities to one or more committees of our directors and/or officers (referred to collectively as the plan administrator below), subject to the limitations imposed under the 2016 Plan, stock exchange rules and other applicable laws. The plan administrator has the authority to take all actions and make all determinations under the 2016 Plan, to interpret the 2016 Plan and option agreements and to adopt, amend and repeal rules for the administration of the 2016 Plan as it deems advisable. The plan administrator also had the authority to determine which eligible service providers receive options, to grant options and to set the terms and conditions of all options granted under the 2016 Plan, including any vesting and vesting acceleration provisions, subject to the conditions and limitations in the 2016 Plan.

Options

The 2016 Plan provided for the grant of options. All options granted under the 2016 Plan were set forth in option agreements, which will detail the terms and conditions of the options.

Options provide for the purchase of our ordinary shares in the future at an exercise price set on the grant date. The plan administrator will determine the number of shares covered by each option, the exercise price of each option and the conditions and limitations applicable to the exercise of each option.

If a holder of options dies, options may be exercised by the personal representative with 12 months following death in respect of all or such proportion of the option as the plan administrator may specify to take account of the extent to which any exercise conditions have been achieved at the relevant date. If a holder of options leaves as a good leaver or the plan administrator allows, options may be exercised within 90 days in respect of all or such proportion of the option as the plan administrator may specify to take account of the extent to which any exercise conditions have been achieved at the relevant date.

Exercise Conditions

The plan administrator may specify one or more appropriate exercise conditions that must be satisfied before options may be exercised.

Change of Control and Variation of Share Capital

In the event of a change of control, the plan administrator may specify whether all or a proportion of options will be exercisable to take account of the extent to which any exercise conditions have been achieved at the relevant date. Alternatively, holders of options may agree to accept an offer to exchange options for options to acquire shares in an acquiring company.

If there is a variation of our ordinary shares the plan administrator may adjust the number of shares under options and/or the exercise price.

Plan Amendment and Termination

Our board of directors may amend the 2016 Plan at any time; however, the provisions governing eligibility requirements, equity dilution, the basis for determining the rights of holders of options and the adjustment of options cannot be altered to the advantage of existing or new holders of options without the prior approval of our shareholders in general meeting. No options may be granted under the 2016 Plan after the tenth anniversary of the date of adoption by our board of directors.

Transferability

Options granted under the 2016 Plan are generally non-transferrable, except on death. With regard to tax withholding and exercise price obligations arising in connection with the exercise of options under the 2016 Plan, the plan administrator may, in its discretion, accept cash, wire transfer or cheque.

Non-Employee Sub-Plan

Under the Non-Employee Sub-Plan, options may be granted to advisers, consultants and non-executive directors on terms comparable to those described above.

US Sub-Plan

The US Sub-Plan permits the grant of options to employees, directors and consultants who are US residents and US taxpayers, including potentially tax efficient Incentive Stock Options (as defined in Section 422 of the Internal Revenue Code of 1986, as amended). A maximum of 9,233,392 ordinary shares may be issued under the US Sub-Plan (which number shall be the maximum number that may be granted as Incentive Stock Options).

The Tiziana Life Sciences Ltd 2021 Equity Incentive Plan

On October 20, 2021, Tiziana adopted the Tiziana Life Sciences Ltd 2021 Equity Incentive Plan (the “Plan”) which operates over common shares in Tiziana. The purpose of the Plan is to assist the Company and its Subsidiaries in attracting and retaining valued Employees, Consultants and Non-Employee Directors by offering them a greater stake in the Company’s success and a closer identity with it, and to encourage ownership of the Company’s shares by such Employees, Consultants and Non-Employee Directors. Any employee, director or consultant of Tiziana Life Sciences Ltd or any of its subsidiaries is eligible to receive Awards under the Plan. The Plan will be administered by the Compensation Committee of the Board (the “Compensation Committee”). Awards granted to nonemployee members of the Board will be administered by the full Board.

The Plan was approved by the shareholders of the Company, no new awards will be granted under the Tiziana Life Sciences plc Employee Share Option Plan with Non-Employee Sub-Plan and US Sub-Plan with California Supplement, as amended and/or restated from time to time (collectively, the “Prior Equity Plan”).

Subject to adjustment as provided in the Plan, the maximum number of shares that may be issued pursuant to Awards under the Plan is 15,000,000 shares (the “Cap”). The Cap will be increased by the number of shares corresponding (as determined by the Compensation Committee) to the securities underlying the portion of an award granted under the 2016 Plan that is cancelled, terminated or forfeited or lapses, in any case, on or after the effective date of the Plan. No more than 15,000,000 shares issued under the Plan may be issued pursuant to the exercise of incentive stock options.

Under the Plan, awards may be in the form of options, share appreciation rights, restricted stock, restricted stock units, performance stock, performance stock units, and other share-based awards. Each Award will be evidenced by an Award agreement containing the terms and conditions applicable to such Award.

Change of Control and Variation of Share Capital

A Change in Control shall not, in and of itself, accelerate the vesting, settlement or exercisability of outstanding awards, unless otherwise specified.

Transferability

Transferability of Restricted Stock shall be prohibited or restricted in the manner and to the extent prescribed in the applicable Award Agreement. Such restrictions may include, without limitation, rights of repurchase or first refusal in the Company or provisions subjecting the Restricted Stock to a continuing substantial risk of forfeiture in the hands of any transferee.

UK Supplemental Plan

The UK Supplemental plan shall apply to any Award granted to a Participant who is resident in the United Kingdom for tax purposes at the time the Award is granted or on the occurrence of any taxable event in respect of the Award and to any Participant who is not resident in the United Kingdom at such time(s) but who is granted the Award in respect of duties performed in the United Kingdom (a "UK Participant").

Additional Terms for UK Participants

Employer National Insurance Contributions Indemnity. In the case of any Award to a UK Participant in the form of Options, Restricted Stock, Restricted Stock Units, Performance Stock, Performance Stock Units or Other Share-Based Award, if required by the Board, it shall be a condition of such Award that the UK Participant irrevocably agrees that the Company and/or any applicable Subsidiary may recover from the UK Participant the whole or any part of any employer National Insurance Contributions, Apprenticeship Levy or other social security contributions for which the Company and/or any applicable Subsidiary is liable to account in respect of the Award, in each case to the extent permitted by applicable law, and/or that the UK Participant shall enter into such election (using a form approved by HM Revenue & Customs) as may be required for the whole or any part of such taxes to be transferred to the UK Participant.

Date of Termination. For the purposes of the Plan (and the corresponding provisions in any Award Agreement) the termination of employment of a UK Participant for Cause or as the result of the UK Participant's resignation shall be deemed to occur on the earlier of (i) the date on which the UK Participant's employment terminates, and (ii) the date on which the UK Participant gives or receives notice of the termination of employment.

Bankruptcy. Unless otherwise provided in an Award Agreement, the unvested portion of a Participant's Award shall be immediately forfeited with no compensation or other payment due to the Participant upon the Participant (i) being declared bankrupt, (ii) making an application for an interim order or any proposal for a voluntary arrangement within Part VIII of the Insolvency Act 1988, or (iii) proposing any form of compromise with his creditors or any class of creditors.

Tax Election. In the case of an Award to a UK Participant in the form of Options, Restricted Stock, Restricted Stock Units, Performance Stock, Performance Stock Units or Other Share-Based Award, unless the Board determines otherwise, it shall be a condition of the Award that the UK Participant enters into a joint tax election with his or her employer pursuant to Section 431(1) of the Income Tax (Earnings and Pensions) Act 2003 in respect of any Shares acquired pursuant to such Award, such election to be made no later than 14 days following the date on which such Shares are acquired.

Relationship to Employment Contract. The rights of a UK Participant under the terms of his or her office or employment with the Company or any Subsidiary shall not be affected by the Plan, this Supplement or any Award Agreement. The value of any benefit realized by a UK Participant in respect of an Award shall not be taken into account in determining any pension or similar entitlement.

Limitation on Claims. A UK Participant shall have no right to compensation or damages on account of any loss in respect of an Award where the loss arises (or is claimed to arise), in whole or in part, from termination of office or employment with, or notice to terminate office or employment given by or to, the Company or any Subsidiary. This exclusion of liability shall apply however termination of office or employment, or the giving of notice, is caused, and however compensation or damages are claimed. A UK Participant shall have no right to compensation or damages from the Company or any Subsidiary on account of any loss in respect of an Award where the loss arises (or is claimed to arise), in whole or in part, from any Change in Control, any company ceasing to be a Subsidiary or the transfer or any business from the Company or any Subsidiary to any other person.

Policies and Practices Regarding the Grant of Equity Awards

We do not schedule the grant of any equity awards in anticipation of the disclosure of material, non-public information and we do not schedule the disclosure of material, non-public information based on the timing of granting equity awards. We have not adopted a formal policy that dictates the timing of equity award grants. We may choose to grant equity awards outside of the annual broad-based awards (e.g., as part of a new hire package or as a retention or promotional incentive). Stock options may be granted only with an exercise price at or above the closing market price of our common stock on the date of grant. During 2024, no stock option grants were made to any of our NEOs during any period beginning four business days before the filing or furnishing of a periodic report or current report and ending one business day after the filing or furnishing of any such report with the SEC. We believe that our Insider Trading Policy is reasonably designed to promote compliance with insider trading laws, rules and regulations, and Nasdaq listing standards. A copy of our Insider Trading Policy is filed as Exhibit 19.1 to our Annual Report on Form 20-F for the fiscal year ended December 31, 2024.

C. Board Practices

Corporate Governance Practices

We are a “foreign private issuer,” as defined by the SEC. As a result, in accordance with Nasdaq listing requirements, we may rely on home country governance requirements and certain exemptions thereunder rather than complying with NASDAQ corporate governance standards. While we voluntarily follow most Nasdaq corporate governance rules, we may choose to take advantage of the following limited exemptions:

- Exemption from filing quarterly reports on Form 10-Q containing unaudited financial and other specified information or current reports on Form 8-K upon the occurrence of specified significant events.
- Exemption from Section 16 rules requiring insiders to file public reports of their stock ownership and trading activities and liability for insiders who profit from trades in a short period of time, which will provide less data in this regard than shareholders of U.S. companies that are subject to the Exchange Act.
- Exemption from the Nasdaq requirement requiring disclosure of any waivers of the code of business conduct and ethics for directors and officers.
- Exemption from the requirement that our board have a compensation committee that is composed entirely of independent directors with a written charter addressing the committee’s purpose and responsibilities.
- Exemption from the requirement to have independent director oversight of director nominations.

In connection with the migration to Bermuda, Tiziana adopted a Code of Business Conduct and Ethics which covers a broad range of matters including the handling of conflicts of interest, compliance issues and other corporate policies such as insider trading and equal opportunity and non-discrimination standards. Tiziana’s Code of Business Conduct and Ethics applies to all directors, executive officers and employees of Tiziana. Tiziana publishes its Code of Business Conduct and Ethics on its website (www.tizianalifesciences.com).

- We do not follow Nasdaq Rule 5620(c) regarding quorum requirements applicable to meetings of shareholders. Such quorum requirements are not required under English law. In accordance with generally accepted business practice, our Bye-laws will provide alternative quorum requirements that are generally applicable to meetings of shareholders.
- We do not follow Nasdaq Rule 5605(b)(2), which requires that independent directors regularly meet in executive sessions where only independent directors are present. Our independent directors may choose to meet in executive sessions at their discretion.

Although we may rely on certain home country corporate governance practices, we must comply with Nasdaq’s Notification of Noncompliance requirement (Nasdaq Rule 5625) and the Voting Rights requirement (Nasdaq Rule 5640). Further, we must have an audit committee that satisfies Nasdaq Rule 5605(c)(3), which addresses audit committee responsibilities and authority and requires that the audit committee consist of members who meet the independence requirements of Nasdaq Rule 5605(c)(2)(A)(ii).

We intend to take all actions necessary for us to maintain compliance as a foreign private issuer under the applicable corporate governance requirements of the Sarbanes-Oxley Act, the rules adopted by the SEC and Nasdaq listing rules. Accordingly, our shareholders will not have the same protections afforded to shareholders of companies that are subject to all of the corporate governance requirements of Nasdaq. For an overview of our corporate governance principles, see the following section titled “Description of Bye-laws and Memorandum of Association”

Description of Bye-laws and Memorandum of Association

The following description includes a summary of specified provisions of our memorandum of association and our Bye-laws. This description is qualified by reference to our memorandum of association and our Bye-laws which are incorporated by reference as exhibits to this annual report.

Preemptive Rights

Our Bye-laws do not provide shareholders with pro rata preemptive rights to subscribe for any newly issued common shares. Additionally, the Companies Act does not provide shareholders with a statutory preemptive right.

Repurchase of Shares

Our board of directors may exercise all of the powers to purchase for cancellation or acquire our shares as treasury shares in accordance with the Companies Act. On a reacquisition of shares, such shares may be cancelled (in which event, our issued but not our authorized capital will be diminished accordingly) or held as treasury shares. Such purchases may only be effected out of the capital paid up on the purchased shares or out of the funds otherwise available for dividend or distribution or out of the proceeds of a fresh issue of shares made for the purpose.

Alteration of Share Capital

We may, if authorized by a resolution of our shareholders, increase, divide, consolidate, subdivide, change the currency denomination of, diminish or otherwise alter or reduce the share capital in any manner permitted by the Companies Act.

Variation of Rights

If at any time we have more than one class of shares, the rights attaching to any class, unless otherwise provided for by the terms of issue of the relevant class, may be varied with the sanction of a resolution passed by a majority of the votes cast at a general meeting of the relevant class of shareholders at which a quorum consisting of at least two persons holding or representing one-third of the issued shares of the relevant class is present. Our Amended and Restated Bye-laws specify that the creation or issue of shares ranking equally with existing shares will not, unless expressly provided by the terms of issue of existing shares, vary the rights attached to existing shares. In addition, the creation or issue of preference shares ranking prior to common shares will not be deemed to vary the rights attached to common shares or, subject to the terms of any other series of preference shares, to vary the rights attached to any other series of preference shares.

Transfer of Shares

Our board of directors may in its absolute discretion and without assigning any reason refuse to register the transfer of a share which is not fully paid. Our board of directors may also refuse to recognize an instrument of transfer of a share unless it is accompanied by the relevant share certificate and such other evidence of the transferor's right to make the transfer as our board of directors shall reasonably require. The board shall refuse to register a transfer unless all applicable consents, authorizations and permissions of any governmental body or agency in Bermuda have been obtained. Subject to these restrictions, a holder of common shares may transfer the title to all or any of its common shares by completing a form of transfer in the form set out in our Bye-laws (or as near thereto as circumstances admit) or in such other common form as the board may accept. The instrument of transfer must be signed by the transferor and transferee, although in the case of a fully paid share our board of directors may accept the instrument signed only by the transferor.

Notwithstanding anything to the contrary in the Amended and Restated Bye-laws, our shares may be transferred without a written instrument if transferred by an appointed agent and in any form or manner which is in accordance with the rules or regulations of an appointed stock exchange (which includes the Nasdaq Capital Market) on which the shares are listed or admitted to trading.

General Meetings

An annual general meeting will be held each year in accordance with the requirements of the Companies Act and our Bye-laws at such time and place as our board of directors appoints. Our board of directors or the chairman may also, whenever in its judgment it is necessary, convene general meetings other than annual general meetings which are called special general meetings. Bermuda law and the Bye-laws provide that a special general meeting must be called upon the request of shareholders holding not less than one-tenth of the paid-up capital of the Company carrying the right to vote at general meetings. Any annual general meeting and special general meeting must be called by, respectively, not less than twenty-one (21) days and five (5) days' prior notice in writing. A notice of meeting must include the place, day and time of the meeting and, in the case of an annual general meeting, that the election of directors will take place thereat and any other business to be conducted at the meeting, and, in the case of a special general meeting, the general nature of the business to be considered at the meeting. This notice requirement is subject to the ability to hold such meetings on shorter notice if such notice is agreed: (i) in the case of an annual general meeting by all of the shareholders entitled to attend and vote at such meeting; or (ii) in the case of a special general meeting by a majority in number of the shareholders entitled to attend and vote at the meeting holding not less than 95% in nominal value of the shares entitled to vote at such meeting. A shareholder may appoint a proxy to attend and vote at the general meeting by providing notice in writing to us at our registered office or at such other place or in such manner as specified in the notice of the general meeting.

The chairman, if present, and if not, the chief executive officer, if present, and if not, the president, if present, and if not, any person appointed by our board of directors will act as chairman of the meeting. In their absence and if no one is appointed by our board of directors as chairman of such meeting, a chairman of the meeting will be appointed or elected by those present at the meeting and entitled to vote.

Board and Shareholder Ability to Call Special Meetings

Our Bye-laws provide that (a) the president or the chairman of the Company (if any) or any two Directors or any Director and the Secretary or the Board may convene a special general meeting whenever in their judgment such a meeting is necessary and (b) the board of directors must convene a special general meeting at the request of shareholders holding not less than one-tenth of the paid-up share capital of the Company with the right to vote at general meetings.

Shareholder Meeting Quorum

Our Bye-laws provide that at any general meeting of shareholders, At any general meeting two or more persons present throughout the meeting and representing in person or by proxy in excess of 33 1/3% of the total voting rights of all issued and outstanding shares in the Company shall form a quorum for the transaction of business.

Voting Rights

Subject to any restrictions for the time being lawfully attached to any class of shares, every shareholder who is present in person or by proxy at a general meeting shall be entitled to one vote on a show of hands and be entitled to one vote for every share of which he is a holder on a vote taken by poll, and any question proposed for the consideration of the shareholders at any general meeting shall be decided by the affirmative votes of a majority of the votes cast in accordance with the Bye-laws, and in the case of an equality of votes, the resolution will fail.

