UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, DC 20549

FORM 20-F

☐ REGISTRATION STATEMENT PURSUANTTO 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, 2023

OR

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

OR

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

Commission File No.: 001-38428

POLYPID LTD.
(Exact name of registrant as specified in its charter)

Translation of registrant's name into English: Not applicable

State of Israel
(Jurisdiction of incorporation or organization)

18 Hasivim Street
Petach Tikva 495376, Israel
(Address of principal executive offices)

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(Name, Telephone, E-mail and/or Facsimile number and Address of Company Contact Person)

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

Title of each class	*Trading Symbol(s)*	*Name of each exchange on which registered*
Ordinary Shares, no par value	**PYPD**	**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

Indicate the number of outstanding shares of each of the issuer's classes of capital or common stock as of the close of the period covered by the annual report:

1,653,559 ordinary shares as of December 31, 2023.

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 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 Exchange Act 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 every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T during the preceding 12 months.

Yes ☒ No ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or an emerging growth company. See definition of "large accelerated filer," "accelerated filer," and emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer	☐	Accelerated filer	☐
Non-accelerated filer	☒	Emerging Growth Company	☒

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

Yes ☐ No ☒

If 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 o

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.

Yes ☐ No ☒

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INTRODUCTION

We are a Phase 3 clinical-stage biopharmaceutical company focused on developing targeted, locally administered and prolonged-release therapeutics using our proprietary PLEX technology. Our product candidates are designed to address diseases with high unmet medical needs by pairing our PLEX technology with drugs already approved by the U.S. Food and Drug Administration, or FDA, or innovative drug candidates to achieve a novel therapeutic effect. Our PLEX technology is designed to deliver drugs directly to targeted treated sites in the body at predetermined release rates and predetermined durations ranging from several days to several months. We believe that our PLEX technology and product candidates have the potential to significantly improve the management of a variety of medical conditions, including surgical site infections, or SSIs, and cancer. Our lead product candidate, D-PLEX$_{100}$, is in a pivotal Phase 3 confirmatory trial for the potential approval for prevention of SSIs in patients undergoing abdominal colorectal surgery with large incisions. D-PLEX$_{100}$ pairs our novel proprietary PLEX technology with doxycycline, a first-line, broad spectrum and FDA-approved antibiotic. D-PLEX$_{100}$ is administered directly into the surgical site during surgery, and provides a prolonged and continuous release of the broad-spectrum antibiotic, resulting in high local concentration of the drug for a period of 30 days for the prevention of SSIs, including SSIs caused by standard of care, or SoC, antibiotic-resistant bacteria. Infections resulting from surgery can be fatal and create a significant public health burden despite the extensive use of systemically administered antibiotics both pre- and post-operatively and other measures taken to reduce infection risk in the intra-operative setting.

The World Health Organization, or WHO, estimates that SSIs result in up to $10 billion of additional hospital costs per year in the United States alone, and a further €11 billion per year in the European Union, or the EU. The Centers for Disease Control, or CDC, estimates that SSIs are the costliest hospital acquired infection, or HAI, type of event in the United States. SSIs occur in approximately 2% to 5% of all patients undergoing inpatient surgery worldwide and account for 20% of all HAIs in United States. In their last guidelines, the WHO and the CDC have labeled SSIs as a high priority unmet medical need due to the associated morbidity, mortality and economic cost burden.

We believe that D-PLEX$_{100}$, if approved, would be a significant improvement over the current SoC, which includes systemic administration of antibiotics.

We initiated two Phase 3 trials of D-PLEX$_{100}$, which we refer to as SHIELD I and SHIELD II, for the prevention of abdominal (soft tissue) SSIs in the third and fourth quarters of 2020, respectively. In May 2021, the FDA agreed in a Type B meeting that a single pivotal Phase 3 study is sufficient, provided the study results are adequate, for potential approval of a D-PLEX$_{100}$ NDA for the prevention of SSIs in colorectal surgery.

In September 2022, we announced top-line results from the SHIELD I Phase 3 study of D-PLEX$_{100}$ for the prevention of SSIs in abdominal surgery. The SHIELD I study did not achieve its primary endpoint of reduction in SSIs, re-interventions due to SSIs and mortality: in the intent to treat, or ITT, population, the local administration of D-PLEX$_{100}$ and SoC (n=485) resulted in a decrease in the primary endpoint of 23% compared to SoC alone (n=489) (p=0.1520). That said, in a pre-specified subgroup ITT analysis requested by the FDA of a total of 423 subjects with large incisions (>20 centimeters), the local administration of D-PLEX$_{100}$ resulted in a significant reduction of 54% in the primary endpoint, compared to SoC alone (p=0.0032). Within the first 30 days post-surgery, SSIs decreased from 9.7% in the SoC treatment arm (n=211), as compared to 4.4% in the D-PLEX$_{100}$ treatment arm (n=212). In addition, in exploratory post hoc analysis, the SHIELD I study also showed a 34% reduction in the primary endpoint in patients with one or more patient-specific risk factors (documented obesity- body mass index (BMI) >30 kg/m2, diabetes mellitus, hypertension, peripheral vascular disease, and chronic obstructive pulmonary disease/smoking) compared to SoC (post hoc analysis; p=0.047; n=680). Together, these results suggest potential prophylactic efficacy when D-PLEX is administered concomitantly with systemic antibacterial prophylaxis in patients with increased SSI risk factors, whether procedural or patient-specific comorbidities. Patients with either of these risk profiles are readily identifiable by the surgeon in the pre- and intra-operative periods, offering the option to apply D-PLEX after fascial closure but before skin closure. The SHIELD I study demonstrated a good safety profile of D-PLEX$_{100}$: the overall incidence of treatment emergent adverse events, or TEAEs, was similar between study arms with numerically lower incidences of severe and serious TEAEs, and any TEAEs requiring surgical reinterventions in the D-PLEX arm compared to the SoC arm.

In November 2022, we provided the FDA with available data from the SHIELD I study as part of a Type D meeting request. Following positive Type D meeting communication with the FDA, which took place in January 2023 on the SHIELD I Phase 3 data, we now have a clear regulatory pathway towards a potential NDA submission. Based on the data, particularly the 54% reduction observed in the primary endpoint in complex surgeries in a pre-specified subgroup analysis of patients with large open incisions (p=0.0032, n=423) compared to SoC, the FDA acknowledged that the SHIELD I results may provide supportive evidence on this population and recommended that we conduct an additional study to support a potential NDA submission. The FDA stated that the ongoing SHIELD II study could potentially serve as such a study. The FDA also recognized that D-PLEX$_{100}$'s proposed indication is for the prevention of infection and has the potential for wide use.

In March 2023, we received feedback in a national scientific advice meeting from the Swedish Medical Products Agency (MPA) similar to the Type D meeting feedback previously received from the FDA.
Swedish Medical Products Agency, or MPA, recommended that we confirm the results with an additional Phase 3 study to support a marketing authorisation application, or MAA, submission and confirmed that clinical safety data obtained to date in abdominal surgery studies is sufficient for a MAA submission.

SHIELD II is a prospective, multinational, randomized, double blind Phase 3 trial designed to assess the efficacy and safety of D-PLEX$_{100}$ administered concomitantly with SoC, compared to SoC alone arm, in the prevention of post abdominal-surgery incisional infection in patients undergoing surgeries with incisions greater than 20 cm. The primary endpoint of the trial is measured by the proportion of subjects with either an SSI event as determined by a blinded and independent adjudication committee, reintervention, or mortality for any reason within 30 days post-surgery. Patient safety will be monitored for an additional 30 days. The trial will enroll patients in centers in the United States, Europe and Israel.

We resumed recruitment into SHIELD II trial in June 2023. As of March 6, 2024, approximately 120 patients were already enrolled. Unblinded interim analysis is planned to be conducted once approximately 400 patients complete their 30-day follow-up, which is expected in mid-2024. Top-line results are expected in the second half of 2024.

In September 2022, we received confirmation from the European Medicines Agency, or EMA, that D-PLEX$_{100}$ is eligible for submission of a MAA in the EU under the EMA's centralized procedure. The centralized process eligibility is granted to D-PLEX$_{100}$ under the Therapeutic Innovation criteria which underscores that D-PLEX$_{100}$ potentially provides a new alternative to patients in preventing post abdominal SSIs.

In addition to our lead program D-PLEX$_{100}$, our pipeline includes an early-stage oncology program, OncoPLEX, PolyPid's lead intra-tumoral cancer therapy drug candidate. OncoPLEX utilizes our PLEX technology to provide controlled local exposure to docetaxel, one of the most widely used chemotherapy agents, directly at the tumor site for several weeks. OncoPLEX may be used as an adjuvant and applied at the intra-operative setting post-tumor resection to potentially reduce local tumor reoccurrence, the potential spreading of cancer cells, and ultimately improve the overall survival rate of cancer patients. OncoPLEX may also be used as a neoadjuvant and injected directly into the tumor to potentially reduce tumor volume and improve survival. Local delivery of drugs directly into the tumor site, especially in difficult to access tumors such as in the brain, may significantly improve the clinical outcome. The OncoPLEX intra-tumoral cancer therapy program has been evaluated successfully in various animal tumor models, both as adjuvant and neoadjuvant, including murine colon carcinoma, melanoma and glioblastoma animal models. We are currently finalizing chemistry, manufacturing and controls, or CMC, processes for OncoPLEX as we continue our efforts to begin clinical development. The intratumoral injection of the PLEX platform could be used as an interventional oncology treatment with additional chemotherapies or other types of molecules, such as antibodies, bispecific antibodies and nucleic acids.

We are an Israeli corporation based in Israel near Tel Aviv, and were incorporated in 2008. Our Ordinary Shares are currently traded in the United States on the Nasdaq Capital Market under the symbol "PYPD".

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

Certain information included or incorporated by reference in this annual report on Form 20-F may be deemed to be "forward-looking statements". Forward-looking statements are often characterized by the use of forward-looking terminology such as "may," "will," "expect," "anticipate," "estimate," "continue," "believe," "should," "intend," "project" or other similar words, but are not the only way these statements are identified.

These forward-looking statements may include, but are not limited to, statements relating to our objectives, plans and strategies, statements that contain projections of results of operations or of financial condition, expected capital needs and expenses, statements relating to the research, development, completion and use of our products, and all statements (other than statements of historical facts) that address activities, events or developments that we intend, expect, project, believe or anticipate will or may occur in the future.