Shareholder Action by Written Consent

The Bye-laws provide that no action required to be taken or which may be taken at any general meeting of Members may be taken without a meeting, and the power of Members to consent in writing, without a meeting, to the taking of any action is specifically denied.

Access to Books and Records and Dissemination of Information

Members of the general public have a right to inspect the public documents of a company available at the office of the Registrar of Companies in Bermuda. These documents include the company's memorandum of association, including its objects and powers, and certain alterations to the memorandum of association. The shareholders have the additional right to inspect the bye-laws of the company, minutes of general meetings and the company's audited financial statements, which must be presented to the annual general meeting. The register of members of a company is also open to inspection by shareholders and by members of the general public without charge. The register of members is required to be open for inspection for not less than two hours in any business day (subject to the ability of a company to close the register of members for not more than thirty days in a year). A company is required to maintain its share register in Bermuda but may, subject to the provisions of the Companies Act, establish a branch register outside of Bermuda. A company is required to keep at its registered office a register of directors and officers that is open for inspection for not less than two hours in any business day by members of the public without charge. A company is also required to file with the Registrar of Companies in Bermuda a list of its directors to be maintained on a register, which register will be available for public inspection subject to such conditions as the Registrar may impose and on payment of such fee as may be prescribed. Bermuda law does not, however, provide a general right for shareholders to inspect or obtain copies of any other corporate records.

Removal of Directors

Our Amended and Restated Bye-laws provide that shareholders entitled to vote for the election of directors may, at any special general meeting convened and held in accordance with the Amended and Restated Bye-laws, remove a director only with cause, by the affirmative vote of shareholders holding at least a majority of the total voting rights of all shareholders having the right to vote at such meeting, provided that the notice of any such meeting convened for the purpose of removing a director must contain a statement of the intention so to do and be served on such director not less than 14 days before the meeting and at such meeting the director will be entitled to be heard on the motion for such director's removal.

Proceedings of Board of Directors

Our Bye-laws provide that our business is to be managed and conducted by our board of directors. Bermuda law permits individual and corporate directors and there is no requirement in the Bye-laws or Bermuda law that directors hold any of our shares. There is also no requirement in the Bye-laws or Bermuda law that our directors must retire at a certain age.

The remuneration of our directors is determined by the board of directors from time to time at a duly authorized meeting. Our directors may also be paid all travel, hotel and other expenses properly incurred by them in connection with our business or their duties as directors.

Provided a director discloses a direct or indirect interest in any contract or arrangement or proposed contract or arrangement with us as required by Bermuda law, such director is entitled to vote in respect of any such contract or arrangement in which he or she is interested and/or be counted in the quorum for the meeting at which such contract or arrangement is to be voted on.

Amalgamations, Mergers and Business Combinations

The amalgamation or merger of a Bermuda company with another company or corporation (other than certain affiliated companies) requires the amalgamation or merger agreement to be approved by the company's board of directors and by its shareholders. Unless the company's bye-laws provide otherwise, the approval of 75% of the shareholders voting at such meeting is required to approve the amalgamation or merger agreement, and the quorum for such meeting must be two persons holding or representing more than one-third of the issued shares of the company. The Amended and Restated Bye-laws provide that an amalgamation, consolidation or a merger (other than with a wholly owned subsidiary or as described below) that has been approved by the board must only be approved by a majority of the votes cast at a general meeting of the shareholders at which the quorum shall be two or more persons present in person and representing in person or by proxy in excess of 50% of all issued and outstanding common voting shares. Any other amalgamation or merger or other business combination (as defined in the Amended and Restated Bye-laws) not approved by our board must be approved by the holders of not less than 66 2/3% of all votes attaching to all shares then in issue entitling the holder to attend and vote on the resolution.

Dissenter's Rights

Under Bermuda law, in the event of an amalgamation or merger of a Bermuda company with another company or corporation, including a public Bermuda company, a shareholder of the Bermuda company who did not vote in favor of the amalgamation or merger and is not satisfied that fair value has been offered for such shareholder's shares may, within one month of notice of the shareholders meeting, apply to the Supreme Court of Bermuda to appraise the fair value of those shares. These approval rights did not apply to the Business Combination because the Company was not a party to any amalgamation or merger contemplated by the Business Combination.

Limitations on Director Liability and Indemnification of Directors and Officers

Section 98 of the Companies Act provides generally that a Bermuda company may indemnify its directors, officers and auditors against any liability which by virtue of any rule of law would otherwise be imposed on them in respect of any negligence, default, breach of duty or breach of trust, except in cases where such liability arises from fraud or dishonesty of which such director, officer or auditor may be guilty in relation to the company. Section 98 further provides that a Bermuda company may indemnify its directors, officers and auditors against any liability incurred by them in defending any proceedings, whether civil or criminal, in which judgment is awarded in their favor or in which they are acquitted or granted relief by the Supreme Court of Bermuda pursuant to section 281 of the Companies Act.

The Bye-laws provide that the directors, resident representative, secretary and other officers acting in relation to any of the affairs of the Company or any subsidiary thereof and the liquidator or trustees (if any) acting in relation to any of the affairs of the Company or any subsidiary thereof and every one of them shall be indemnified and secured harmless out of the assets of the Company from and against all actions, costs, charges, losses, damages and expenses which they or any of them shall or may incur or sustain by or by reason of any act done, concurred in or omitted in or about the execution of their duty, or supposed duty, or in their respective offices or trusts, and no indemnified party shall be answerable to the acts, receipts, neglects or defaults of the others of them or for joining in any receipts for the sake of conformity, or for any bankers or other persons with whom any moneys or effects belonging to the Company shall or may be lodged or deposited for safe custody, or for insufficiency or deficiency of any security upon which any moneys of or belonging to the Company shall be placed out on or invested, or for any other loss, misfortune or damage which may happen in the execution of their respective offices or trusts, or in relation thereto, provided that this indemnity shall not extend to any matter in respect of any fraud or dishonesty in relation to the Company which may attach to any of the indemnified parties. We may also enter into an indemnification agreement with any director or officer of the Company.

In addition, the Bye-laws provide that the Company may (i) purchase and maintain insurance for the benefit of any director or officer against any liability incurred by such person under the Companies Act in his or her capacity as a director or officer of the Company or indemnifying such director or officer in respect of any loss arising or liability attaching to him or her by virtue of any rule of law in respect of any negligence, default, breach of duty or breach of trust of which the director or officer may be guilty in relation to the Company or any of its subsidiaries and (ii) advance moneys to a director or officer for the costs, charges and expenses incurred by the director or officer in defending any civil or criminal proceedings against him or her, on condition that the director or officer shall repay the advance if any allegation of fraud or dishonesty in relation to the Company is proved against him or her.

Class Actions and Derivative Suits

Class actions and derivative actions are generally not available to shareholders under Bermuda law. The Bermuda courts, however, would ordinarily be expected to permit a shareholder to commence an action in the name of a company to remedy a wrong to the company where the act complained of is alleged to be beyond the corporate power of the company or illegal, or would result in the violation of the company's memorandum of association or bye-laws. Furthermore, consideration would be given by a Bermuda court to acts that are alleged to constitute a fraud against the minority shareholders or, for instance, where an act requires the approval of a greater percentage of the company's shareholders than that which actually approved it.

When the affairs of a company are being conducted in a manner which is oppressive or prejudicial to the interests of some part of the shareholders, one or more shareholders may apply to the Supreme Court of Bermuda, which may make such order as it sees fit, including an order regulating the conduct of the company's affairs in the future or ordering the purchase of the shares of any shareholders by other shareholders or by the company.

Amendment of Memorandum of Association and Bye-laws

Bermuda law provides that the memorandum of association of a company may be amended by a resolution passed at a general meeting of shareholders. Our Amended and Restated Bye-laws provide that no bye-law shall be rescinded, altered or amended, and no new bye-law shall be made, unless it shall have been approved by a resolution of our board of directors and by a resolution of our shareholders.

Under Bermuda law, the holders of an aggregate of not less than 20% in par value of the company's issued share capital or any class thereof have the right to apply to the Supreme Court of Bermuda for an annulment of any amendment of the memorandum of association adopted by shareholders at any general meeting, other than an amendment which alters or reduces a company's share capital as provided in the Companies Act. Where such an application is made, the amendment becomes effective only to the extent that it is confirmed by the Bermuda court. An application for an annulment of an amendment of the memorandum of association must be made within 21 days after the date on which the resolution altering the company's memorandum of association is passed and may be made on behalf of persons entitled to make the application by one or more of their number as they may appoint in writing for the purpose. No application may be made by shareholders voting in favor of the amendment.

Capitalization of Profits and Reserves

Pursuant to our Bye-laws, our board of directors may (i) capitalize any part of the amount of our share premium or other reserve accounts or any amount credited to our profit and loss account or otherwise available for distribution by applying such sum in paying up unissued shares to be allotted as fully paid bonus shares pro-rata (except in connection with the conversion of shares) to the shareholders; or (ii) capitalize any sum standing to the credit of a reserve account or sums otherwise available for dividend or distribution by paying up in full, partly paid or nil paid shares of those shareholders who would have been entitled to such sums if they were distributed by way of dividend or distribution.

Certain Provisions of Bermuda Law

Share Certificates

In accordance with Bermuda law, share certificates are only issued in the names of companies, partnerships or individuals. In the case of a shareholder acting in a special capacity (for example as a trustee), certificates may, at the request of the shareholder, record the capacity in which the shareholder is acting. Notwithstanding such recording of any special capacity, we are not bound to investigate or see to the execution of any such trust.

Membership

Under the Companies Act, only those persons who agree to become members of a Bermuda company and whose names are entered on the register of members of such company are deemed members. A Bermuda company is not bound to see to the execution of any trust, whether express, implied or constructive, to which any of its shares are subject and whether or not the company had notice of such trust. Accordingly, persons holding shares through a trustee, nominee or depository will not be recognized as members of a Bermuda company under Bermuda law and may only have the benefit of rights attaching to the shares or remedies conferred by law on members through or with the assistance of the trustee, nominee or depository.

Composition of Our Board of Directors

Our board of directors is currently composed of four members. Our board of directors has determined that, of our four directors, none have a relationship that would interfere with the exercise of independent judgment in carrying out the responsibilities of two of the directors, Mr. John Brancaccio and Mr. Simon, and that each of these directors is “independent” as that term is defined under Nasdaq rules.

In accordance with our Articles, at the first general meeting which is held after the date of adoption of the Bye-laws for the purpose of electing Directors, the Class I Directors shall be elected for a three year term of office, the Class II Directors shall be elected for a two year term of office and the Class III Directors shall be elected for a one year term of office. At each succeeding annual general meeting, successors to the class of Directors whose term expires at that annual general meeting shall be elected for a three-year term. If the number of Directors is changed, any increase or decrease shall be apportioned among the classes so as to maintain the number of Directors in each class as nearly equal as possible, and any Director of any class elected to fill a vacancy shall hold office for a term that shall coincide with the remaining term of the other Directors of that class, but in no case shall a decrease in the number of Directors shorten the term of any Director then in office. A Director shall hold office until the annual general meeting for the year in which his term expires.

The Class of the members of the Board of Directors is as follows:

Name	Class	Year Current Term Began	Year Current Term Expires
Gabriele Cerrone	III	2023	2026
John Brancaccio	II	2022	2025
Willy Simon	III	2022	2025
Ivor Elrifi	II	2025	2027

Committees of Our Board of Directors

Our board of directors has three standing committees: an audit committee, a remuneration committee and a nominating committee.

Audit Committee

The audit committee, which consists of, Mr. Brancaccio and Mr. Simon, assists the board of directors in overseeing our accounting and financial reporting processes. Mr. Brancaccio serves as chairman of the audit committee. The audit committee consists exclusively of members of our board who are financially literate, and Mr. Simon is considered an “audit committee financial expert” as defined by applicable SEC rules and has the requisite financial sophistication as defined under the applicable Nasdaq rules and regulations.

Our board has determined that all of the members of the audit committee satisfy the “independence” requirements set forth in Rule 10A-3 under the Exchange Act. The audit committee will be governed by a charter that complies with Nasdaq rules.

The audit committee’s responsibilities include:

- recommending the appointment of the independent auditor to the general meeting of shareholders;
- the appointment, compensation, retention and oversight of any accounting firm engaged for the purpose of preparing or issuing an audit report or performing other audit services;
- pre-approving the audit services and non-audit services to be provided by our independent auditor before the auditor is engaged to render such services;

- evaluating the independent auditor's qualifications, performance and independence, and presenting its conclusions to the full board of directors on at least an annual basis;
- reviewing and discussing with management and our independent registered public accounting firm our financial statements and our financial reporting process;
- reviewing, approving or ratifying any related party transactions.
- recommending the appointment of the independent auditor to the general meeting of shareholders; and
- the appointment, compensation, retention and oversight of any accounting firm engaged for the purpose of preparing or issuing an audit report or performing other audit services;

Remuneration Committee

The remuneration committee consists of Mr. Brancaccio and Mr. Simon. Mr. Simon serves as chairman of the remuneration committee. Under SEC and Nasdaq rules, there are heightened independence standards for members of the remuneration committee, including a prohibition against the receipt of any compensation from us other than standard board member fees.

The remuneration committee's responsibilities include:

- identifying, reviewing and proposing policies relevant to the compensation and benefits of our directors and executive officers;
- evaluating each executive officer's performance in light of such policies and reporting to the board; and
- overseeing and administering our employee share option scheme or equity incentive plans in operation from time to time.

Nominating Committee

The nominating committee consists of Mr. Cerrone and Mr. Simon. Mr. Simon serves as chairman of the nominating committee. The nominating committee's responsibilities include:

- drawing up selection criteria and appointment procedures for directors;
- recommending nominees for election to our board of directors and its corresponding committees;
- assessing the functioning of individual members of our board of directors and executive officers and reporting the results of such assessment to the board of directors; and
- developing corporate governance guidelines.

None of our non-employee directors have any service contracts with Tiziana Life Sciences Ltd or any of our subsidiaries that provide for benefits upon termination of employment.

Board Diversity Matrix (As of April 24, 2025)

Country of Principal Executive Offices	United Kingdom			
Foreign Private Issuer	Yes			
Disclosure Prohibited Under Home Country Law	No			
Total Number of Directors	4			
				Did Not Disclose Gender
	Female	Male	Non-Binary	
Part I: Gender Identity				
Directors	0	4	0	0
Part II: Demographic Background				
Underrepresented Individual in Home Country Jurisdiction	0	0	0	0
LGBTQ+	0	0	0	0

D. Employees

As of December 31, 2024, we had 9 full time employees. Three of our employees were engaged in research and development and six employees were engaged in management, administration and finance. Five are located in England and four are located in the United States. None of our employees are members of labor unions. None of our employees are covered by a collective bargaining agreement.

Insurance and Indemnification

To the extent permitted by the Companies Act, we are empowered to indemnify our directors against any liability they incur by reason of their directorship. We maintain directors' and officers' insurance to insure such persons against certain liabilities. We expect to enter into a deed of indemnity with each of our directors and executive officers prior to, or as soon as practicable, following the filing of this registration statement.

In addition to such indemnification, we provide our directors and executive officers with directors' and officers' liability insurance.

Insofar as indemnification of liabilities arising under the Securities Act may be permitted to our board of directors, executive officers, or persons controlling us pursuant to the foregoing provisions, we have been informed that, in the opinion of the SEC, such indemnification is against public policy as expressed in the Securities Act and is therefore unenforceable.

E. Share Ownership

See "Item 7. Major Shareholders and Related Party Transactions."

ITEM 7: MAJOR SHAREHOLDERS AND RELATED PARTY TRANSACTIONS**A. Major Shareholders**

The following table sets forth information relating to the beneficial ownership of our ordinary shares as of March 31, 2025 by:

- each person, or group of affiliated persons, known by us to own beneficially 5% or more of our outstanding ordinary shares; and
- each member of our board of directors and each of our executive officers.

The number of ordinary shares beneficially owned by each entity, person, board member, or executive officer is determined in accordance with the rules of the SEC, and the information is not necessarily indicative of beneficial ownership for any other purpose. Under such rules, beneficial ownership includes any ordinary shares over which the individual has sole or shared voting power or investment power as well as any ordinary shares that the individual has the right to acquire within 60 days of March 31, 2025 through the exercise of any option, warrant or other right. Except as otherwise indicated, and subject to applicable community property laws, the persons named in the table have sole voting and investment power with respect to all ordinary shares held by that person.

Name and address of beneficial owner	Number of Ordinary Shares Beneficially Owned	
	Shares	%
5% or Greater Shareholders:		
Gabriele Cerrone ⁽¹⁾	42,037,143	35.98
Executive Officers and Directors:		
Gabriele Cerrone ⁽¹⁾	42,037,143	35.98
Willy Simon ⁽²⁾	79,083	*
John Brancaccio ⁽²⁾	70,833	*
Ivor Elrifi	-	-
All directors and executive officers as a group (3 persons) ⁽³⁾	42,187,059	36.06

* Indicates beneficial ownership of less than 1% of the total outstanding ordinary shares.

(1) Mr. Gabriele Cerrone is the ultimate beneficial owner of ordinary shares through Planwise Group Limited and Panetta Partners Limited.