Forward-looking statements are not guarantees of future performance and are subject to risks and uncertainties. We have based these forward-looking statements on assumptions and assessments made by our management in light of their experience and their perception of historical trends, current conditions, expected future developments and other factors they believe to be appropriate.

Important factors that could cause actual results, developments and business decisions to differ materially from those anticipated in these forward-looking statements include, among other things:

- our dependence on enrollment of patients in our clinical trials in order to continue development of our product candidates;
- the outcomes of our anticipated interim analysis in our SHIELD II clinical trial;
- our ability to raise capital through the issuance of securities;
- our ability to advance the development of our product candidates, including the anticipated starting and ending dates of our anticipated clinical trials;
- our assessment of the potential of our product candidates to treat certain indications;
- our ability to successfully receive approvals from the FDA, EMA, or other applicable regulatory bodies, including approval to conduct clinical trials, the scope of those trials and the prospects for regulatory approval of, or other regulatory action with respect to our product candidates, including the regulatory pathway to be designated to our product candidates;
- the regulatory environment and changes in the health policies and regimes in the countries in which we operate, including the impact of any changes in regulation and legislation that could affect the pharmaceutical industry;
- our ability to commercialize our existing product candidates and future sales of our existing product candidates or any other future potential product candidates;
- our ability to meet our expectations regarding the commercial supply of our product candidates;
- the overall global economic environment;
- the potential impact of the COVID-19 pandemic on the territories in which the Company operates;
- the impact of competition and new technologies;
- general market, political and economic conditions in the countries in which we operate;
- projected capital expenditures and liquidity;
- changes in our strategy;
- litigation; and
- those factors referred to in "Item 3. Key Information – D. Risk Factors," "Item 4. Information on the Company," and "Item 5. Operating and Financial Review and Prospects", as well as in this annual report on Form 20-F generally.

Readers are urged to carefully review and consider the various disclosures made throughout this annual report on Form 20-F which are designed to advise interested parties of the risks and factors that may affect our business, financial condition, results of operations and prospects.

You should not put undue reliance on any forward-looking statements. Any forward-looking statements in this annual report on Form 20-F are made as of the date hereof, and we undertake no obligation to publicly update or revise any forward-looking statements, whether as a result of new information, future events or otherwise, except as required by law.

In addition, the section of this annual report on Form 20-F entitled "Item 4. Information on the Company" contains information obtained from independent industry sources and other sources that we have not independently verified.

Unless otherwise indicated, all references to "Company," "we," "our" and "PolyPid" refer to PolyPid Ltd., its wholly owned subsidiaries, PolyPid Inc., a Delaware corporation with operations in New Jersey, and PolyPid Pharma SRL, a company organized and existing under the laws of Romania. References to "U.S. dollars" and "$" are to currency of the United States of America, and references to "shekel", "Israeli shekel" and "NIS" are to New Israeli Shekels. References to "Ordinary Shares" are to our Ordinary Shares, no par value. We report our financial statements in accordance with generally accepted accounting principles in the United States, or U.S. GAAP.

On September 20, 2023, we announced a reverse share split, or the Reverse Share Split, of our Ordinary Shares, at the ratio of 1-for-30, such that each thirty (30) Ordinary Shares, shall be consolidated into one (1) Ordinary Share. We obtained shareholders' approval for the Reverse Share Split at a ratio of between 1:10 and 1:30 at an extraordinary general meeting of shareholders, which took place on September 18, 2023. Our Board then approved the Reverse Share Split ratio of 1-for-30 on September 18, 2023. The first date when our Ordinary Shares traded on the Nasdaq on a post- reverse split basis was September 21, 2023. Unless the context expressly dictates otherwise, all references to share and per share amounts referred to herein reflect the Reverse Share Split.

PolyPid, BonyPid, Bacfenssi, Baczenssi, Opzifend, Ssisurg, Elyfssi and Bacyssio are our proprietary trademarks. These trademarks are important to our business. Although we have omitted the "®" and "TM" trademark designations for such marks in this annual report on Form 20-F, all rights to such trademarks and service marks are nevertheless reserved.

Summary Risk Factors

The risk factors described below are a summary of the principal risk factors associated with an investment in us. These are not the only risks we face. You should carefully consider these risk factors, together with the risk factors set forth in Item 3D. of this annual report on Form 20-F and the other reports and documents filed by us with U.S. Securities and Exchange Commission, or the SEC.

Risks Related to Our Financial Condition and Capital Requirements

- We have never generated revenues, have incurred significant losses since our inception and anticipate that we will continue to incur significant losses for the foreseeable future, and we may never achieve or maintain profitability.

- We expect that we will need to raise substantial additional funding, which may not be available on acceptable terms, or at all. Failure to obtain funding on acceptable terms and on a timely basis may require us to curtail, delay or discontinue our product development efforts or other operations.

Risks Related to the Discovery, Development and Clinical Testing of Product Candidates

- We depend on enrollment of patients in our clinical trials in order to continue development of our product candidates.

- We are heavily dependent on the success of D-PLEX$_{100}$, including obtaining regulatory approval to market D-PLEX$_{100}$ in the United States and the EU.

- The outcome of our planned unblinded interim analysis in our SHIELD II trial may require that we enroll more patients than would have been the case without an interim analysis, in which case we will need to spend additional time, effort and financial resources on the SHIELD II trial, which may not ultimately be successful or support regulatory approval of D-PLEX$_{100}$.