(2) Includes 70,833 stock options which are currently exercisable or exercisable within 60 days of March 31, 2025

(3) Includes 141,666 stock options which are currently exercisable or exercisable within 60 days of March 31, 2025

B. Related Party Transactions

The following is a description of related party transactions we have entered into since January 1, 2023, with the beneficial owners of 5% or more of our ordinary shares, which are our only voting securities, and senior management and members of our board of directors.

Indemnity Agreements

We have entered into deeds of indemnity with each of our directors.

Related Person Transaction Policy

Our board of directors has adopted a written related person transaction policy, effective as of November 9, 2018, the date on which our registration statement on Form F-1 was declared effective. This policy covers, any transaction or proposed transactions between us and a related person that are material to us or the related person, including without limitation, purchases of goods or services by or from the related person or entities in which the related person has a material interest, indebtedness, guarantees of indebtedness and employment by us of a related person. In reviewing and approving any such transactions, our audit and risk committee is tasked to consider all relevant facts and circumstances, including, but not limited to, whether the transaction is on terms comparable to those that could be obtained in an arm's length transaction and the extent of the related person's interest in the transaction.

Employment Agreements

We have entered into a consultancy agreement with our Acting Chief Executive Officer, and director agreements with our remaining board members. For further details on these agreements, see Item 6 entitled "Directors, Senior Management and Employees."

We have entered into certain related party transactions as disclosed in Note 8 and Note 23 to the Consolidated Financial Statements in Item 18 of this report.

C. Interests of Experts and Counsel

Not applicable.

ITEM 8: FINANCIAL INFORMATION**A. Consolidated Statements and Other Financial Information**

See "Item 18. Financial Statements".

Legal Proceedings

Except as disclosed in this paragraph, there are no governmental, legal or arbitration proceedings (including any such proceedings which are pending or threatened of which the Company is aware), which may have, or have had during the 12 months prior to the date of this registration statement, a significant effect on the Company's and/or our financial position or profitability. In addition to the proceedings set out in this section, the Company is involved in other legal proceedings and claims in the ordinary course of business.

B. Significant Changes

See Note 25 of our consolidated financial statements at the end of this Annual Report for a description of the significant changes since December 31, 2024.

ITEM 9: THE LISTING**A. Listing Details**

Our common shares are listed on The Nasdaq Capital Market under the symbol “TLSA.”

B. Plan of Distribution

Not applicable.

C. Markets

Our common shares are listed on the Nasdaq Capital Market under the symbol “TLSA.”

D. Selling Shareholders

Not applicable.

E. Dilution

Not applicable.

F. Expenses of the Issue

Not applicable.

ITEM 10: ADDITIONAL INFORMATION**A. Share Capital**

Not applicable.

B. Memorandum of Association and Bye-laws

We incorporate by reference into this Annual Report the description of our memorandum of association and Bye-laws contained in Form 8-K filed with the SEC on October 21, 2021.

C. Material Contracts

Except as otherwise disclosed in this Annual Report (including the exhibits hereto), we are not currently, and have not been in the last two years, party to any material contract, other than contracts entered into in the ordinary course of business.

D. Exchange Controls

The permission of the Bermuda Monetary Authority is required, under the provisions of the Exchange Control Act 1972 of Bermuda and related regulations, for all issuances and transfers of shares (which includes our common shares) of Bermuda companies to or from a non-resident of Bermuda for exchange control purposes, other than in cases where the Bermuda Monetary Authority has granted a general permission. The Bermuda Monetary Authority, in its notice to the public dated June 1, 2005, has granted a general permission for the issue and subsequent transfer of any securities of a Bermuda company from and/or to a non-resident of Bermuda for exchange control purposes for so long as any “Equity Securities” of the company (which include our common shares) are listed on an “Appointed Stock Exchange” (which include Nasdaq). In granting the general permission the Bermuda Monetary Authority accepts no responsibility for our financial soundness or the correctness of any of the statements made or opinions expressed in this annual report.

Although the Company is incorporated in Bermuda, as an exempted company it is classified as a non-resident of Bermuda for exchange control purposes by the Bermuda Monetary Authority. Other than transferring Bermuda Dollars out of Bermuda, there are no restrictions on the Company’s ability to transfer funds into and out of Bermuda or to pay dividends in currency other than Bermuda Dollars to non-residents of Bermuda who are holders of our common shares.

E. Taxation

Material U.S. Federal Income Tax Considerations for U.S. Holders

U.S. Federal Income Tax Considerations for U.S. Holders

The following discussion describes the material U.S. federal income tax consequences relating to the ownership and disposition of our Common shares by U.S. Holders. This discussion applies to U.S. Holders that purchase our Common shares pursuant to this offering and hold such Common shares as capital assets for tax purposes. This discussion is based on the Internal Revenue Code, U.S. Treasury regulations promulgated thereunder and administrative and judicial interpretations thereof, and the income tax treaty between the United Kingdom and the United States, or the Treaty, all as in effect on the date hereof and all of which are subject to change, possibly with retroactive effect. This discussion does not address all of the U.S. federal income tax consequences that may be relevant to specific U.S. Holders in light of their particular circumstances or to U.S. Holders subject to special treatment under U.S. federal income tax law (such as certain financial institutions, insurance companies, dealers or traders in securities or other persons that generally mark their securities to market for U.S. federal income tax purposes, tax-exempt entities or governmental organizations, retirement plans, regulated investment companies, real estate investment trusts, grantor trusts, brokers, dealers or traders in securities, commodities, currencies or notional principal contracts, certain former citizens or long-term residents of the United States, persons who hold our Common shares as part of a “straddle,” “hedge,” “conversion transaction,” “synthetic security” or integrated investment, persons that have a “functional currency” other than the U.S. dollar, persons who are subject to the tax accounting rules of Section 451(b) of the Internal Revenue Code, persons that own directly, indirectly or through attribution 10% or more (by vote or value) of our equity, corporations that accumulate earnings to avoid U.S. federal income tax, partnerships and other pass-through entities, and investors in such pass-through entities). This discussion does not address any U.S. state or local or non-U.S. tax consequences or any U.S. federal estate, gift or alternative minimum tax consequences.

As used in this discussion, the term “U.S. Holder” means a beneficial owner of our Common shares that is, for U.S. federal income tax purposes, (1) an individual who is a citizen or resident of the United States, (2) a corporation (or entity treated as a corporation for U.S. federal income tax purposes) created or organized in or under the laws of the United States, any state thereof, or the District of Columbia, (3) an estate the income of which is subject to U.S. federal income tax regardless of its source or (4) a trust (x) with respect to which a court within the United States is able to exercise primary supervision over its administration and one or more United States persons have the authority to control all of its substantial decisions or (y) that has elected under applicable U.S. Treasury regulations to be treated as a domestic trust for U.S. federal income tax purposes.

If an entity treated as a partnership for U.S. federal income tax purposes holds our Common shares, the U.S. federal income tax consequences relating to an investment in such Common shares will depend upon the status and activities of such entity and the particular partner. Any such entity and a partner in any such entity should consult its own tax advisor regarding the U.S. federal income tax consequences applicable to it (and, as applicable, its partners) of the purchase, ownership and disposition of our Common shares.

We have not sought, nor will we seek, a ruling from the IRS with respect to the matters discussed below. There can be no assurance that the IRS will not take a different position concerning the tax consequences of the purchase, ownership or disposition of the Common shares or that any such position would not be sustained. Persons considering an investment in our Common shares should consult their own tax advisors as to the particular tax consequences applicable to them relating to the purchase, ownership and disposition of our Common shares, including the applicability of U.S. federal, state and local tax laws and non-U.S. tax laws.

Passive Foreign Investment Company Rules

In general, a corporation organized outside the United States will be treated as a PFIC for any taxable year in which either (1) at least 75% of its gross income is “passive income,” or the PFIC income test, or (2) on average at least 50% of its assets, determined on a quarterly basis, are assets that produce passive income or are held for the production of passive income, or the PFIC asset test. Passive income for this purpose generally includes, among other things, dividends, interest, royalties, rents, and gains from the sale or exchange of property that give rise to passive income. Assets that produce or are held for the production of passive income generally include cash, even if held as working capital or raised in a public offering, marketable securities, and other assets that may produce passive income. Generally, in determining whether a non-U.S. corporation is a PFIC, a proportionate share of the income and assets of each corporation in which it owns, directly or indirectly, at least a 25% interest (by value) is taken into account.

Although PFIC status is determined on an annual basis and generally cannot be determined until the end of the taxable year, based on the nature of our current and expected income and the current and expected value and composition of our assets, we do not believe we were a PFIC for our 2024 tax year and we do not expect to be a PFIC for our current taxable year. There can be no assurance that we will not be a PFIC in future taxable years. Even if we determine that we are not a PFIC for a taxable year, there can be no assurance that the IRS will agree with our conclusion and that the IRS would not successfully challenge our position. Because of the uncertainties involved in establishing our PFIC status, our U.S. counsel expresses no opinion regarding our PFIC status, and also expresses no opinion with respect to our predictions or past determinations regarding our PFIC status.

If we are a PFIC in any taxable year during which a U.S. Holder owns our Common shares, the U.S. Holder could be liable for additional taxes and interest charges under the “PFIC excess distribution regime” upon (1) a distribution paid during a taxable year that is greater than 125% of the average annual distributions paid in the three preceding taxable years, or, if shorter, the U.S. Holder’s holding period for our Common shares, and (2) any gain recognized on a sale, exchange or other disposition, including, under certain circumstances, a pledge, of our Common shares, whether or not we continue to be a PFIC. Under the PFIC excess distribution regime, the tax on such distribution or gain would be determined by allocating the distribution or gain ratably over the U.S. Holder’s holding period for our Common shares. The amount allocated to the current taxable year (*i.e.*, the year in which the distribution occurs or the gain is recognized) and any year prior to the first taxable year in which we are a PFIC will be taxed as ordinary income earned in the current taxable year. The amount allocated to other taxable years will be taxed at the highest marginal rates in effect for individuals or corporations, as applicable, to ordinary income for each such taxable year, and an interest charge, generally applicable to underpayments of tax, will be added to the tax.

If we are a PFIC for any year during which a U.S. Holder holds our Common shares, we must generally continue to be treated as a PFIC by that U.S. Holder for all succeeding years during which the U.S. Holder holds such Common shares, unless we cease to meet the requirements for PFIC status and the U.S. Holder makes a “deemed sale” election with respect to our Common shares. If the election is made, the U.S. Holder will be deemed to sell our Common shares at their fair market value on the last day of the last taxable year in which we qualified as a PFIC, and any gain recognized from such deemed sale would be taxed under the PFIC excess distribution regime. After the deemed sale election, the U.S. Holder’s Common shares would not be treated as shares of a PFIC unless we subsequently become a PFIC.

If we are a PFIC for any taxable year during which a U.S. Holder holds our Common shares and one of our non-United States subsidiaries is also a PFIC (*i.e.*, a lower-tier PFIC), such U.S. Holder would be treated as owning a proportionate amount (by value) of the shares of the lower-tier PFIC and would be taxed under the PFIC excess distribution regime on distributions by the lower-tier PFIC and on gain from the disposition of shares of the lower-tier PFIC even though such U.S. Holder would not receive the proceeds of those distributions or dispositions. Any of our non-United States subsidiaries that have elected to be disregarded as entities separate from us or as partnerships for U.S. federal income tax purposes would not be corporations under U.S. federal income tax law and accordingly, cannot be classified as lower-tier PFICs. However, a non-United States subsidiary that has not made the election may be classified as a lower-tier PFIC if we are a PFIC during your holding period and the subsidiary meets the PFIC income test or PFIC asset test.

If we are a PFIC, a U.S. Holder will not be subject to tax under the PFIC excess distribution regime on distributions or gain recognized on our Common shares if a valid “mark-to-market” election is made by the U.S. Holder for our Common shares. An electing U.S. Holder generally would take into account as ordinary income each year, the excess of the fair market value of our Common shares held at the end of such taxable year over the adjusted tax basis of such Common shares. The U.S. Holder would also take into account, as an ordinary loss each year, the excess of the adjusted tax basis of such Common shares over their fair market value at the end of the taxable year, but only to the extent of the excess of amounts previously included in income over ordinary losses deducted as a result of the mark-to-market election. The U.S. Holder’s tax basis in our Common shares would be adjusted annually to reflect any income or loss recognized as a result of the mark-to-market election. Any gain from a sale, exchange or other disposition of our Common shares in any taxable year in which we are a PFIC would be treated as ordinary income and any loss from such sale, exchange or other disposition would be treated first as ordinary loss (to the extent of any net mark-to-market gains previously included in income) and thereafter as capital loss. If, after having been a PFIC for a taxable year, we cease to be classified as a PFIC because we no longer meet the PFIC income or PFIC asset test, the U.S. Holder would not be required to take into account any latent gain or loss in the manner described above and any gain or loss recognized on the sale or exchange of the Common shares would be classified as a capital gain or loss.

A mark-to-market election is available to a U.S. Holder only for “marketable stock.” Generally, stock will be considered marketable stock if it is “regularly traded” on a “qualified exchange” within the meaning of applicable U.S. Treasury regulations. A class of stock is regularly traded during any calendar year during which such class of stock is traded, other than in de minimis quantities, on at least 15 days during each calendar quarter.

Our Common shares will be marketable stock as long as they remain listed on Nasdaq and are regularly traded. A mark-to-market election will not apply to the Common shares for any taxable year during which we are not a PFIC, but will remain in effect with respect to any subsequent taxable year in which we become a PFIC. Such election will not apply to any of our non-U.S. subsidiaries. Accordingly, a U.S. Holder may continue to be subject to tax under the PFIC excess distribution regime with respect to any lower-tier PFICs notwithstanding the U.S. Holder’s mark-to-market election for our Common shares.

The tax consequences that would apply if we are a PFIC would also be different from those described above if a U.S. Holder were able to make a valid QEF election. As we do not expect to provide U.S. Holders with the information necessary for a U.S. Holder to make a QEF election, prospective investors should assume that a QEF election will not be available.

The U.S. federal income tax rules relating to PFICs are very complex. Prospective U.S. investors are strongly urged to consult their own tax advisors with respect to the impact of PFIC status on the purchase, ownership and disposition of our Common shares, the consequences to them of an investment in a PFIC, any elections available with respect to the Common shares and the IRS information reporting obligations with respect to the purchase, ownership and disposition of Common shares of a PFIC.

Distributions

Subject to the discussion above under “— Passive Foreign Investment Company Rules,” a U.S. Holder that receives a distribution with respect to our Common shares generally will be required to include the gross amount of such distribution in gross income as a dividend when actually or constructively received by the U.S. Holder to the extent of the U.S. Holder’s pro rata share of our current and/or accumulated earnings and profits (as determined under U.S. federal income tax principles). To the extent a distribution received by a U.S. Holder is not a dividend because it exceeds the U.S. Holder’s pro rata share of our current and accumulated earnings and profits, it will be treated first as a tax-free return of capital and reduce (but not below zero) the adjusted tax basis of the U.S. Holder’s Common shares. To the extent the distribution exceeds the adjusted tax basis of the U.S. Holder’s Common shares, the remainder will be taxed as capital gain. Because we may not account for our earnings and profits in accordance with U.S. federal income tax principles, U.S. Holders should expect all distributions to be reported to them as dividends. The amount of a dividend will include any amounts withheld by the company in respect of United Kingdom taxes.

Distributions on our Common shares that are treated as dividends generally will constitute income from sources outside the United States for foreign tax credit purposes and generally will constitute passive category income. Subject to applicable limitations, some of which vary depending upon the U.S. Holder’s particular circumstances, any United Kingdom income taxes withheld from dividends on Common shares at a rate not exceeding the rate provided by the Treaty will be creditable against the U.S. Holder’s U.S. federal income tax liability. The rules governing foreign tax credits are complex and U.S. Holders should consult their tax advisers regarding the creditability of foreign taxes in their particular circumstances. In lieu of claiming a foreign tax credit, U.S. Holders may, at their election, deduct foreign taxes, including any United Kingdom income tax, in computing their taxable income, subject to generally applicable limitations under U.S. law. An election to deduct foreign taxes instead of claiming foreign tax credits applies to all foreign taxes paid or accrued in the taxable year. The amount of any dividend income paid in a currency other than the U.S. dollar will be the U.S. dollar amount calculated by reference to the exchange rate in effect on the date of actual or constructive receipt, regardless of whether the payment is in fact converted into U.S. dollars at that time. If the dividend is converted into U.S. dollars on the date of receipt, a U.S. holder should not be required to recognize foreign currency gain or loss in respect of the dividend amount. A U.S. Holder may have foreign currency gain or loss if the dividend is converted into U.S. dollars after the date of receipt.

Distributions paid on our Common shares will not be eligible for the “dividends received” deduction generally allowed to corporate shareholders with respect to dividends received from U.S. corporations under the Internal Revenue Code. Dividends paid by a “qualified foreign corporation” to non-corporate U.S. Holders are eligible for taxation at a reduced capital gains rate rather than the marginal tax rates generally applicable to ordinary income provided that a holding period requirement (more than 60 days of ownership, without protection from the risk of loss, during the 121-day period beginning 60 days before the ex-dividend date) and certain other requirements are met. Each U.S. Holder is advised to consult its tax advisors regarding the availability of the reduced tax rate on dividends to its particular circumstances. However, if we are a PFIC for the taxable year in which the dividend is paid or the preceding taxable year (see discussion above under “— Passive Foreign Investment Company Rules”), we will not be treated as a qualified foreign corporation, and therefore the reduced capital gains tax rate described above will not apply.

A non-United States corporation (other than a corporation that is classified as a PFIC for the taxable year in which the dividend is paid or the preceding taxable year) generally will be considered to be a qualified foreign corporation with respect to any dividend it pays on Common shares that are readily tradable on an established securities market in the United States.