- Improvement in SoC infection prevention and control measures being undertaken in hospitals globally as a result of the COVID-19 pandemic may have decreased the rate of SSIs, which may adversely impact the ability of our clinical trials to demonstrate an improvement over the SoC and may ultimately reduce our commercial opportunity even if our trials are successful.

- Regulatory approval processes of the FDA, the EMA and comparable foreign regulatory authorities are lengthy, time-consuming, costly and unpredictable, and if we are ultimately unable to obtain regulatory approval for D-PLEX$_{100}$ or any future product candidates, our business may fail.

- PLEX is a novel technology, which makes it difficult to accurately and reliably predict the time and cost of development and of subsequently obtaining regulatory approval of D-PLEX$_{100}$ or any future PLEX product candidates.

- Clinical drug development is difficult to design and implement and involves a lengthy and expensive process with uncertain outcomes. We may be unable to successfully complete clinical development for any product candidates we may develop, including D-PLEX$_{100}$.

Risks Related to Our Reliance on Third Parties

- We rely on third parties to conduct certain elements of our preclinical studies, clinical trials and analytical tests, and perform other tasks for us. If these third parties do not successfully carry out their contractual duties, meet expected deadlines or comply with regulatory requirements, we may not be able to obtain regulatory approval for or commercialize our product candidates.

- We rely on third parties to manufacture the raw materials, including the active pharmaceutical ingredient, that we use to create our product candidates. Our business could be harmed if existing and prospective third parties fail to provide us with sufficient quantities of these materials and products or fail to do so at acceptable quality levels or prices.

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

Risks Related to Our Intellectual Property

- If we are unable to obtain and maintain effective patent rights for our product candidates or any future product candidates, we may not be able to effectively protect our products and business and compete effectively in our markets.

- If we are unable to protect the confidentiality of our trade secrets or know-how, such proprietary information may be used by others to compete against us.

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

Risks Related to Our Business Operations

- Our future success depends in part on our ability to retain our senior management team and to attract, retain and motivate other qualified personnel.

- Due to our limited resources and access to capital, we must, and have in the past decided to, prioritize development of certain product candidates over other potential candidates. These decisions may prove to have been wrong and may adversely affect our revenues.

- European data collection is governed by restrictive regulations governing the collection, use, processing and cross-border transfer of personal information. Failure to comply with such regulations may result in substantial fines, other administrative penalties and civil claims being brought against us.

- Our business and operations have been and are likely to further continue to be adversely affected by the COVID-19 global pandemic.

Risks Related to Commercialization of Our Product Candidates

- We have limited manufacturing experience and could experience production problems that result in delays in our development or commercialization programs or otherwise adversely affect our business.

- We currently have no marketing and sales organization. If we are unable to establish sales and marketing capabilities or enter into agreements with third parties to market and sell our product candidates, we may be unable to generate any product revenue.

- We are subject to significant regulatory oversight with respect to manufacturing our product candidates. Delays in establishing and 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.

- It may be difficult for us to profitably sell our product candidates if coverage and reimbursement for these products, or the procedures in which they are used, is limited by government authorities and/or third-party payor policies.

Risks Related to Ownership of Our Ordinary Shares

- The market price of our Ordinary Shares may be highly volatile, and you may not be able to resell your Ordinary Shares at or above the price you paid.

- Our executive officers, directors and principal shareholders have the ability to exert significant control over matters submitted to our shareholders for approval.

- We may be or may become classified as a passive foreign investment company. If we are or become classified as a passive foreign investment company, our U.S. shareholders may suffer adverse tax consequences as a result.

- If a United States person is treated as owning at least 10% of our shares, such holder may be subject to adverse U.S. federal income tax consequences.

Risks Related to Israeli Law and Our Operations in Israel

- Our headquarters and other significant operations are located in Israel. Conditions in Israel, including implications of political, economic and military instability arising from, among other things, the Israel-Hamas war, may adversely affect our operations and results and may limit our ability raise additional funds.

- We received Israeli government grants for certain of our research and development activities, the terms of which may require us to pay royalties and to satisfy specified conditions in order to manufacture products and transfer technologies outside of Israel. If we fail to satisfy these conditions, we may be required to pay penalties and refund grants previously received.

- Provisions of Israeli law and our amended and restated articles of association may delay, prevent or otherwise impede a merger with, or an acquisition of, us, which could prevent a change of control, even when the terms of such a transaction are favorable to us and our shareholders.

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.

[Reserved]

B. Capitalization and Indebtedness.

Not applicable.

C. Reasons for the Offer and Use of Proceeds.

Not applicable.

D. Risk Factors.

Our business faces significant risks. You should carefully consider the risks described below, together with all of the other information in this annual report on Form 20-F. The risks described below are not the only risks facing us. Additional risks and uncertainties not currently known to us or that we currently deem to be immaterial may also materially and adversely affect our business operations. If any of these risks actually occurs, our business and financial condition could suffer, and the price of our Ordinary Shares could decline. This 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 report and our other SEC filings. See "Cautionary Note Regarding Forward-Looking Statements" above.