The amount of any dividend income that is paid in Pounds Sterling will be the U.S. dollar amount calculated by reference to the exchange rate in effect on the date of receipt, regardless of whether the payment is in fact converted into U.S. dollars. If the dividend is converted into U.S. dollars on the date of receipt (actual or constructive), a U.S. Holder should not be required to recognize foreign currency gain or loss in respect of the dividend income. A U.S. Holder may have foreign currency gain or loss if the dividend is converted into U.S. dollars after the date of receipt (actual or constructive).

Sale, Exchange or Other Taxable Disposition of Our Common shares

Subject to the discussion above under “— Passive Foreign Investment Company Rules,” a U.S. Holder generally will recognize capital gain or loss for U.S. federal income tax purposes upon the sale, exchange or other disposition of our Common shares in an amount equal to the difference, if any, between the amount realized (*i.e.*, the amount of cash plus the fair market value of any property received) on the sale, exchange or other disposition and such U.S. Holder’s adjusted tax basis in the Common shares. Such capital gain or loss generally will be long-term capital gain taxable at a reduced rate for non-corporate U.S. Holders or long-term capital loss if, on the date of sale, exchange or other disposition, the Common shares were held by the U.S. Holder for more than one year. Any capital gain of a non-corporate U.S. Holder that is not long-term capital gain is taxed at ordinary income rates. The deductibility of capital losses is subject to limitations. Any gain or loss recognized from the sale or other disposition of our Common shares will generally be gain or loss from sources within the United States for U.S. foreign tax credit purposes.

Medicare Tax

Certain U.S. Holders that are individuals, estates or trusts and whose income exceeds certain thresholds generally are subject to a 3.8% tax on all or a portion of their net investment income, which may include their gross dividend income and net gains from the disposition of our Common shares. If you are a U.S. Holder that is an individual, estate or trust, you are encouraged to consult your tax advisors regarding the applicability of this Medicare tax to your income and gains in respect of your investment in our Common shares.

Information Reporting and Backup Withholding

U.S. Holders may be required to file certain U.S. information reporting returns with the IRS with respect to an investment in our Common shares, including, among others, IRS Form 8938 (Statement of Specified Foreign Financial Assets). In addition, each U.S. Holder who is a shareholder of a PFIC must file an annual report containing certain information. U.S. Holders paying more than \$100,000 for our Common shares may be required to file IRS Form 926 (Return by a U.S. Transferor of Property to a Foreign Corporation) reporting this payment. Substantial penalties and other adverse circumstances may be imposed upon a U.S. Holder that fails to comply with the required information reporting.

Dividends on and proceeds from the sale or other disposition of our Common shares generally have to be reported to the IRS unless the U.S. Holder establishes a basis for exemption. Backup withholding may apply to amounts subject to reporting if the holder (1) fails to provide an accurate U.S. taxpayer identification number or otherwise establish a basis for exemption, or (2) is described in certain other categories of persons. However, U.S. Holders that are corporations generally are excluded from these information reporting and backup withholding tax rules.

Backup withholding is not an additional tax. Any amounts withheld under the backup withholding rules generally will be allowed as a refund or a credit against a U.S. Holder's U.S. federal income tax liability if the required information is furnished by the U.S. Holder on a timely basis to the IRS.

U.S. Holders should consult their own tax advisors regarding the backup withholding tax and information reporting rules.

EACH PROSPECTIVE INVESTOR IS URGED TO CONSULT ITS OWN TAX ADVISOR ABOUT THE TAX CONSEQUENCES TO IT OF AN INVESTMENT IN OUR COMMON SHARES IN LIGHT OF THE INVESTOR'S OWN CIRCUMSTANCES. IN ADDITION, SIGNIFICANT CHANGES IN U.S. FEDERAL INCOME TAX LAWS WERE RECENTLY ENACTED. PROSPECTIVE INVESTORS SHOULD ALSO CONSULT WITH THEIR TAX ADVISORS WITH RESPECT TO SUCH CHANGES IN U.S. TAX LAW AS WELL AS POTENTIAL CONFORMING CHANGES IN STATE TAX LAWS.

Bermuda Tax Considerations

Under present Bermuda law, no Bermuda withholding tax on dividends or other distributions, or any Bermuda tax computed on profits or income or on any capital asset, gain or appreciation will be payable by us or applicable to our operations, and there is no Bermuda tax in the nature of estate duty or inheritance tax applicable to our shares, debentures or other obligations held by non-residents of Bermuda.

Tax Assurance

We have obtained an assurance from the Minister of Finance of Bermuda under the Exempted Undertakings Tax Protection Act 1966 that, in the event that any legislation is enacted in Bermuda imposing any tax computed on profits or income, or computed on any capital asset, gain or appreciation or any tax in the nature of estate duty or inheritance tax, such tax shall not, until March 31, 2035, be applicable to us or to any of our operations or to our shares, debentures or other obligations except insofar as such tax applies to persons ordinarily resident in Bermuda or is payable by us in respect of real property owned or leased by us in Bermuda.

Taxation of Shareholders

Shareholders should seek advice from their tax advisor to determine the taxation to which they may be subject based on the shareholder's circumstances.

F. Dividends and Paying Agents

Not applicable.

G. Statements by Experts

Not applicable

H. Documents on Display

We are subject to the informational requirements of the Exchange Act. Accordingly, we are required to file reports and other information with the SEC, including annual reports on Form 20-F and reports on Form 6-K. You may inspect and copy reports and other information filed with the SEC at the public reference facilities of the SEC located at 100 F Street, N.E., Washington, D.C. 20549. You may also obtain copies of the documents at prescribed rates by writing to the Public Reference Section of the SEC at 100 F Street, N.E., Washington, DC 20549. Please call the SEC at 1-800-SEC-0330 for further information on the public reference room. The SEC also maintains a website at <http://www.sec.gov> from which certain filings may be accessed.

We also make available on our website, free of charge, our Annual Report and the text of our reports on Form 6-K, including any amendments to these reports, as well as certain other SEC filings, as soon as reasonably practicable after they are electronically filed with or furnished to the SEC. Our website address is "www.tizianalifesciences.com." The information contained on our website is not incorporated by reference in this Annual Report.

Members of the general public have a right to inspect the public documents of a company available at the office of the Registrar of Companies in Bermuda. These documents include the company's memorandum of association, including its objects and powers, and certain alterations to the memorandum of association. The shareholders have the additional right to inspect the bye-laws of the company, minutes of general meetings and the company's audited financial statements, which must be presented to the annual general meeting. The register of members of a company is also open to inspection by shareholders and by members of the general public without charge. The register of members is required to be open for inspection for not less than two hours in any business day (subject to the ability of a company to close the register of members for not more than thirty days in a year). A company is required to maintain its share register in Bermuda but may, subject to the provisions of the Companies Act, establish a branch register outside of Bermuda. A company is required to keep at its registered office a register of directors and officers that is open for inspection for not less than two hours in any business day by members of the public without charge. A company is also required to file with the Registrar of Companies in Bermuda a list of its directors to be maintained on a register, which register will be available for public inspection subject to such conditions as the Registrar may impose and on payment of such fee as may be prescribed. Bermuda law does not, however, provide a general right for shareholders to inspect or obtain copies of any other corporate records.

I. Subsidiary Information

For information on our subsidiaries, see "Item 4C. Organizational Structure."

ITEM 11: QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

We are exposed to market risks in the ordinary course of our business, which are principally limited to interest rate fluctuations and foreign currency exchange rate fluctuations. We maintain significant amounts of cash and cash equivalents that are in excess of federally insured limits in various currencies, placed with one or more financial institutions for varying periods according to expected liquidity requirements.

Interest Rate Risk

Our exposure to interest rate sensitivity is impacted by changes in the underlying U.S. and U.K. bank interest rates. Our surplus cash and cash equivalents have been invested in interest-bearing savings and money market accounts from time to time. We have not entered into investments for trading or speculative purposes. Due to the conservative nature of our investment portfolio, which is predicated on capital preservation of investments with short-term maturities, we do not believe an immediate one percentage point change in interest rates would have a material effect on the fair market value of our portfolio, and therefore we do not expect our operating results or cash flows to be significantly affected by changes in market interest rates.

Foreign Currency Exchange Risk

We maintain our consolidated financial statements in the functional currency US Dollar. Monetary assets and liabilities denominated in currencies other than the functional currency are translated into the functional currency at rates of exchange prevailing at the balance sheet dates. Non-monetary assets and liabilities denominated in foreign currencies are translated into the functional currency at the exchange rates prevailing at the date of the transaction. Exchange gains or losses arising from foreign currency transactions are included in the determination of net income (loss) for the respective periods.

The currencies of our subsidiaries are generally their functional currencies. In translating the financial statements of those subsidiaries or branches whose functional currency is other than the U.S. dollar, assets and liabilities are converted into U.S. dollars using the rates of exchange in effect at the balance sheet dates, and revenues and expenses are converted using the average foreign exchange rates for the period. Translation adjustments are not included in determining net income (loss) but are included in foreign exchange adjustment to accumulate other comprehensive loss, a component of shareholders' equity.

We do not currently engage in currency hedging activities in order to reduce our currency exposure, but we may begin to do so in the future. Instruments that may be used to hedge future risks may include foreign currency forward and swap contracts. These instruments may be used to selectively manage risks, but there can be no assurance that we will be fully protected against material foreign currency fluctuations.

ITEM 12: DESCRIPTION OF SECURITIES OTHER THAN EQUITY SECURITIES**A. Debt Securities**

Not applicable.

B. Warrants and Rights

Not applicable.

C. Other Securities

Not applicable.

D. American Depositary Shares

Not applicable.

PART II**ITEM 13: DEFAULTS, DIVIDEND ARREARAGES AN DELINQUENCIES**

None.

ITEM 14: MATERIAL MODIFICATIONS TO THE RIGHTS OF SECURITY HOLDERS AND USE OF PROCEEDS

None.

ITEM 15: CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures

Disclosure Controls and Procedures

The Company's management, with the participation of the Company's Chief Executive Officer and Finance Director, have evaluated the effectiveness of the Company's disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended (the "Exchange Act")) as of December 31, 2023. Based on that evaluation, the Company's Chief Executive Officer and the Company's Finance Director have concluded that as of December 31, 2024, there were no material weaknesses in the Company's internal control over financial reporting described below, the Company's disclosure controls and procedures were effective.

Management's Annual Report on Internal Control over Financial Reporting

The Company's management is responsible for establishing and maintaining adequate internal controls over financial reporting as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act. The Company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with International Financial Reporting Standards (IFRS) as issued by the International Accounting Standards Board (IASB), and IFRIC interpretations as applicable to companies reporting under IFRS.

Because of their inherent limitations, internal controls over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Under the supervision and with the participation of management, the Company's Chief Executive Officer and the Company's Finance Director, the Company conducted an evaluation of the effectiveness of its internal control over financial reporting based on the framework described in Internal Control-Integrated Framework issued by the Commission of Sponsoring Organizations of the Treadway Commission, as revised in 2013. Based on that evaluation, management has concluded that the Company did maintain effective internal control over financial reporting as of the period ended December 31, 2024 and no material weaknesses were identified.

Management has determined that the Company did maintain effective internal control over financial reporting as of the period ended December 31, 2024.

ITEM 16: [RESERVED]

ITEM 16A: AUDIT COMMITTEE FINANCIAL EXPERT

The members of our audit committee are Mr John Brancaccio and Mr. Willy Simon. Mr. John Brancaccio is the chair of the audit committee. Each of our audit committee members satisfies the independence requirements of Rule 5605(a)(2) of the Nasdaq Stock Market Marketplace Rules and the independence requirements of Rule 10A-3(b)(1) under the Exchange Act. Our board of directors has determined that Mr. John Brancaccio is an “audit committee financial expert” as defined in Item 16A of Form 20-F.

ITEM 16B: CODE OF ETHICS

Our Code of Business Conduct and Ethics is applicable to all of our employees, officers and directors and is available on our website at <https://www.tizianalifesciences.com>. Our Code of Business Conduct and Ethics provides that our directors and officers are expected to avoid any action, position or interest that conflicts with the interests of our company or gives the appearance of a conflict. Our directors and officers have an obligation under our Code of Business Conduct and Ethics to advance our company’s interests when the opportunity to do so arises. We expect that any amendment to this code, or any waivers of its requirements, will be disclosed on our website. Information contained on, or that can be accessed through, our website is not incorporated by reference into this Annual Report, and you should not consider information on our website to be part of this Annual Report.

ITEM 16C: PRINCIPAL ACCOUNTANT FEES AND SERVICES

The following table sets forth, for each of the years indicated, the aggregate fees billed to us for services rendered by PKF and Mazars, our independent registered public accounting firm.

PKF Littlejohn LLP

	Year Ending December 31,	
	2024	2023
	(in thousands)	
Audit fees	140	165
Other assurance services	20	25
Total	160	190

Mazars LLP

	Year Ending December 31,	
	2024	2023
	(in thousands)	
Audit fees	-	-
Other assurance services	38	-
Total	38	-

ITEM 16D: EXEMPTIONS FROM THE LISTING STANDARDS FOR AUDIT COMMITTEES

Not applicable.

ITEM 16E: PURCHASES OF EQUITY SECURITIES BY THE ISSUER AND AFFILIATED PURCHASERS

During the year ended December 31, 2023, we purchased 281,253 of our common shares at an average price of \$0.90 (excluding fees).

ITEM 16F: CHANGE IN REGISTRANTS CERTIFYING ACCOUNTANT

None.

ITEM 16G: CORPORATE GOVERNANCE

The Sarbanes-Oxley Act of 2002, as well as related rules subsequently implemented by the SEC, requires foreign private issuers, including our company, to comply with various corporate governance practices. In addition, Nasdaq rules provide that foreign private issuers may follow home country practice in lieu of the Nasdaq corporate governance standards, subject to certain exceptions and except to the extent that such exemptions would be contrary to U.S. federal securities laws. The home country practices followed by our company in lieu of Nasdaq rules are described below:

- We do not follow Nasdaq's quorum requirements applicable to meetings of shareholders. Such quorum requirements are not required under Bermuda law. In accordance with generally accepted business practice, our Bye-laws provide alternative quorum requirements that are generally applicable to meetings of shareholders.
- We do not follow Nasdaq's requirements that non-management directors meet on a regular basis without management present. Our board of directors may choose to meet in executive session at their discretion.
- We do not follow Nasdaq's requirements to seek shareholder approval for the implementation of certain equity compensation plans, the issuances of ordinary shares under such plans, or in connection with certain private placements of equity securities. In accordance with Bermuda law, we are not required to seek shareholder approval to allot ordinary shares in connection with applicable employee equity compensation plans. We will follow Bermuda law with respect to any requirement to obtain shareholder approval prior to any private placements of equity securities.

We intend to take all actions necessary for us to maintain compliance as a foreign private issuer under the applicable corporate governance requirements of the Sarbanes-Oxley Act of 2002, the rules adopted by the SEC and Nasdaq's listing standards.

Because we are a foreign private issuer, our directors and senior management are not subject to short-swing profit and insider trading reporting obligations under Section 16 of the U.S. Securities Exchange Act of 1934, as amended, or Exchange Act. They are, however, subject to the obligations to report changes in share ownership under Section 13 of the Exchange Act and related SEC rules.

ITEM 16H: MINE SAFETY DISCLOSURE

Not applicable.

ITEM 16I: DISCLOSURE REGARDING FOREIGN JURISDICTIONS THAT PREVENT INSPECTIONS

Not applicable.

ITEM 16J: INSIDER TRADING POLICIES

Pursuant to applicable SEC transition guidance, the disclosure required by Item 16J will only be applicable to the Company from the fiscal year ending on December 31, 2024.

ITEM 16K: CYBERSECURITY

We believe cybersecurity is critical to advancing our technological advancements. As a biopharmaceutical company, we face a multitude of cybersecurity threats that range from attacks common to most industries, such as ransomware and denial-of service. Our customers, suppliers, subcontractors, and business partners face similar cybersecurity threats, and a cybersecurity incident impacting us or any of these entities could materially adversely affect our operations, performance, and results of operations. These cybersecurity threats and related risks make it imperative that we expend resources on cybersecurity.

Our Board of Directors oversees management's processes for identifying and mitigating risks, including cybersecurity risks, to help align our risk exposure with our strategic objectives. Senior leadership, including our cybersecurity consultant, regularly briefs the Board of Directors on our cybersecurity and information security posture and the Board of Directors is apprised of cybersecurity incidents deemed to have a moderate or higher business impact, even if immaterial to us. The full Board retains oversight of cybersecurity because of its importance. In the event of an incident, we intend to follow our detailed incident response playbook, which outlines the steps to be followed from incident detection to mitigation, recovery, and notification, including notifying functional areas (e.g., legal), as well as senior leadership and the Board, as appropriate. Our Cybersecurity consultant has extensive information technology and program management experience. We have implemented a governance structure and processes to assess, identify, manage, and report cybersecurity risks.

As a biopharmaceutical company, we must comply with extensive regulations, including requirements imposed by the Federal Drug Administration related to adequately safeguarding patient information and reporting cybersecurity incidents to the SEC. We work with our cybersecurity consultant on assessing cybersecurity risk and on policies and practices aimed at mitigating these risks. We believe we are positioned to meet the requirements of the SEC. In addition to following SEC guidance and implementing pre-existing third party frameworks, we have developed our own practices and frameworks, which we believe enhance our ability to identify and manage cybersecurity risks. Third parties also play a role in our cybersecurity. We engage third-party services to conduct evaluations of our security controls, whether through penetration testing, independent audits, or consulting on best practices to address new challenges. Assessing, identifying, and managing cybersecurity related risks are factored into our overall business approach.