Risks Related to Our Financial Condition and Capital Requirements

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

We are a Phase 3 clinical-stage biopharmaceutical company. We have incurred operating losses each year since our inception, including operating losses of $22.9 million and $38.9 million for the years ended December 31, 2023 and 2022, respectively. As of December 31, 2023, we had an accumulated deficit of $238.3 million. We have devoted substantially all of our financial resources to designing and developing our PLEX product candidates, including conducting clinical trials and preclinical studies and providing general and administrative support for these operations. We expect that we will continue to incur expenses and operating losses for the foreseeable future as we continue clinical development of D-PLEX$_{100}$ for the prevention of SSIs and develop other product candidates using our PLEX technology. Our ability to ultimately achieve revenues and profitability is dependent upon our ability to successfully complete the development of D-PLEX$_{100}$ and any future product candidates, obtain necessary regulatory approvals for and successfully manufacture, market and commercialize our products.

We anticipate that we will continue to incur expenses based on a number of factors, including to the extent that we:

- continue our clinical development of D-PLEX$_{100}$, including our ongoing SHIELD II Phase 3 trial evaluating D-PLEX$_{100}$ for the prevention of abdominal colorectal SSIs;
- require an increase of sample size in our SHIELD II clinical trial as a result of our anticipated interim analysis;
- seek regulatory and marketing approvals for any product candidates that successfully complete clinical trials;
- build the necessary commercial and medical infrastructure in the United States to successfully launch any products, including hiring field and office-based staff;
- advance our preclinical and research and development programs, including, without limitation, our OncoPLEX program;
- identify, assess, acquire, license and/or develop other product candidates;
- manufacture current good manufacturing practices, or cGMP, material for clinical trials or potential commercial sales, either at our manufacturing facility or through third-party contract manufacturers;
- establish a sales, marketing and distribution infrastructure to commercialize any products for which we may obtain marketing approval;
- hire personnel and invest in additional infrastructure to support our operations and expand our product development;
- enter into agreements to license intellectual property from third parties;
- develop, maintain, protect and expand our intellectual property portfolio; and
- experience any delays or encounter issues with respect to any of the above, including, but not limited to, failed trials, complex results, safety issues or other regulatory challenges that require longer follow-up of existing clinical trials, additional major clinical trials or additional supportive studies in order to pursue marketing approval.

To date, we have financed our operations primarily through the sale of equity securities, convertible loans made by certain of our shareholders or other loan facilities, royalty-bearing and non-royalty bearing grants that we received from the Israeli Innovation Authority, or the IIA, and non-royalty bearing grants under the European Commission's Seventh Framework Program for Research, or the FP7. The amount of any future operating losses will depend, in part, on the rate of our future expenditures and our ability to obtain funding through equity or debt financings, strategic collaborations or grants. Even if we obtain regulatory approval to market one or more product candidates, our future revenue will depend upon the size of any markets in which such product candidates receive approval and our ability to achieve sufficient market acceptance, pricing, reimbursement from third-party payors for such product candidates. Further, the operating losses that we incur may fluctuate significantly from quarter to quarter and year to year, such that a period-to-period comparison of our results of operations may not be a good indication of our future performance. Other unanticipated costs may also arise.

We have never generated any revenue from product sales and may never be profitable.

We have no products approved for marketing in any jurisdiction and we have never generated any revenue from product sales. Our ability to generate revenue and achieve profitability depends on our ability, alone or with strategic collaboration partners, to successfully complete the development of, and obtain the regulatory and marketing approvals necessary to commercialize, D-PLEX$_{100}$ or any future product candidates. We do not anticipate generating revenue from product sales for at least the next few years. Our ability to generate future revenue from product sales will depend heavily on our ability to:

- complete research and preclinical and clinical development of D-PLEX$_{100}$ and any future product candidates in a timely and successful manner, including our ability to enroll patients in our ongoing SHIELD II Phase 3 trial of D-PLEX$_{100}$;
- obtain regulatory and marketing approval for any product candidates for which we complete clinical trials, including, without limitation, with respect to safety and efficacy data;
- maintain and enhance a commercially viable, sustainable, scalable, reproducible and transferable manufacturing process for D-PLEX$_{100}$ and any future product candidates that is compliant with cGMPs;
- establish and maintain supply and, if applicable, manufacturing relationships with third parties that can provide, in both amount and quality, adequate products to support clinical development and the market demand for D-PLEX$_{100}$ and any future product candidates, if and when approved;
- launch and commercialize any product candidates for which we obtain regulatory and marketing approval, either directly by establishing commercial and medical infrastructure, and/or with collaborators or distributors;

- expose and educate physicians and other medical professionals to use our products;
- obtain market acceptance, if and when approved, of D-PLEX$_{100}$ and any future product candidates from the medical community and third-party payors;
- ensure our product candidates are approved for reimbursement from governmental agencies, health care providers and insurers in jurisdictions where they have been approved for marketing;
- address any competing technological and market developments that impact D-PLEX$_{100}$ and any future product candidates or their prospective usage by medical professionals;
- identify, assess, acquire and/or develop new product candidates;
- negotiate favorable terms in any collaboration, licensing or other arrangements into which we may enter and perform our obligations under such collaborations;
- maintain, protect and expand our portfolio of intellectual property rights, including patents, patent applications, trade secrets and know-how;
- avoid and defend against third-party interference or infringement claims;
- attract, hire and retain qualified personnel; and
- locate and lease or acquire suitable facilities to support our clinical development, manufacturing facilities and commercial expansion.