We rely heavily on our supply chain to deliver our products and services, and a cybersecurity incident at a supplier, subcontractor or business partner could materially adversely impact us. We require that our subcontractors report cybersecurity incidents to us so that we can assess the impact of the incident on us. Notwithstanding the extensive approach we take to cybersecurity, we may not be successful in preventing or mitigating a cybersecurity incident that could have a material adverse effect on us. While we maintain cybersecurity insurance, the costs related to cybersecurity threats or disruptions may not be fully insured. See "Risk Factors" for a discussion of cybersecurity risks.

PART III**ITEM 17: FINANCIAL STATEMENTS**

We have elected to furnish financial statements and related information specified in Item 18.

ITEM 18: FINANCIAL STATEMENTS

See the Financial Statements beginning on page F-1.

ITEM 19: EXHIBITS

Exhibit No.	Description
1.1	Memorandum of Association of Tiziana Life Sciences Ltd, adopted as of October 20, 2021 (incorporated by reference to Exhibit 3.1 to Form 8-K12B filed on October 21, 2021).
1.2	Amended and restated bye-laws of Tiziana Life Sciences Ltd, adopted as of October 20, 2021 (incorporated by reference to Exhibit 3.2 to Form 8-K12B filed on October 21, 2021).
2.1	Description of Securities (Incorporated by reference to Exhibit 2.1 to Form 20-F filed on May 10, 2024)
4.2	License and Sublicence Agreement relating to CD3 (NI-0401) between Novimmune SA and Tiziana Life Sciences PLC, dated December 2014, incorporated by reference to Exhibit 10.2 to Amendment No. 1 to Form F-1 filed on August 23, 2018).
4.3	License and Sublicence Agreement relating to IL-6r (NI-1201) between Novimmune SA and Tiziana Life Sciences PLC, dated December 2016. (incorporated by reference to Exhibit 10.3 to Amendment No. 1 to Form F-1 filed on August 23, 2018).
4.4	License Agreement relating to a novel formulation of Foralumab in a medical device for nasal administration between The Brigham and Women's Hospital, Inc. and Tiziana Life Sciences plc, dated April 2018. (incorporated by reference to Exhibit 10.4 to Amendment No. 1 to Form F-1 filed on August 23, 2018).
4.5	Annual Lease for 14-15 Conduit Street, London W1S 2XJ United Kingdom (incorporated by reference to Exhibit 4.5 to Form 20-F filed on April 26, 2023).
4.7	Tiziana Life Sciences plc Employee Share Option Plan, with Non-Employee Sub-Plan and US Sub-Plan, adopted by the Board on 23 March 2016 and approved by shareholders on June 30, 2016. (Incorporated by reference to Exhibit 4.8 to Form 20-F filed on April 4, 2019).
4.8	Amended and Restated Service Agreement dated July 11, 2019, between the Registrant and Dr. Kunwar Shailubhai (incorporated by reference to Exhibit 10.9 to Amendment No. 2 to Form F-1 filed on September 20, 2019)
4.9	Form of Deed of Indemnity for board members. (Incorporated by reference to Exhibit 10.10 to Amendment No. 1 to Form F-1 filed on August 23, 2018).
4.10	Tiziana Life Sciences Ltd 2021 Equity Incentive Plan (incorporated by reference to Exhibit 10.3 to Form 8-K12B filed on October 21, 2021).
8.1	List of Subsidiaries. (Incorporated by reference to Exhibit 8.1 to Form 20-F filed on May 23, 2022).
12.1*	Certification by the Principal Executive Officer pursuant to Securities Exchange Act Rules 13a-14(a) and 15d-14(a) as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
12.2*	Certification by the Principal Financial Officer pursuant to Securities Exchange Act Rules 13a-14(a) and 15d-14(a) as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
13.1*	Certification by the Principal Executive Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
13.2*	Certification by the Principal Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
15.2	Consent of PKF Littlejohn. (Previously filed with the SEC as exhibits to the Registrant's Annual Report on Form 20-F filed on May 6, 2025)
19.1	Insider Trading Policy (Previously filed with the SEC as exhibits to the Registrant's Annual Report on Form 20-F filed on May 6, 2025)
97	Clawback policy (Incorporated by reference to Exhibit 97.1 to Form 20-F filed on May 10, 2024)
101.INS	Inline XBRL Instance Document.
101.SCH	Inline XBRL Taxonomy Extension Schema Document.
101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase Document.
101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase Document.
101.LAB	Inline XBRL Taxonomy Extension Label Linkbase Document.
101.PRE	Inline XBRL Taxonomy Extension Presentation Linkbase Document.
104	Cover Page Interactive Data File (formatted as Inline XBRL and contained in Exhibit 101).

* Filed Herewith

SIGNATURES

The Registrant hereby certifies that it meets all of the requirements for filing on Form 20-F and that it has duly caused and authorized the undersigned to sign this registration statement on its behalf.

TIZIANA LIFE SCIENCES LTDBy: /s/ Ivor ElrifiIvor Elrifi
Chief Executive Officer

Date: May 8, 2025

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TIZIANA LIFE SCIENCES LTD

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Consolidated Financial Statements and Notes to Financial Statements to be provided under separate cover.

*REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM***To the Board of Directors and Stockholders of Tiziana Life Sciences Ltd****Opinion on the Consolidated Financial Statements**

We have audited the accompanying Consolidated Balance Sheet of Tiziana Life Sciences Ltd and its subsidiaries (the “Group”) as of December 31, 2024 and 2023 and the related Consolidated Statements of Operations and Comprehensive Loss, Consolidated Statements of Cash Flows and Consolidated Statements of Shareholders’ Equity for each of the three years ended December 31, 2024 and the related notes (collectively referred to as the “consolidated financial statements”). In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of the Group as of December 31, 2024 and 2023 and the consolidated results of its operations and its cash flows for each of the three years ended December 31, 2024 in conformity with International Financial Reporting Standards as issued by the International Accounting Standards Board.

Going Concern Uncertainty

The accompanying consolidated financial statements have been prepared assuming that the Group will continue as a going concern. As discussed in note 2 to the consolidated financial statements, the Group are pre-revenue, and its business model requires significant ongoing expenditure on research and development. Management’s plans regarding these matters are also described in note 2. The forecast prepared by management indicates that the current cash held will be utilised by March 2026 without additional financing facilities in place. Management is currently pursuing a number of alternatives in order to raise sufficient funds, including deferred payment of existing liabilities, working capital cost reductions and arranging short-term and long-term funding. These conditions raise substantial doubt about the Group’s ability to continue as a going concern. The consolidated financial statements do not include any adjustments that might result from the outcome of this uncertainty.

Basis for opinion

These consolidated financial statements are the responsibility of the Group’s management. Our responsibility is to express an opinion on these consolidated financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (“PCAOB”) and are required to be independent with respect to the Group in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud. The Group is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audits, we are required to obtain an understanding of internal control over financial reporting, but not for the purpose of expressing an opinion on the effectiveness of the Group’s internal control over financial reporting. Accordingly, we express no such opinion.

Our audits included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. We believe that our audits provide a reasonable basis for our opinion.

Critical Audit Matters

Critical audit matters are matters arising from the current period audit of the consolidated financial statements that were communicated or required to be communicated to the audit committee and that: 1) relate to accounts or disclosures that are material to the financial statements and 2) involved our especially challenging, subjective, or complex judgements. The communication of critical audit matters does not alter in any way our opinion on the consolidated financial statements, taken as a whole, and we are not, by communicating the critical audit matter below, providing separate audit opinions on the critical audit matter or on the accounts or disclosures to which they relate.

We have identified one critical audit matter, being the going concern basis of preparation. The nature of the critical audit matter, together with our conclusion, is set out above in the going concern uncertainty paragraph. The Directors were required to exercise significant judgement in making their assessment as to whether it is appropriate to prepare the consolidated financial statements on a going concern basis and in preparing their related explanatory disclosures. As a result of the requirement for the Directors to exercise significant judgement, together with the pervasive impact of the going concern basis of preparation and the importance of the related explanatory disclosures, we have concluded that the going concern basis of preparation is a critical audit matter.

Our evaluation of the Directors' assessment of the appropriateness of the going concern basis of preparation of these consolidated financial statements included, but was not limited to:

- Undertaking an initial assessment at the planning stage of the audit to identify events or conditions that may cast significant doubt on the group's ability to continue as a going concern;
- Obtaining an understanding of the relevant controls relating to the Directors' going concern assessment;
- Reviewing the Directors' going concern assessment, including the supporting cash flow projections to 31 May 2026;
- Evaluating the key assumptions used and judgements applied to the Directors in forming their conclusions on going concern; and

Reviewing the appropriateness of the disclosures made by the Directors in the consolidated financial statements.

We have served as the Group's auditor since 2022.

PKF Littlejohn LLP
London, England

May 6, 2025

TIZIANA LIFE SCIENCES LTD

Consolidated Balance Sheets
(In thousands)

	Notes	Year ended December 31,	
		2024	2023
		\$	\$
ASSETS			
Current assets:			
Cash and cash equivalents		3,724	1,183
Prepayments and other receivables	12	145	223
Taxation receivable	12	32	3,793
Related party receivables	21	3,607	2,138
Total current assets		7,508	7,337
Non – Current Assets:			
Property and equipment, net		16	10
Right of use asset	22	171	283
Investment in related party	19	3,589	4,554
Total non-current assets		3,776	4,847
Total assets		11,284	12,184
LIABILITIES AND SHAREHOLDERS' EQUITY			
Liabilities:			
Current liabilities:			
Accounts payable and accrued expenses	18	7,230	6,387
Lease Liability	22	106	138
Other liabilities		12	14
Total current liabilities		7,348	6,539
Lease Liability (Non-Current)	22	-	109
Total liabilities		7,348	6,648
Shareholders' Equity:			
Called up share capital (111,462,617 shares are issued and outstanding; 2023:103,087,744)		111	103
Share premium	13	23,105	16,492
Share based payment reserve – Options		7,626	6,905
Share based payment reserve – warrants		25	-
Merger relief reserve	13	118,697	118,697
Treasury shares		-	(1,574)
RSU reserve		910	-
Shares to be issued reserve		-	225
Translation reserve		(1,707)	(1,636)
Retained earnings		(144,831)	(133,676)
Total shareholders' equity		3,936	5,536
Total liabilities and shareholders' equity		11,284	12,184

The accompanying notes are an integral part of these consolidated financial statements.

TIZIANA LIFE SCIENCES LTD

Consolidated Statements of Operations and Comprehensive Loss
(In thousands, except loss per share)

	Notes	Year ended December 31,		
		2024	2023	2022
		\$	\$	\$
Operating Expenses				
Research and Development		(5,229)	(8,113)	(12,955)
Operating expenses		(10,565)	(9,871)	(1,631)
Total operating expenses		(15,794)	(17,984)	(14,586)
Loss from operations		(15,794)	(17,984)	(14,586)
Other income/(expense):				
Finance (expense)/ income	9	814	1,144	(7)
FV Loss on Investment	9	(1,766)	(402)	(869)
Other income/(losses)	4	-	-	65
Total other income/(expense)		(952)	742	(811)
Loss from operations before income taxes		(16,746)	(17,242)	(15,397)
Income tax (expense)/credit		4,883	(449)	-
Loss for the year		(11,863)	(17,691)	(15,397)
Other Comprehensive loss:				
Gain/(Loss) on currency translation		(72)	1,492	(3,582)
Comprehensive loss		(11,935)	(16,199)	(18,979)
Basic and diluted loss per share attributable to common shareholders		\$ (0.11)	\$ (0.17)	\$ (0.15)

The accompanying notes are an integral part of these consolidated financial statements.

TIZIANA LIFE SCIENCES LTD

Consolidated Statements of Shareholders' Equity
(In thousands)

	Share Capital	Share Premium	Share Based Payment Reserve (Options)	Share Based Payment Reserve (warrants)	Merger Reserve	Treasury Shares	RSU Reserve	Retained Earnings	Shares to be issued Reserve	Translation Reserve	Total Equity
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
Balance at 1 January 2022	102	15,596	13,797	697	118,697	-	-	(108,063)	-	454	41,280
Treasury Shares	-	-	-	-	-	(1,320)	-	-	-	-	(1,320)
Share based payment charge (options)	-	-	1,811	-	-	-	-	-	-	-	1,811
Options Forfeited/Cancelled in the year	-	-	(3,221)	-	-	-	-	-	-	-	(3,221)
Reclass of FV for options forfeited/Cancelled	-	-	(7,197)	-	-	-	-	7,197	-	-	-
Total transactions with owners	-	-	(8,607)	-	-	-	-	7,197	-	-	(1,410)
Loss for Period	-	-	-	-	-	-	-	(15,397)	-	-	(15,397)
Translation	-	-	-	-	-	-	-	-	-	(3,582)	(3,582)
Total comprehensive loss	-	-	-	-	-	-	-	(15,397)	-	(3,582)	(18,979)
Balance at 31 December 2022	102	15,596	5,190	697	118,697	(1,320)	-	(116,263)	-	(3,128)	19,571
Issuance of Stock	1	323	-	-	-	-	-	-	-	-	324
Share based payment charge (options)	-	-	1,773	-	-	-	-	-	-	-	1,773
Options forfeited/cancelled in the year	-	-	(39)	-	-	-	-	-	-	-	(39)
Reclass of FV for options forfeited/Cancelled	-	-	(19)	-	-	-	-	19	-	-	-
Warrants Exercised in the year	-	573	-	(438)	-	-	-	-	-	-	135
Warrants Forfeited in the year	-	-	-	(259)	-	-	-	259	-	-	-
Buyback of Treasury Shares	-	-	-	-	-	(254)	-	-	-	-	(254)
Shares to be issued in lieu of directors fees, cash bonus and Expenses	-	-	-	-	-	-	-	-	225	-	225
Total transactions with owners	1	896	1,715	(697)	-	(254)	-	278	225	-	2,164
Loss for Period	-	-	-	-	-	-	-	(17,691)	-	-	(17,691)
Translation	-	-	-	-	-	-	-	-	-	1,492	1,492
Total comprehensive loss	-	-	-	-	-	-	-	(17,691)	-	1,492	(16,199)
Balance at 31 December 2023	103	16,492	6,905	-	118,697	(1,574)	-	(133,676)	225	(1,636)	5,536
Share based payment charge (options)	-	-	1,656	-	-	-	-	-	-	-	1,656
Options forfeited/cancelled in the year	-	-	(875)	-	-	-	-	708	-	-	(167)
Options exercised in the year	-	75	(60)	-	-	-	-	-	-	-	15
Warrants charge	-	(25)	-	25	-	-	-	-	-	-	-
Buyback and cancellation of Treasury Shares	(2)	(1,623)	-	-	-	1,574	-	-	-	-	(51)
Shares issued in lieu of directors fees, bonus and Expenses	3	1,835	-	-	-	-	-	-	(225)	-	1,613
Shares issued in lieu of Consultancy Fees	2	1,785	-	-	-	-	-	-	-	-	1,787
Net Shares issued for ATM	-	124	-	-	-	-	-	-	-	-	124
Net Shares issued for fundraising	5	4,442	-	-	-	-	-	-	-	-	4,447
Restricted Shares	-	-	-	-	-	-	910	-	-	-	910
Total transactions with owners	8	6,613	721	25	-	1,574	910	708	(225)	-	10,334
Loss for Period	-	-	-	-	-	-	-	(11,863)	-	-	(11,863)
Translation	-	-	-	-	-	-	-	-	-	(72)	(72)
Total comprehensive loss	-	-	-	-	-	-	-	(11,863)	-	(72)	(11,935)
Balance at 31 December 2024	111	23,105	7,626	25	118,697	-	910	(144,831)	-	(1,708)	3,936

The accompanying notes are an integral part of these consolidated financial statements.

TIZIANA LIFE SCIENCES LTD

Consolidated Statements of Cash Flows
(In thousands)

	Year ended December 31,		
	2024	2023	2022
CASH FLOWS FROM OPERATING ACTIVITIES:			
Loss from operations before income taxes	\$ (16,746)	(17,242)	\$ (15,397)
Shares issued in lieu of directors fees, bonus and expenses	1,613	525	-
Shares issued in lieu of consultancy fees	1,788	-	-
Share based payment – restricted stock	910	-	-
Share based payment – options	1,656	1,773	1,811
Options forfeited during the year	(227)	(39)	(3,221)
Fair value loss on investment, net	1,760	402	869
(Gain)/loss on disposal of assets	1	-	129
Depreciation	12	7	1
(Gain)/ loss on foreign exchange	158	1,519	(3,183)
Depreciation of right-of-use asset	112	89	50
Cash inflow from taxation	8,784	-	490
Interest on related party loan conversion	(795)	(1,150)	-
Net (increase) in related party receivables	(1,469)	(1,524)	(1,158)
Net (decrease)/increase in related party payables	-	-	(1,355)
Net (increase)/decrease in operating assets/other receivables	78	80	1,002
Net increase/(decrease) in operating liabilities /other liabilities	839	(138)	347
Net cash used in operating activities	(1,526)	(15,698)	(19,615)
CASH FLOWS FROM INVESTING ACTIVITIES			
Purchase of Fixed Assets	(19)	-	-
Investment in Related Party	-	(1,000)	(2,676)
Purchase of Treasury Shares	(52)	(253)	(1,320)
Net cash used in Investing activities	(71)	(1,253)	(3,996)
CASH FLOWS FROM FINANCING ACTIVITIES:			
Proceeds from issuance of ordinary shares – ATM, net	124	24	-
Proceeds from issuance of ordinary shares – Fundraise, net	4,447	-	-
Proceeds from the issuance of warrants	-	135	-
Repayment of leasing liabilities	(141)	(119)	(55)
Proceeds of Exercise of options	75	-	-
Net cash (used in)/provided by financing activities	4,505	40	(55)
Net increase/(decrease) in cash and cash equivalents	2,908	(16,911)	(23,666)
Cash and cash equivalent, beginning of year	1,183	18,122	42,186
Exchange difference on cash and cash equivalents	(367)	(28)	(398)
Cash and cash equivalent, end of year	3,724	1,183	18,122

*TIZIANA LIFE SCIENCES LTD***Notes to Consolidated Financial Statements****1. GENERAL INFORMATION**

Tiziana Life Sciences Ltd, (the “company”) is a public limited company incorporated in Bermuda and at the year-end is quoted on the NASDAQ Capital Market (NASDAQ: TLSA). The previous parent, Tiziana Life Sciences PLC, delisted from the main market of the London Stock Exchange (LSE: TILS) on October 21, 2021. The address of its registered office is given on page 1. The principal activities of the Company and its subsidiaries (the Group) are that of a clinical stage biotechnology company that specializes in the development of transformative therapies for neurodegenerative and lung diseases. Our clinical pipeline includes drug assets for Secondary Progressive Multiple Sclerosis, ALS, Alzheimer’s, Crohn’s Disease and KRAS+ NSCLC.