Even if D-PLEX$_{100}$ or any future product candidates are approved for marketing and sale, we anticipate incurring significant incremental costs associated with commercializing such product candidates. Our expenses could increase beyond expectations if we are required by the FDA, the EMA or other regulatory agencies, domestic or foreign, or ethical committees in medical centers, to change our manufacturing processes or assays or to perform clinical, nonclinical or other types of studies in addition to those that we currently anticipate. Even if we are successful in obtaining regulatory approvals to market D-PLEX$_{100}$ or any future product candidates, our revenue earned from such product candidates will be dependent in part upon the breadth of the product label, the size of the markets in the territories for which we gain regulatory approval for such products, the accepted price for such products, our ability to obtain reimbursement for such products at any price, whether we own the commercial rights for that territory in which such products have been approved and the expenses associated with manufacturing and marketing such products for such markets. Therefore, we may not generate significant revenue from the sale of such products, even if approved. Further, if we are not able to generate significant revenue from the sale of our approved products, we may be forced to curtail or cease our operations. Due to the numerous risks and uncertainties involved in product development, it is difficult to predict the timing or amount of increased expenses, or when, or if, we will be able to achieve or maintain profitability.

The report of our independent registered public accounting firm contains an explanatory paragraph regarding substantial doubt about our ability to continue as a going concern, which could prevent us from obtaining new financing on reasonable terms or at all.

The report of our independent registered public accounting firm on our audited consolidated financial statements for the period ended December 31, 2023, contains an explanatory paragraph regarding substantial doubt about our ability to continue as a going concern. Our consolidated financial statements do not include any adjustments that might result from the outcome of the uncertainty regarding our ability to continue as a going concern. This going concern opinion could materially limit our ability to raise additional funds through the issuance of equity or debt securities or otherwise. Further reports on our consolidated financial statements may include an explanatory paragraph with respect to our ability to continue as a going concern. Until we can generate significant recurring revenues, we expect to satisfy our future cash needs through debt or equity financing. We cannot be certain that additional funding will be available to us on acceptable terms, if at all. If funds are not available, we may be required to delay, reduce the scope of, or eliminate research or development plans for, or commercialization efforts with respect to our products. This may raise substantial doubts about our ability to continue as a going concern.

We expect that we will need to raise substantial additional funding, which may not be available on acceptable terms, or at all. Failure to obtain funding on acceptable terms and on a timely basis may require us to curtail, delay or discontinue our product development efforts or other operations.

We are currently advancing D-PLEX$_{100}$ through clinical development in order to obtain regulatory approval. Developing product candidates is expensive, and we expect to continue to incur research and development expenses in connection with our ongoing activities, particularly as we advance product candidates through clinical trials and regulatory approval.

To date, we have financed our operations primarily through the sale of equity securities, convertible loans made by certain of our shareholders or other loan facilities, and royalty-bearing and non-royalty bearing grants that we received from the IIA and FP7. As of March 4, 2024, we had cash, cash equivalents and short-term deposits of $15.6 million. We will require significant additional financing to fund our operations. Our future funding requirements will depend on many factors, including but not limited to:

- the progress, results and costs of our ongoing and anticipated clinical trials of D-PLEX$_{100}$ and any future product candidates;
- the cost, timing and outcomes of regulatory review of D-PLEX$_{100}$ and any future product candidates;
- the costs of maintaining our own commercial-scale cGMP manufacturing facility, including costs related to obtaining and maintaining regulatory compliance, and/or engaging third-party manufacturers therefor;
- the scope, progress, results and costs of product development, laboratory testing, manufacturing, preclinical development and clinical trials for any other product candidates that we may develop or otherwise obtain in the future;
- the cost of our future activities, including establishing sales, marketing and distribution capabilities for any product candidates in any particular geography where we receive marketing approval for such product candidates;
- the terms and timing of any collaborative, licensing and other arrangements that we may establish;
- the costs of preparing, filing and prosecuting patent applications, maintaining and enforcing our intellectual property rights and defending intellectual property-related claims; and
- the level of revenue, if any, received from commercial sales of any product candidates for which we receive marketing approval.

Identifying potential product candidates and conducting preclinical testing 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 and when 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. Any additional fundraising efforts may divert our management from their day-to-day activities, which may adversely affect our ability to develop and commercialize our product candidates.

We cannot guarantee that financing will be available in sufficient amounts or on terms acceptable to us, if at all, and the terms of any financing may adversely affect the interests or rights of our shareholders. Even if we believe that we have sufficient funds for our current or future operating plans, we may seek additional capital if market conditions are favorable or if we have specific strategic considerations. The issuance of additional securities, whether equity or debt, by us, or the possibility of such issuance, may cause the market price of our shares to decline. Further, our ability to raise additional capital may be adversely impacted by potential worsening global economic conditions and the disruptions to and volatility in the credit and financial markets in the United States and worldwide.

To the extent that we raise capital through the sale of equity or convertible debt securities, your ownership interest will be diluted, and the terms of such securities may include liquidation or other preferences that adversely affect your rights as a shareholder. Debt financing, if available, may involve covenants restricting our operations or our ability to incur additional debt. If we raise funds through collaboration and licensing arrangements with third parties, it may be necessary to relinquish certain rights to our technologies or our product candidates, or to grant licenses on terms that are not favorable to us.