The functional currency for the Company is also US dollars (\$) indicative of the primary economic environment in which the Company operates. These consolidated financial statements are presented in thousands of dollars (\$’000) which is the presentational currency of the Company.

2. ACCOUNTING POLICIES

The principal accounting policies applied in the preparation of these consolidated financial statements are set out below. These policies have been applied consistently to all the years presented unless otherwise stated.

Basis of preparation

The consolidated financial statements of the Group have been prepared in accordance with International Financial Reporting Standards (IFRS) as issued by the International Accounting Standards Board (IASB), and International Financial Reporting Interpretations Committee IFRIC interpretations as applicable to companies reporting under IFRS. These accounts have been prepared under the historical cost convention except for the following items:

- Financial instruments – fair value through profit or loss
- Financial instruments – fair value through other comprehensive income

Going Concern

The Group incurred losses during the year and has net assets at the year end.

The Group is in the early stages of developing its business focusing on the discovery and development of novel molecules that treat human disease in oncology and immunology. As the Group is pre-revenue, the Directors expect the Group to incur further losses and to require significant capital expenditure in continuing to develop clinical stage development therapeutic candidates in both oncology and immunology. The Group has successfully funded clinical trials to date and going forward will need to continue to secure additional investment to fund the clinical trials.

The Group has experienced net losses and significant cash outflows from cash used in operating activities over the past years, and as December 31, 2024, had an accumulated loss of \$144m and a net loss for the year ended December 31, 2023 of \$11.9m.

The Directors have prepared cash flow projections that include the costs associated with the continued clinical trials and additional investment to fund that operation. Based on those projections, that the company will not be able to meet its liabilities as they fall due within the next 12 months from the date when these financial statements are issued. The Directors are however aware, through their own extensive experience in the sector, that this position is not uncommon in the context of a pre-revenue life sciences company principally involved in cash consuming research and development activity.

The top line data for the clinical trial is expected in 2025 and the Directors are taking steps to put engagements and plans into place to ensure that sufficient funds will be forthcoming. These steps include possible deferred payments of existing liabilities, working capital cost reductions and raising additional equity. Until and unless the Group and Company secures sufficient investment to fund their clinical pipeline, there is a material uncertainty that may cast significant doubt on the Group and Company's ability to continue as a going concern, and therefore, that it may be unable to realize its assets and discharge its liabilities in the normal course of business. Despite this material uncertainty, the Directors conclude that it is appropriate to continue to adopt the going concern basis of accounting as the Directors are confident, based on the previous fund-raising history as well as additional measures being planned, that sufficient funds will be forthcoming and accordingly they have prepared these financial statements on a going concern basis.

New and Revised Standards

Standards in effect in 2024

There are no new IFRS standards, amendments to standards or interpretations that are mandatory for the financial year beginning on January 1, 2024, that are relevant to the Group and that have had any impact in the year to December 31, 2024. New standards, amendments to standards and interpretations that are not yet effective, which have been deemed by the Group as currently not relevant and are not listed here.

Basis of consolidation

Subsidiary undertakings are all entities over which the Group exercises control. The Group has control when it can demonstrate all of the following: (a) power over the investee; (b) exposure, or rights, to variable returns from its involvement with the investee; and (c) the ability to use its power over the investee to affect the amount of the investor's return.

The existence and effect of both current voting rights and potential voting rights that are currently exercisable or convertible are considered when assessing whether control of an entity is exercised. Subsidiaries are consolidated from the date at which the Group obtains control and are de-consolidated from the date at which control ceases.

Business combination

The Group undertook a group reorganization exercise during the year to December 31, 2021. As part of this process, Tiziana Life Sciences Ltd (a Bermudan entity) was inserted above Tiziana Life Sciences Limited (formerly Tiziana Life Sciences Plc) in the Group's structure. As both entities were under common control of Planwise Ltd, the transaction does not constitute a business combination under IFRS 3 'Business combinations' and instead has been accounted for as a group reorganization, using the pooling of interest method. This results in assets and liabilities being measured at their carrying amount in Tiziana Life Sciences Limited (formerly Tiziana Life Sciences Plc) but share capital being that of Tiziana Life Sciences Ltd (a Bermudan entity). Merger accounting has been used to account for this transaction (See note 15 for details).

On 21 October 2021, Tiziana Life Sciences Ltd. (the 'Company') acquired the entire shareholding of the former Tiziana Life Sciences Plc and its related subsidiaries, by a way of a share for share exchange with Tiziana Life Sciences Ltd becoming the Group's immediate parent company.

On 21 October 2021, the Company was admitted for listing on the NASDAQ Capital Market Exchange and the former Tiziana Life Sciences Plc was delisted from the London Stock Exchange.

Segment reporting

Operating segments are reported in a manner consistent with the internal reporting provided to the Board. The Board considers there to be only one operating segment being the research and development of biotechnological and pharmaceutical products.

Taxation

The tax expense/(credit) for the year represents the total of current taxation and deferred taxation. The charge/(credit) in respect of current taxation is based on the estimated taxable profit or loss for the year. Current tax is provided at amounts expected to be paid (or recovered) using the tax rates and laws that have been enacted or substantively enacted by the balance sheet date.

Deferred tax is provided in full, using the liability method, on temporary differences arising between the tax bases of assets and liabilities and their carrying amounts in the consolidated financial statements. Deferred tax is determined using tax rates (and laws) that have been enacted or substantively enacted by the balance sheet date and expected to apply when the related deferred tax is realized, or the deferred liability is settled. Deferred tax assets are recognized to the extent that it is probable that the future taxable profit will be available against which the temporary differences can be utilized.

Research and Development tax credits are provided for in the year that the costs are incurred. These are estimated based on eligible research and development expenditure. Any differences that are rebated are recognized in the following year, when the cash is received from the UK tax authorities.

Foreign currency translation

Items included in the financial statements of each of the Group's entities are measured using the currency of the primary economic environment in which the entity operates (the functional currency). The consolidated financial statements are presented in US dollars, which is the Group's presentational currency.

Foreign currency transactions are translated into the functional currency using exchange rates prevailing at the dates of the transactions. Foreign exchange gains and losses resulting from the settlement of foreign currency transactions and from the translation at year-end exchange rates of monetary assets and liabilities denominated in foreign currencies are recognized in the Consolidated statements of operations and comprehensive loss.

The financial statements of overseas subsidiary undertakings are translated into US dollars on the following basis:

- Assets and liabilities at the rate of exchange ruling at the year-end date.
- Profit and loss account items at the average rate of exchange for the year.

Exchange differences arising from the translation of the net investment in foreign entities, borrowings and other currency instruments designated as hedges of such investments, are taken to equity (and recognized in the Consolidated statements of operations and comprehensive loss) on consolidation.

License fees

Payments made which provide the right to perform research are carefully evaluated to determine whether such payments are to fund research or acquire an asset. "License fees expenses" are recognized as incurred.

Research and development

All on-going research and development expenditure is currently expensed in the period in which it is incurred. Due to the regulatory environment inherent in the development of the Group's products, the criteria for development costs to be recognized as an asset, as set out in IAS 38 'Intangible Assets', are not met until a product has been granted regulatory approval and it is probable that future economic benefit will flow to the Group. The Group currently has no qualifying expenditure.

Fair Value Measurement

Management have assessed the categorization of the fair value measurements using the IFRS 13 fair value hierarchy. Categorization within the hierarchy has been determined on the basis of the lowest level of input that is significant to the fair value measurement of the relevant asset as follows:

Level 1 - valued using quoted prices in active markets for identical assets

Level 2 - valued by reference to valuation techniques using observable inputs other than quoted prices included within

Level 3 - valued by reference to valuation techniques using inputs that are not based on observable market data.

Financial instruments

The Group classifies a financial instrument, or its component parts, as a financial liability, a financial asset or an equity instrument in accordance with the substance of the contractual arrangement and the definitions of a financial liability, a financial asset and an equity instrument.

The Group evaluates the terms of the financial instrument to determine whether it contains an asset, a liability or an equity component. Such components shall be classified separately as financial assets, financial liabilities or equity instruments.

A financial instrument is any contract that gives rise to a financial asset of one entity and a financial liability or equity instrument of another entity.

(a) Financial assets, initial recognition and measurement and subsequent measurement

All financial assets not recorded at fair value through profit or loss, such as receivables and deposits, are recognized initially at fair value plus transaction costs. Financial assets carried at fair value through profit or loss (FVTPL) are initially recognized at fair value, and transaction costs are expensed in the consolidated statements of operations and comprehensive loss. The measurement of financial assets depends on their classification. Financial assets such as receivables and deposits are subsequently measured at amortized cost using the effective interest method, less loss allowance. The Group holds an investment in Accustem Inc. and Okyo Pharma Limited as a financial asset at fair value through profit or loss.

(b) Financial liabilities, initial recognition and measurement and subsequent measurement

Financial liabilities are classified as measured at amortized cost or FVTPL.

A financial liability is classified as at FVTPL if it is a derivative. Financial liabilities at FVTPL are measured at fair value and net gains and losses, including any interest expense, are recognized in profit or loss. Other financial liabilities are subsequently measured at amortized cost using the effective interest method. Interest expense and foreign exchange gains and losses are recognized in profit or loss. Any gain or loss on derecognition is also recognized in profit or loss.

The Group's financial liabilities include trade and other payables.

Warrants

Warrants are issued by the Group in return for services and as part of a financing transaction.

Warrants issued in return for services.

These warrants fall within the scope of IFRS 2. The Company recognizes that the fair value at the date of grant of these warrants should be expensed to the Statement of Income and recognized over the life of the service for which the warrant was provided. These warrants have been valued by reference to the equity instruments granted as they are all tied to Convertible loan notes. The measurement date is therefore the date that the Convertible loan note was entered into.

Warrants issued as part of a financing transaction.

Warrants issued as part of a financing transaction fall outside the scope of IFRS 2. These are classified as equity instruments because a fixed amount of cash is exchanged for a fixed amount of equity. The fair value is recognized within equity and is not remeasured.

Share capital

Ordinary shares of the Company are classified as equity.

Property, plant and equipment

(i) Recognition and measurement

Items of property, plant and equipment are measured at cost less accumulated depreciation and accumulated impairment losses. Costs include expenditures that are directly attributable to the acquisition of the asset. Purchased software that is integral to the functionality of the related equipment is capitalized as part of that equipment.

When parts of an item of property, plant and equipment have different useful lives, they are accounted for as separate items (major components) of property, plant and equipment.

Gains and losses on disposal of an item of property, plant and equipment are determined by comparing the proceeds from disposal with the carrying amount of property, plant and equipment, and are recognized in profit or loss.

(ii) Depreciation

Depreciation is calculated on the depreciable amount, which is the cost of an asset, or other amount substituted for cost, less its residual value.

Depreciation is recognized in consolidated statements of operations and comprehensive loss on a straight-line basis over the estimated useful life of each part of an item of property, plant and equipment. Leased assets are depreciated over the shorter of the lease term and their useful lives unless it is reasonably certain that the Group will obtain ownership by the end of the lease term in which case they are depreciated over their useful lives.

The estimated useful lives for the current period and the comparative period are as follows.

Fixtures and fittings	5 years
IT and equipment	3 years
Right of use asset	Economic life of contractual relationship

Depreciation methods, useful lives and residual values are reviewed at each reporting date. Depreciation is allocated to the operating expenses line of the Consolidated statements of operations and comprehensive loss.

Impairment

Impairment of financial assets measured at amortized cost

At each reporting date the Group recognizes a loss allowance for expected credit losses on financial assets measured at amortized cost.

In establishing the appropriate amount of loss allowance to be recognized, the Group applies either the general approach or the simplified approach, depending on the nature of the underlying group of financial assets.

General approach

The general approach is applied to the impairment assessment of refundable lease deposits and other refundable lease contributions, and cash and cash equivalents.

Under the general approach the Group recognizes a loss allowance for a financial asset at an amount equal to the 12-month expected credit losses, unless the credit risk on the financial asset has increased significantly since initial recognition, in which case a loss allowance is recognized at an amount equal to the lifetime expected credit losses.

Simplified approach

The simplified approach is applied to the impairment assessment of other receivables.

Under the simplified approach the Group always recognizes a loss allowance for a financial asset at an amount equal to the lifetime expected credit losses.

Impairment of non-financial assets

Non-financial assets are tested for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable.

Non-financial assets are impaired when carrying amounts exceed recoverable amounts. The recoverable amount is measured as the higher of fair value less cost of disposal and value in use. The value in use is calculated as being net projected cash flows based on financial forecasts discounted back to present value at a pre-tax discount rate.

Contingent Liabilities

The Company is required to make judgments about contingent liabilities including the probability of pending and potential future litigation outcomes that, by their nature, are dependent on future events that are inherently uncertain. In making its determination of possible scenarios, management considers the evaluation of outside counsel knowledgeable about each matter, as well as known outcomes in case law.

Leases

All leases are accounted for by recognizing a right-of-use asset and a lease liability except for:

- Leases of low value assets; and
- Leases with a duration of 12 months or less.

The Group has leases for its offices. Each lease is reflected on the consolidated balance sheet as a right-of-use asset and a lease liability. The Group does not have any leases of low value assets. Variable lease payments which do not depend on an index or a rate (such as lease payments based on a percentage of Group sales) are excluded from the initial measurement of the lease liability and asset. The Group classifies its right-of-use assets in a consistent manner to its property, plant and equipment (see Note 21).

For leases over office buildings and factory premises the Group must keep those properties in a good state of repair and return the properties in their original condition at the end of the lease. The expected costs of returning to its original condition are considered negligible.

At the lease commencement date, the Group recognizes a right-of-use asset and a lease liability in its consolidated balance sheets. The right-of-use asset is measured at cost, which is made up of the initial measurement of the lease liability, any initial direct costs incurred by the Group, an estimate of any costs to dismantle and remove the asset at the end of the lease, and any lease payments made in advance of the lease commencement date (net of any incentives received).

At the commencement date, the Group measures the lease liability at the present value of the lease payments unpaid at that date, discounted using the Group's incremental borrowing rate because as the lease contracts are negotiated with third parties it is not possible to determine the interest rate that is implicit in the lease. The incremental borrowing rate is the estimated rate that the Group would have to pay to borrow the same amount over a similar term, and with similar security to obtain an asset of equivalent value. This rate is adjusted should the lessee entity have a different risk profile to that of the Group.

The Group depreciates the right-of-use asset on a straight-line basis from the lease commencement date to the earlier of the end of the useful life of the right-of-use asset or the end of the lease term. The Group also assesses the right-of-use asset for impairment when such indicators exist.

Lease payments included in the measurement of the lease liability are made up of fixed payments (including in substance fixed), variable payments based on an index or rate, amounts expected to be payable under a residual value guarantee and payments arising from options reasonably certain to be exercised.

Subsequent to initial measurement, the liability will be reduced by lease payments that are allocated between repayments of principal and finance costs. The finance cost is the amount that produces a constant periodic rate of interest on the remaining balance of the lease liability.

Short term leases exempt from IFRS 16 are classified as operating leases. Payments made under operating leases are recognized in profit and loss on a straight-line basis over the term of the lease.

Share – based payments

The calculation of the fair value of equity-settled share-based awards and the resulting charge to the Consolidated statements of operations and comprehensive loss requires assumptions to be made regarding future events and market conditions. These assumptions include the future volatility of the Company's share price. These assumptions are then applied to a recognized valuation model in order to calculate the fair value of the awards.

Where employees and directors are rewarded using share-based payments, the fair value of the employees', directors' and/or advisers' services are determined by reference to the fair value of the share options/warrants awarded. Their value is appraised at the date of grant and excludes the impact of any nonmarket vesting conditions (for example, profitability and sales growth targets).

In accordance with IFRS 2, a charge is made to the Consolidated statements of operations and comprehensive loss for all share-based payments including share options based upon the fair value of the instrument used. A corresponding credit is made to an equity reserve, in the case of options/warrants awarded to employees, directors, advisers and other consultants.