If we are unable to obtain funding on acceptable terms and on a timely basis, we may be required to significantly curtail, delay or discontinue one or more of our research, development or manufacturing programs or the commercialization of any approved product, or be unable to expand our operations or otherwise capitalize on our business opportunities, as desired, which could materially affect our business, financial condition and results of operations.

Risks Related to the Discovery, Development and Clinical Testing of Product Candidates

We depend on enrollment of patients in our clinical trials in order to continue development of our product candidates.

Our anticipated time to data in SHIELD II trial for the prevention of SSIs in patients undergoing abdominal colorectal surgery with large incisions is subject to our ability to recruit sufficient eligible patients and the number and size of cohorts that will need to be enrolled prior to observing activity, if achieved at all for the dose escalation and expansion arms of the trial. There can be no assurance that we will complete enrollment or have data from the trial when we anticipate or at all. The timely completion of the clinical trial in accordance with its protocol depends, among other things, on our ability to enroll a sufficient number of patients that are in line with our inclusions and exclusion criteria and our ability to monitor these patients as required.

We may experience difficulties in patient enrollment in our clinical trials for a variety of reasons. Patient enrollment is affected by many factors including the size and nature of the patient population, the eligibility criteria for the trial, the design of the clinical trial, the size of the patient population required for analysis of the trial's primary endpoints, the proximity of patients to study sites, our ability to recruit clinical trial investigators with the appropriate competencies and experience, the number of enrolling clinical sites, our ability to obtain and maintain patient consents, the risk that patients enrolled in clinical trials will drop out of the trials before completion, and competing clinical trials (including other clinical trials that we are conducting or will conduct in the future) and clinicians' and patients' perceptions as to the potential advantages of the drug being studied in relation to other available therapies, or competing drugs against the same target as well as any new drugs that may be approved for the indications we are investigating.

Additionally, we must compete for clinical sites, clinicians and the limited number of patients who fulfill the stringent requirements for participation in clinical trials. Also, due to the confidential nature of clinical trials, we do not know how many of the eligible patients may be enrolled in competing studies and who are consequently not available to us for our clinical trials. Our clinical trials may be delayed or terminated due to the inability to enroll enough patients. The delay or inability to meet planned patient enrollment may result in increased costs and delay or termination of our trials, which could have a harmful effect on our ability to develop products.

We are heavily dependent on the success of D-PLEX$_{100}$, including obtaining regulatory approval to market D-PLEX$_{100}$ in the United States and the EU.

To date, we have invested all of our efforts and financial resources to: (i) research and develop our PLEX technology, our lead product candidate, D-PLEX$_{100}$, and our preclinical and research and development programs, including conducting preclinical studies and clinical trials, and providing general and administrative support for these operations; (ii) develop and secure our intellectual property portfolio for D-PLEX$_{100}$ and our PLEX technology and (iii) invest in our current manufacturing facility. Our future success is dependent on our ability to successfully develop, obtain regulatory approval for and commercialize one or more of our current and future product candidates. Our product candidates' marketability is subject to significant risks associated with successfully completing current and future clinical trials, including:

- our ability to complete our ongoing SHIELD II Phase 3 clinical trial of D-PLEX$_{100}$ for the prevention of SSIs in patients undergoing abdominal colorectal surgery with large incisions in a timely fashion and that such Phase 3 clinical trial, even if successfully completed, will be sufficient to support approval of an NDA;

- acceptance by the FDA, EMA or other regulatory agencies of our strategies for seeking regulatory approvals for D-PLEX$_{100}$ and any future product candidates, including our proposed indications, primary and secondary endpoint assessments and measurements, safety evaluations and regulatory pathways;

- the acceptance by the FDA, EMA or other regulatory agencies of the number, design, size, conduct and implementation of our clinical trials, our trial protocols and the interpretation of data from preclinical studies or clinical trials;

- our ability to successfully complete the clinical trials of D-PLEX$_{100}$ and any future product candidates, including timely patient enrollment and acceptable safety and efficacy data and our ability to demonstrate the safety and efficacy of the product candidates undergoing such clinical trials;

- the willingness of the FDA, EMA or other regulatory agencies to schedule an advisory committee meeting in a timely manner in connection with our regulatory submissions, if such advisory committee meetings are required;

- the recommendation of the FDA's advisory committee to approve our applications to market D-PLEX$_{100}$ and any future product candidates in the United States, and the EMA's approval to market D-PLEX$_{100}$ in the EU, if such advisory committee reviews are scheduled, without limiting the approved labeling, specifications, distribution or use of the products, or imposing other restrictions;

- the satisfaction of the FDA, EMA or other regulatory agencies with the safety and efficacy of D-PLEX$_{100}$ and any future product candidates;

- the prevalence and severity of adverse events associated with D-PLEX$_{100}$ and any future product candidates;

- the timely and satisfactory performance by third-party contractors, trial sites and principal investigators of their obligations in relation to our clinical trials;

- our success in educating medical professionals and patients about the benefits, administration and use of D-PLEX$_{100}$ and any future product candidates, if approved;

- our success in educating payers and hospital administrators about the potential cost savings benefits that D-PLEX$_{100}$ can deliver;

- the availability, perceived advantages, relative cost, safety and efficacy of alternative and competing treatments for the indications addressed by D-PLEX$_{100}$ and any future product candidates;

- the effectiveness of our marketing, sales and distribution strategy, and operations, as well as that of any current and future licensees;

- our ability to scale, validate and maintain a commercially viable manufacturing process that is cGMP-compliant;

- our ability to obtain, protect and enforce our intellectual property rights with respect to D-PLEX$_{100}$, any future product candidates and our PLEX technology; and

- changes to regulatory guidelines.