If vesting periods or other vesting conditions apply, the expense is allocated over the vesting period, based on the best available estimate of the number of share options/warrants expected to vest. Non- market vesting conditions are included in assumptions about the number of options/warrants that are expected to become exercisable.

Estimates are subsequently revised, if there is any indication that the number of share options/warrants expected to vest differs from previous estimates. No adjustment is made to the expense or share issue cost recognized in prior periods if fewer share options ultimately are exercised than originally estimated.

Upon exercise of share options/warrants, the proceeds received are allocated to share capital with any excess being recorded as share premium. A corresponding debit is made to the share-based payment reserve.

Where share options are cancelled, this is treated as an acceleration of the vesting period of the options. The amount that otherwise would have been recognized for services received over the remainder of the vesting period is recognized immediately within the Consolidated statements of operations and comprehensive loss.

All goods and services received in exchange for the grant of any share – based payment are measured at their fair value.

Restricted Stock Units (RSUs)

Where RSUs are granted to directors or employees, the fair value of the RSUs at grant date is based upon the market price of the shares underlying the awards and this is charged to the Statement of Comprehensive Income over the vesting period. There are no internal performance conditions. The expense charged is adjusted based on actual forfeitures.

Other intangible assets

Other intangible assets that are acquired by the Group are stated at cost less accumulated impairment losses.

At each balance sheet date non-financial assets are assessed to determine whether there is an indication that the asset or the asset's cash generating unit may be impaired. If there is such an indication the recoverable amount of the asset or asset's cash generating unit is compared to the carrying amount.

3. CRITICAL ACCOUNTING JUDGEMENT

The preparation of financial information in accordance with generally accepted accounting practice, in the case of the Group being International Financial Reporting Standards as issued by the IASB, requires the directors to make estimates and judgements that affect the reported amount of assets, liabilities, income and expenditure and the disclosures made in the consolidated financial statements. Such estimates and judgements must be continually evaluated based on historical experience and other factors, including expectations of future events.

The following are considered to be critical accounting estimates:

Share-based payments

The Group accounts for share-based payment transactions for employees in accordance with IFRS 2 Share-based Payment, which requires the measurement of the cost of employee services received in exchange for the options on our ordinary shares, based on the fair value of the award on the grant date.

The Company utilizes the Black-Scholes-Merton option pricing model as the most appropriate method for determining the estimated fair value of our share-based awards without market conditions. For performance-based options that include vesting conditions relating to the market performance of our ordinary shares, a Monte Carlo pricing model was used in order to reflect the valuation impact of price hurdles that have to be met as conditions to vesting.

The Company makes estimates as to the useful life of an option award, the expected price volatility of the underlying share, risk free interest rate for the term of the award and correlations and volatilities of the shares of peer group companies. The Company also makes estimates as to the vesting period for awards that have performance – based criteria.

4 OTHER (EXPENSE)/ INCOME

The Group's other (expense)/ income is made up of the following:

	Year Ended December 31,		
	2024	2023	2022
	\$'000	\$'000	\$'000
Other Income	-	-	65
Total other income/(expense)	-	-	65

Sublicense income has been classified as other income as the counterparty is not considered a customer but an entity we are collaborating with.

5. OPERATING LOSS

The Group's operating losses are stated after charging/(crediting) the following:

	Year Ended December 31,		
	2024	2023	2022
	\$'000	\$'000	\$'000
License fee	-	563	-
Depreciation of Property, plant and equipment	12	7	1
Depreciation (Right-of-use asset)	112	89	50
Foreign exchange (gains)/losses	158	1,519	(3,183)

6. SEGMENTAL REPORTING

During the year under review Management identified the Group's only operating segment as the research and development of biotechnological and pharmaceutical products. This one segment is monitored and strategic decisions are made based upon it and other non-financial data collated from industry intelligence. The form of financial reporting reported to the Board is consistent with those presented in the annual consolidated financial statements.

7. EMPLOYEES

	Year ended December 31,		
	2024 \$'000	2023 \$'000	2022 \$'000
Staff costs comprised:			
Directors' salaries (including bonus)	1,969	929	554
Employees' wages, salaries and bonus	1,120	1,777	2,014
Social security costs	140	136	135
Recruitment fees	20	24	197
Share based payment (credit) / charge	2,338	1,730	(1,410)
	<u>5,587</u>	<u>4,596</u>	<u>1,490</u>
The average monthly number of employees, including directors, employed by the group during the year was:			
Research and development	2	3	3
Corporate and administration	6	6	6
	<u>8</u>	<u>9</u>	<u>9</u>

8. REMUNERATION OF KEY MANAGEMENT PERSONNEL

Director	Year ended December 31,											
	2024				2023				2022			
	Directors' fee	Bonus	Salary	Share based payments	Directors' fee	Bonus	Salary	Share based payments	Directors' fee	Bonus	Salary	Share based payments
G. Cerrone ⁽¹⁾	673	1,180	-	901	717	100	-	562	296	148	-	-
Ivor Elrifi	-	-	131	-	-	-	-	-	-	-	-	-
Willy Simon	58	-	-	95	56	-	-	98	55	-	-	83
J Brancaccio	58	-	-	95	56	-	-	98	55	-	-	83
K. Shailubhai	-	-	-	-	-	-	-	-	-	-	379	(145)
T Adams	-	-	-	-	-	-	-	-	-	-	-	(1,967)
	<u>789</u>	<u>1,180</u>	<u>131</u>	<u>1,091</u>	<u>829</u>	<u>100</u>	<u>-</u>	<u>758</u>	<u>406</u>	<u>148</u>	<u>379</u>	<u>(1,946)</u>

All bonuses are short term. No post-employment or termination payments were made.

The following share options were granted to directors in the following periods:

	Year ended December 31,		
	2024	2023	2022
	Number of options	Number of options	Number of options
W.Simon	200,000	75,000	-
J. Brancaccio	200,000	75,000	-
	<u>400,000</u>	<u>150,000</u>	<u>-</u>

Key management personnel of the Group are comprised of directors and officers of the Company.

No share options were exercised by directors during the years ended December 31, 2024, 2023 and 2022.

The Company made payments totaling approximately \$21k, \$25k(restated), and \$32k to defined contribution pension schemes on behalf of directors and employees during 2024, 2023, and 2022, respectively.

9. FINANCE COSTS

	Year ended December 31,		
	2024	2023	2022
	\$'000	\$'000	\$'000
Group			
Finance Income			
Loan Interest Received	814	1,154	32
Total finance income	<u>814</u>	<u>1,154</u>	<u>32</u>
Finance Expense			
Interest expense on lease liabilities	6	10	7
Fair Value loss on Investment	1,760	402	869
Total finance Expense	<u>1,766</u>	<u>412</u>	<u>876</u>
Net finance income/ (expense) recognized in Consolidated statements of operations and comprehensive loss	<u>(952)</u>	<u>742</u>	<u>(844)</u>

10. TAXATION

	Year Ended December 31,		
	2024	2023	2022
Group	\$'000	\$'000	\$'000
Current year tax (credit)	(4,883)	449	-
Adjustments due to prior periods	-	-	-
Total tax (credit) for the period	(4,883)	449	-
The tax charge for the year is different from the standard rate of corporation tax in the United Kingdom of 19%. The difference can be reconciled as follows:			
Loss before taxation	(16,746)	(17,242)	(15,397)
Loss charged at standard rate of corporation tax 25% 2024, 23.52% 2023, 19% 2022	(4,187)	(4,055)	(2,926)
Movement in unrecognized deferred tax	2,942	3,194	2,319
Expenses not deductible for taxation	3,142	3,961	1,036
Adjustments due to prior periods	-	449	-
Research and development claim	(4,883)	-	-
Income not taxable for tax purposes	(1,894)	(3,113)	(495)
Fixed asset differences	-	-	(1)
Current Tax - Other	-	13	-
Foreign Tax - Other	(3)	-	-
Adjustments to brought forward values	-	-	67
	(4,883)	449	-

The Research and Development claim has been calculated in accordance with the R&D tax relief available to small and medium sized entities, whereby the entity is able to claim a cash tax credit (if loss making), worth up to 14.5% of the surrenderable losses.

The adjustments due to prior periods relate to R&D tax relief claims for the prior period. Under UK tax legislation, a 2-year window is available under which R&D tax relief can be claimed.

No deferred tax asset has been recognized in respect of trading losses carried forward because of uncertainty as to when these losses will be recoverable.

The amount of tax losses for which no deferred tax assets have been recognized for the year ended December 31, 2024 is \$ 16,844k. (2023 is \$18,137k; 2022; \$15,011k).

11. LOSS PER SHARE

Basic loss per share is calculated by dividing the loss attributable to equity holders of the Company by the weighted average number of ordinary shares in issue during the year.

	Year ended December 31,		
	2024	2023	2022
(Loss) attributable to equity holders of the company (\$000)	(11,863)	(17,691)	(15,397)
Weighted average number of ordinary shares in issue	106,672,342	102,471,016	101,526,389
Basic loss per share (cents per share)	(11.1)	(17.3)	(15.2)

As the Group is reporting a loss from continuing operations for the year then, in accordance with IAS 33, share options, warrants and convertible loan notes are not considered dilutive because the exercise of the share options would have an anti-dilutive effect. The basic and diluted earnings per share as presented on the face of the income statement are therefore identical. All earnings per share figures presented above arise from continuing and total operations and therefore no earnings per share for discontinued operations are presented. The weighted average number of ordinary shares in issuance is stated as net excluding Treasury shares.

12. OTHER RECEIVABLES

\$000	Year ended	
	December 31, 2023	
	2024	2023
Security deposits receivable	53	121
Prepayments	92	102
Taxation receivable	32	3,793
	<u>177</u>	<u>4,016</u>

There are no differences between the carrying amount and fair value of any of the trade and other receivables above.

13 SHARE CAPITAL AND SHARE PREMIUMGroup

	Nominal Value £/\$	Share Capital		Share Premium \$000	Merger Reserve \$000
		Shares	\$000		
At 1 January 2022	\$ 0.001	102,272,614	102	15,596	118,697
Shares issued in the period:	\$ 0.001	-	-	-	-
At 31 December 2022		102,272,614	102	15,596	118,697
Shares issued in lieu of fees/compensation	\$ 0.001	450,000	1	300	-
Warrants Exercised	\$ 0.001	337,501	-	573	-
Issuance of Stock - ATM	\$ 0.001	27,629	-	23	-
At 31 December 2023		103,087,744	103	16,492	118,697
Shares issued in lieu of fees/compensation	\$ 0.001	4,896,508	5	3,620	-
Options Exercised	\$ 0.001	122,849	-	75	-
Issuance of Stock – ATM, net	\$ 0.001	108,659	-	124	-
Issuance of Stock - fundraising	\$ 0.001	5,263,158	5	4,442	-
Issuance of Warrants - fundraising	\$ 0.001	-	-	(25)	-
Cancellation of Treasury Shares	\$ 0.001	(2,016,301)	(2)	(1,623)	-
At 31 December 2024		111,462,617	111	23,105	118,697

Ordinary Shares

Ordinary shares have a par value of \$0.001. They entitle the holder to participate in dividends, and to share in the proceeds of winding up the company in proportion to the number of and amounts paid on the shares held. On a show of hands every holder of ordinary shares present at a meeting in person or by proxy is entitled to one vote, and upon a poll each share is entitled to one vote. The Company has 111,462,617 shares in issue and no shares in treasury (2023: 1,573,510 shares).

14. SHARE BASED PAYMENTS

Group and Company Options

The Company operates share-based payment arrangements to remunerate directors and key employees in the form of a share option scheme. The exercise price of the option is normally equal to the market price of an ordinary share in the Company at the date of grant. The Company is currently operating two plans (Tiziana Life Sciences PLC) Share Option Plan which is closed for any new issuances and the Tiziana Life Sciences Ltd 2021 Equity Incentive Plan.

Tiziana Life Sciences PLC Share Option Plan

	2024		2023		2022	
	Weighted Average exercise price (cents)	Options ('000)	Weighted Average exercise price (cents)	Options ('000)	Weighted Average exercise price (cents)	Options ('000)
Outstanding at 1 January	62	6,621	59	6,724	90	22,234
Granted	-	-	-	-	-	-
Forfeited/Cancelled	(77)	(2,105)	(44)	(103)	(92)	(15,510)
Exercised	-	-	-	-	-	-
Outstanding at 31 December	69	4,516	62	6,621	59	6,724
Exercisable at 31 December	74	1,257	60	2,829	58	2,732

No options were exercised during 2024, 2023 or 2022.

The total outstanding fair value charge of the share option instruments is deemed to be approximately \$1,893k (2023: \$2,602k), 2022: \$3,223k).

Under the Tiziana Life Sciences PLC Share Option Plan, the total expense recognized for the year ending 31 December 2024 arising from share – based payment transactions under the Tiziana Life Sciences PLC Share Option Plan is \$681k of which \$159k relates to forfeitures during the year (2023 \$703k, 2022: \$1,199k).

Share options outstanding at the end of the year have the following expiry dates and exercise prices:

Grant Date	Expiry Date	Exercise Price	Share Options at 31 December 2024 ('000)
30 April 2018	30 April 2028	\$ 1.10	500
6 May 2020	5 May 2028	\$ 0.47	3,416
23 July 2020	26 July 2030	\$ 2.11	100
25 August 2020	24 August 2030	\$ 1.98	500
Total			4,516

Tiziana Life Sciences Ltd Share Option Plan

	<u>2024</u>		<u>2023</u>	
	<u>Weighted Average exercise price (cents)</u>	<u>Options (‘000)</u>	<u>Weighted Average exercise price (cents)</u>	<u>Options (‘000)</u>
Outstanding at 1 January	73	4,268	69	2,575
Granted	72	2,260	61	1,753
Forfeited/Cancelled	(68)	(1,103)	(57)	(60)
Exercised	(61)	(123)	-	-
Outstanding at 31 December	<u>69</u>	<u>5,302</u>	<u>73</u>	<u>4,268</u>
Exercisable at 31 December	<u>68</u>	<u>2,315</u>	<u>-</u>	<u>-</u>
			<u>2022</u>	
			<u>Weighted Average exercise price (cents)</u>	<u>Options (‘000)</u>
Outstanding at 1 January			-	-
Granted			69	2,575
Forfeited/Cancelled			-	-
Exercised			-	-
Outstanding at 31 December			<u>69</u>	<u>2,575</u>
Exercisable at 31 December			<u>-</u>	<u>-</u>

There were 123k options exercised in 2024. No options were exercised during 2023 and 2022.

The total outstanding fair value charge of the share option instruments is deemed to be approximately \$653k. (2023: \$974k, 2022:\$1,176k).

Under the Tiziana Life Sciences Ltd 2021 Equity Incentive Plan, the total expenses recognized for the year ending 31 December 2024 arising from share - based payment transactions are \$962k, not including a charge of \$421k for forfeitures during the year. (2023:\$1,019k, 2022:\$332k).

	<u>03 October 2024</u>	<u>14 August 2024</u>
Grant date share price	\$ 0.82	\$ 1.09
Exercise share price	\$ 0.82	\$ 1.09
Risk free rate	3.49%	3.60%
Expected volatility	96%	95%
Option life	10 years	10 years
Weighted average share price	\$ 0.82	\$ 1.09
Weighted average fair value per share option	\$ 0.82	\$ 1.09

	<u>03 May 2024</u>	<u>13 March 2024</u>
Grant date share price	\$ 0.71	\$ 0.50
Exercise share price	\$ 0.71	\$ 0.50
Risk free rate	4.50%	4.19%
Expected volatility	99%	87%
Option life	10 years	10 years
Weighted average share price	\$ 0.71	\$ 0.50
Weighted average fair value per share option	\$ 0.71	\$ 0.50

Share options outstanding at the end of the year have the following expiry dates and exercise prices:

<u>Grant Date</u>	<u>Expiry Date</u>	<u>Exercise Price</u>	<u>Share Options as at 31 December 2024 ('000)</u>
04 November 2022	04 November 2032	\$ 0.67	1,850
14 March 2023	14 March 2033	\$ 0.57	492
26 July 2023	26 July 2033	\$ 0.67	700
13 March 2024	13 March 2034	\$ 0.50	560
3 May 2024	3 May 2034	\$ 0.71	1,000
14 August 2024	14 August 2034	\$ 1.09	200
3 October 2024	3 October 2034	\$ 0.82	500
Total			5,302

Restricted Stock Unit

	<u>2024</u>	
	<u>Grant Date price (cents)</u>	<u>Restricted Stock ('000)</u>
Outstanding at 1 January	-	-
Granted	1.09	4,200
Forfeited/Cancelled	-	-
Exercised	-	-
Outstanding at 31 December	1.09	4,200
Exercisable at 31 December	-	-

Restricted Stock Units outstanding at the end of the year have the following expiry dates and exercise prices:

<u>Grant Date</u>	<u>Expiry Date</u>	<u>Exercise Price</u>	<u>Restricted Stock at 31 December 2024 ('000)</u>
08 August 2024	08 April 2034	\$ 1.09	4,200
Total			4,200

There were no restricted stocks exercised in 2024.

The total outstanding fair value charge of the restricted stock instruments is deemed to be approximately \$1,476k.

The total expenses recognized for the year ending 31 December 2024 arising from share - based payment transactions are \$910k.

Warrants

For warrants issued during the year to December 31, 2024, the Directors have estimated the fair value of the warrants using the Black-Scholes valuation model and assumptions below. No warrants were issued in 2023 or 2022.

	<u>12 November 2024</u>		
Grant date share price			\$ 0.94
Exercise share price			\$ 1.50
Risk free rate			0.42%
Expected volatility			110.8%
	<u>2024</u>	<u>2023</u>	<u>2022</u>
	<u>\$000</u>	<u>\$000</u>	<u>\$000</u>
Outstanding at 1 January	-	697	697
Issued	25	-	-
Exercised	-	(438)	-
Expired	-	(259)	-
Outstanding at 31 December	<u>25</u>	<u>-</u>	<u>697</u>

Approximately \$25k of share-based payment charges are included in the consolidated balance sheet, for the year ended December 31, 2024. No share-based payment charges relating to warrants were recorded during 2023 or 2022.

15. RESERVES

The share-based payment reserve for warrants represents the cost to issue warrants in the future based on their grant date fair value.

The share-based payment reserve for options represents the cost to issue share-based compensation, primarily share options, based on their grant date fair value.

Retained earnings represent the cumulative profits/(losses) of the entity which have not been distributed to shareholders. This reserve has been credited as part of the capital reduction exercise described below.

The translation reserve represents the unrealized gains or losses from the foreign currency translation of Companies within the Group.

The shares to be issued reserve represents the equity shares that are to be issued to the Chairman in lieu of his bonus and additional salary for his role as acting CEO for the year ending December 31, 2023.

The merger reserve arises on consolidation as a result of the share for share exchange transaction that took place this year described in note 13. It represents the difference between the share capital issued and the aggregate carrying value of assets and liabilities and other reserves of the previous parent on the merger date.

The Restricted Stock Unit reserves represent the restricted stock unit shares that have been issued to the CEO as part of his compensation. The restricted stock units vest over a period of time.

16. FINANCIAL INSTRUMENTS

The main risks arising from the Group's financial instruments are liquidity risk, foreign currency risk and credit risk. The directors regularly review and agree policies for managing each of these risks which are summarized below.

Market risk

Market risk encompasses three types of risk, being foreign currency exchange risk, price risk and fair value interest rate risk. The Group policies for managing fair value interest rate risk are considered along with those for managing cash flow interest rate risk and are set out in the subsection entitled "interest rate risk" below. The Directors do not consider the Group's exposure to price risk to be significant. The Group's risk management is coordinated by the Directors and focuses on actively securing the Group's short to medium term cash flows by minimizing the exposure to financial markets. The Group does not engage in the trading of financial assets for speculative purposes.

Credit risk

Credit risk is managed on a Group basis. Credit risk arises principally from cash and cash equivalents and deposits with banks and financial institutions as well as credit exposure to customers including committed transactions and outstanding receivables. The Group reviews its banking arrangements carefully to minimize such risks and currently has no customers and therefore this risk is viewed as minimal. Management monitor loans between members of the Group as part of their internal reporting and assesses outstanding receivables for ability to be repaid.

Liquidity risk

The Group's policy is to regularly monitor current and expected liquidity requirements to ensure that it maintains sufficient reserves of cash to meet its liquidity requirements in the short and long term. The Group ordinarily finances its activities through cash generated from private and public offerings of equity and debt securities.

The table below summarizes the maturity profile of the Group's financial liabilities based on contractual undiscounted payments:

	2024		
	Less than 3 months	3 to 12 months	Total
\$000			
Trade payables	1,576	4,004	5,580
Lease liabilities	34	72	106
Related party payables	-	-	-
Total	1,610	4,076	5,686
	2023		
	Less than 3 months	3 to 12 months	Total
\$000			
Trade payables	2,223	1,914	4,137
Lease liabilities	34	104	138
Related party payables	-	-	-
Total	2,257	2,018	4,275

Interest rate risk

The Group has limited exposure to interest-rate risk arising from its bank deposits. These deposit accounts are held at variable interest rates based on Bank of America base rate.

The Directors do not consider the impact of possible interest rate changes based on current market conditions to be material to the net result for the year or the equity position as of year-end for either the year ended 31 December 2024 or 31 December 2023.

Foreign currency risk

The Group operates internationally although the majority of its operations are based in the United Kingdom and the United States, and the majority of assets and liabilities are denominated in US Dollars, with a small amount denominated in Pound Sterling. It therefore is exposed to some foreign exchange risk arising from exposure to various currencies primarily the Pound Sterling. The Group monitors currency exchange rates and makes judgments as to whether to enter into currency hedging contracts. Currently no such hedging contracts are in place.

Sensitivity analysis

A reasonably possible strengthening (weakening) of the US dollar or Sterling against all other currencies at 31 December 2024 would have affected the measurement of the financial instruments denominated in a foreign currency and affected equity and profit and loss by the amounts shown below. This analysis assumes that all other variables remain constant.

December 31, 2024	Profit or loss and equity	
	Strengthening	Weakening
USD (1% movement)	112	(112)

17. CAPITAL RISK MANAGEMENT

For the purpose of the Group's capital management, capital includes called up share capital, share premium, share – based payments for options, share - based payments for warrants, convertible loan note reserve, and all other equity reserves attributable to the equity holders of the parent as reflected in the consolidated statement of financial position.

The Company's objectives when managing capital are to safeguard the Company's ability to continue as a going concern and to maximize shareholder value through the optimization of the equity balance.

The Group adjusts its capital structure in light of changes in economic conditions and expected business demands on capital. The Group may also return capital to shareholders or issue additional shares.

18. TRADE AND OTHER PAYABLES

Group	Year ended December 31,	
	2024	2023
	\$000	\$000
Trade payables	5,580	4,137
Accruals	1,650	2,250
	<u>7,230</u>	<u>6,387</u>

19. INVESTMENT IN RELATED PARTY

Group	Year ended December 31,	
	2024	2023
	\$000	\$000
Investment in Accustem Sciences Inc	837	1,806
Movement in fair value	(238)	(969)
	<u>599</u>	<u>837</u>

The share price of Accustem as of December 31, 2024 was \$0.45, which has resulted in the recognition of a fair value loss of \$238k. This has been measured using the Level 1 per IFRS 13 fair value hierarchy. Accustem Sciences Inc is listed on the OTC markets and is run by a separate management team which is independent of the Tiziana management team. Tiziana is therefore not able to assert significant influence over Accustem Sciences Inc.

Group	2024		2023	
	\$000		\$000	
Investment in Okyo Pharma Ltd	3,717		3,150	
Additional shares issued		795		-
Movement in fair value	(1,522)		567	
	<u>2,990</u>		<u>3,717</u>	

The Group converted a loan into 2.1m shares of Okyo Pharma Ltd. on October 23, 2023. The group a received an additional 500k shares in lieu of interest on July 14, 2024 which is a total 8.86% ownership. The share price of Okyo Pharma Ltd as of December 31, 2024 was \$1.15, which has resulted in the recognition of a fair value loss of \$727k. This has been measured using the Level 1 per IFRS 13 fair value hierarchy. Okyo Pharma Ltd is listed on the NASDAQ stock exchange and is run by a separate management team which is independent of the Tiziana management team. Tiziana is therefore not able to assert significant influence over Okyo Pharma Ltd.

20. TREASURY SHARES

The company acquired 51,504, 281,253 and 1,683,544 of its own shares through purchases on the NASDAQ stock exchange during the years ended December 31, 2024, December 31, 2023 and December 31 2022, respectively. The amount paid to acquire the shares totaled \$51k, \$254k and \$1,320k, respectively, and the shares were held as "treasury shares". All shares issued by the Company are fully paid. The treasury shares were cancelled in December 2024.

21. RELATED PARTY TRANSACTIONS

The ultimate controlling party of the Group is Planwise Group Ltd.

Rasna Therapeutics Inc is a related party as the entity is controlled by a person that has significant influence over the Group. Rasna is also party to a Shared Services agreement with Tiziana whereby Rasna is charged for shared services such as the payroll and rent. During 2022, Tiziana extended a loan to Rasna for \$75,000 at an interest rate of 16% per annum. There were no additional loans to Rasna in 2023 or 2024. As of December 31, 2024, \$531k (2023: \$416k, 2022: \$206k) was owed to Tiziana Life Sciences Ltd in respect of the loan and shared services agreement. The total charged under the shared services agreement in the year ending 31 December 2024 was \$1k (2023: \$6k, 2022: \$7k).

In addition to the above, on April 16, 2020, Tiziana also acquired all of the intellectual property relating to a nanoparticle-based formulation of Actinomycin D (Act D; a.k.a. Dactinomycin), from Rasna to expand its pipeline for a consideration of an initial \$120k upfront payment and milestone payments of up to an additional aggregate \$630k. There were no milestone payments due in the year ending 31 December 2024 (2023: \$0k, 2022:\$0k).

OKYO Pharma Ltd is a related party as the entity is controlled by a person that has significant influence over the Group. OKYO is also party to a Shared Services agreement with Tiziana whereby OKYO is charged for shared services such as the payroll and rent. As of December 31, 2024 \$744k (2023: \$398k, 2022: \$274k) was owed to Tiziana Life Sciences Ltd in respect of this agreement. The total charged under the shared services agreement in the year ending 31 December 2024 was \$406k (2023: \$199k, 2022: \$125k).

In August 2022, the Group issued a short-term credit facility to OKYO Pharma Ltd, a related party, for \$2,000k to support short term liquidity. The loan was available for a period of 6 months upon first draw-down and carries an interest rate of 16% per annum, with additional default interest of 4% if the loan is not repaid after the 6-month period. In October 2023 the loan was converted to an investment in OKYO with 20% interest. The principal of \$2,000k plus accrued interest of \$1,150k were converted into 2,100,000 Ordinary Shares, with no par value, of OKYO Pharma Ltd. On July 15, 2024 accrued interest of \$402k was converted into 500,000 ordinary shares with no par value, of Okyo Pharma Ltd.

Accustem Sciences Inc is a related party as the entity is controlled by a person that has significant influence over the Group. Accustem is also party to a Shared Services agreement with Tiziana whereby the Company is charged for shared services such as payroll and rent. As of December 31 2024, \$1,037k (2023:\$1,324K, 2022:\$72k) was owed to Tiziana Life Sciences Ltd. The total charged under the shared services agreement in the year ending 31 December 2024 was \$13k (2023: \$18k, 2022:\$48k).

22. LEASES

All leases are accounted for by recognizing a right-of-use asset and a lease liability except for:

- Leases of low value assets; and
- Leases with a duration of 12 months or less.

The Group has leases for its offices. Each lease is reflected on the balance sheet as a right-of-use asset and a lease liability. The Group does not have leases of low value assets. Variable lease payments which do not depend on an index or a rate (such as lease payments based on a percentage of Group sales) are excluded from the initial measurement of the lease liability and asset. The Group classifies its right-of-use assets in a consistent manner to its property, plant and equipment.

For leases over office buildings and factory premises the Group must keep those properties in a good state of repair and return the properties in their original condition at the end of the lease.

During the course of 2022, the Group entered into a new lease agreement for its London office. Any leases that have a term shorter than 12 months the Group has applied the exemption allowed by paragraph 5a in IFRS16 in respect of short – term leases.

Right-of-use assets	31 Dec 2024	31 Dec 2023
	\$000	\$000
At 1 January	283	372
Depreciation	(111)	(104)
Disposal of lease	-	-
Exchange differences	(1)	15
	<u>171</u>	<u>283</u>

Lease Liabilities	31 Dec 2024	31 Dec 2023
	\$000	\$000
At 1 January	247	365
Interest expense	6	10
Lease payments	(144)	(119)
Exchange differences	(3)	(9)
	<u>106</u>	<u>247</u>

Lease liabilities are presented in the consolidated statement of financial; position as follows:

	31 Dec 2024	31 Dec 2023
	\$000	\$000
Current	106	138
Non-current	-	109
	<u>106</u>	<u>247</u>

The lease liabilities are secured by the related underlying assets. Future minimum lease payments as of 31 December 2024 were as follows:

	Minimum lease payment due				Total
	Within 1 year	1-2 years	2-5 years	Over 5 years	
Lease payments	106	-	-	-	106
Finance Charges	(6)	-	-	-	(6)
Net Present Values	<u>100</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>100</u>

23. FINANCIAL COMMITMENTS

The Group's main financial commitments relate to the contractual payments in respect of its licensing agreements. Due to the uncertain nature of scientific research and development and the length of time required to reach commercialisation of the products of this research and development, pre-clinical, clinical and commercial milestone obligations are not detailed until there is a reasonable certainty that the obligation will become payable.

- Miliciclib project research future payments relate to the achievement of clinical milestones or the payment of royalties.

We are obligated to pay Nerviano the following additional amounts in respect of the first licensed product or service which achieves the stated development milestones:

- (a) \$1,000,000 upon initiation of the first Phase II clinical trial, this is currently being negotiated with BMS.
 - (b) \$4,000,000 upon FPD of the first Phase 3 registration trial in HCC.
 - (c) \$3,600,000 upon first patient enrollment into a Phase II human clinical trial
 - (d) Upon the first NDA equivalent in: thymic carcinoma, \$900,000; HCC, \$9,000,000; breast cancer, \$15,000,000.
- Foralumab project – Future payments relate to the achievement of clinical milestones or the payment of royalties. Diligence obligations are payable to BMS/Medarex should the project continue to commercialisation. \$750,000 has been recorded as other income in respect of diligence obligations due to Medarex for 2021.

We are obligated to pay BMS the following additional amounts in respect of the first licensed product or service which achieves the stated development milestones:

- (a) \$300,000 upon enrollment of first patient in a Phase I human clinical trial of the first Phase II Clinical trial, this is currently being negotiated with BMS.
- (b) \$1,500,000 upon initiation of the first Phase III clinical trial
- (c) \$2,000,000 upon filing of the first BLA, or equivalent
- (d) \$2,000,000 upon approval of the first BLA, or equivalent

We are obligated to pay Brigham's Womens Hospital the following hospital milestone payments:

- (a) \$300,000 upon first patient enrollment into a Phase I human clinical trial
 - (b) \$300,000 upon first patient enrollment into a Phase II human clinical trial
 - (c) \$1,500,000 upon first patient enrollment into a Phase III human clinical trial
 - (d) \$3,000,000 upon first commercial sale of a product
- ACT D - Tiziana will need to make milestone payments of up to \$630k depending on the issuance of a US patent from any US patent application in Transferred IP relating to nanoparticle formulations of Act D and upon the successful completion of a Phase II clinical efficacy trial.

24. CONTINGENT LIABILITIES

The group from time to time is involved in legal proceedings, none of which have given rise to contingent liabilities. Contingencies arising in the ordinary course of business, for which no security has been given, are not expected to result in any material financial loss.

Exhibit 12.1**CERTIFICATION**

I, Ivor Elrifi, certify that:

1. I have reviewed this annual report on Form 20-F/A of Tiziana Life Sciences plc;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the company as of, and for, the periods presented in this report;
4. The company's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the company and have:
 - a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the company, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c. Evaluated the effectiveness of the company's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d. Disclosed in this report any change in the company's internal control over financial reporting that occurred during the period covered by the annual report that has materially affected, or is reasonably likely to materially affect, the company's internal control over financial reporting; and
5. The company's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the company's auditors and the audit committee of the company's board of directors (or persons performing the equivalent functions):
 - a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the company's ability to record, process, summarize and report financial information; and
 - b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the company's internal control over financial reporting.

Date: May 8, 2025

/s/ Ivor Elrifi

Ivor Elrifi

Chief Executive Officer

Exhibit 12.2**CERTIFICATION**

I, Keeren Shah, certify that:

1. I have reviewed this annual report on Form 20-F/A of Tiziana Life Sciences plc;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the company as of, and for, the periods presented in this report;
4. The company's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the company and have:
 - a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the company, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c. Evaluated the effectiveness of the company's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d. Disclosed in this report any change in the company's internal control over financial reporting that occurred during the period covered by the annual report that has materially affected, or is reasonably likely to materially affect, the company's internal control over financial reporting; and
5. The company's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the company's auditors and the audit committee of the company's board of directors (or persons performing the equivalent functions):
 - a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the company's ability to record, process, summarize and report financial information; and
 - b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the company's internal control over financial reporting.

Date: May 8, 2025

/s/ Keeren Shah

Keeren Shah
Chief Financial Officer

Exhibit 13.1**CERTIFICATION**

The certification set forth below is being submitted in connection with Tiziana Life Sciences plc's Annual Report on Form 20-F/A for the fiscal year ended December 31, 2024 (the "Report") for the purpose of complying with Rule 13a-14(b) or Rule 15d-14(b) of the Securities Exchange Act of 1934 (the "Exchange Act") and Section 1350 of Chapter 63 of Title 18 of the United States Code.

Ivor Elrifi, Chief Executive Officer of Tiziana Life Sciences plc, certifies that, to the best of his knowledge:

1. the Report fully complies with the requirements of Section 13(a) or 15(d) of the Exchange Act; and
2. the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of Tiziana Life Sciences plc

Date: May 8, 2025

/s/ Ivor Elrifi

Name: Ivor Elrifi

Chief Executive Officer

Exhibit 13.2**CERTIFICATION**

The certification set forth below is being submitted in connection with Tiziana Life Sciences plc's Annual Report on Form 20-F/A for the fiscal year ended December 31, 2024 (the "Report") for the purpose of complying with Rule 13a-14(b) or Rule 15d-14(b) of the Securities Exchange Act of 1934 (the "Exchange Act") and Section 1350 of Chapter 63 of Title 18 of the United States Code.

Keeren Shah, Chief Financial Officer of Tiziana Life Sciences plc, certifies that, to the best of her knowledge:

1. the Report fully complies with the requirements of Section 13(a) or 15(d) of the Exchange Act; and
2. the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of Tiziana Life Sciences plc

Date: May 8, 2025

/s/ Keeren Shah

Name: Keeren Shah
Chief Financial Officer