Many of these clinical, regulatory and commercial risks are beyond our control. Accordingly, we cannot assure you that we will be able to advance D-PLEX$_{100}$ and any future product candidates through clinical development, or to obtain regulatory approval of or commercialize any product candidates. If we fail to achieve these objectives or overcome the challenges presented above, we could experience significant delays or an inability to successfully commercialize D-PLEX$_{100}$ and any future product candidates. Accordingly, we may not be able to generate sufficient revenues through the sale of our product candidates to enable us to continue our business.

Additionally, approval of a product candidate in the United States by the FDA does not ensure approval of such product candidate by regulatory authorities in other countries or jurisdictions, and approval by one foreign regulatory authority does not ensure approval by regulatory authorities in other foreign countries or by the FDA. We may never obtain approval outside of the United States, which would limit our market opportunities and adversely affect our business.

The outcome of our planned unblinded interim analysis in our SHIELD II trial may require that we enroll more patients than would have been the case without an interim analysis, in which case we will need to spend additional time, effort and financial resources on the SHIELD II trial which may not ultimately be successful or support regulatory approval of D-PLEX$_{100}$.

An unblinded interim analysis is planned to be conducted in our SHIELD II trial once approximately 400 patients complete their 30-day follow-up. The anticipated interim analysis will allow for an early trial stopping due to efficacy or futility, or sample size reassessment. This interim analysis may not result in positive findings for the prevention of SSIs in patients undergoing abdominal colorectal surgery with large incisions sufficient to support submission of an NDA for D-PLEX$_{100}$, in which case we may need to significantly increase enrollment in the trial to improve its statistical power. Any increase in enrollment in the trial would cost us significantly more and cause us to delay any final analysis to determine whether or not the trial was successful to support an NDA submission. Increasing the size of the SHIELD II trial because of the interim analysis may result in pursuing further development of D-PLEX$_{100}$ for an indication in which it may ultimately be unsuccessful.

Our decision to implement an interim analysis for the SHIELD II trial may lead to an erroneous decision to stop the trial early or continue the trial with the expenditure of time, effort and financial resources to a conclusion that may ultimately be unsuccessful.

Improvement in SoC infection prevention and control measures being undertaken in hospitals globally as a result of the COVID-19 pandemic may have decreased the rate of SSIs, which may adversely impact the ability of our clinical trials to demonstrate an improvement over the SoC and may ultimately reduce our commercial opportunity even if our trials are successful.

As a result of heightened awareness and attention to infection prevention and control within hospitals and in society at large as a result of the COVID-19 pandemic, the rate of SSIs may be declining relative to their historic rates. Any reduction in SSIs rates may decrease the likelihood of success for our product candidates to show an improvement over the SoC, and even if successful in clinical trials, a reduction in SSIs, even temporary, may decrease the perceived commercial need for our products if they are approved by regulatory authorities.

Regulatory approval processes of the FDA, EMA and comparable foreign regulatory authorities are lengthy, time-consuming and unpredictable, and if we are ultimately unable to obtain regulatory approval for D-PLEX$_{100}$ or any future product candidates, our business may fail.

The research, development, testing, manufacturing, labeling, packaging, approval, promotion, advertising, storage, recordkeeping, marketing, distribution, post-approval monitoring and reporting and export and import of drug products are subject to extensive regulation by the FDA, the EMA and by foreign regulatory authorities in other countries. These regulations differ from country to country. To gain approval to market D-PLEX$_{100}$ and any future product candidates, we must provide data from well-controlled clinical trials that adequately demonstrate the safety and efficacy of the product for the intended indication to the satisfaction of the FDA, EMA or other regulatory authority. We have not yet obtained regulatory approval to market any product candidate in the United States or any other jurisdiction. The FDA, EMA or other regulatory agencies can delay, limit or deny approval of D-PLEX$_{100}$ or any future product candidate for many reasons, including:

- regulatory requests for additional analyses, reports, data, non-clinical and preclinical studies and clinical trials;
- our inability to demonstrate that a product candidate is safe and effective for the target indication to the satisfaction of the FDA, EMA or other regulatory agencies;
- the FDA's, EMA's, or other regulatory agencies' disagreement with our trial protocol, the interpretation of data from preclinical studies or clinical trials, or adequacy of the conduct and control of clinical trials;
- clinical holds, other regulatory objections to commencing or continuing a clinical trial or the inability to obtain regulatory approval to commence a clinical trial in countries that require such approvals;
- the population studied in the clinical trial may not be sufficiently broad or representative to assess safety in the patient population for which we seek approval;
- unfavorable or inconclusive results of clinical trials and supportive non-clinical studies, including unfavorable results regarding safety or efficacy of a product candidate observed in clinical trials;
- our inability to demonstrate that clinical or other benefits of a product candidate outweighs any safety or other perceived risks;
- any determination that a clinical trial presents unacceptable health risks to subjects;
- our inability to obtain approval from institutional review boards, or IRBs, to conduct clinical trials at their respective sites;
- the FDA's determination that the 505(b)(2) regulatory pathway is not available for a product candidate;
- the non-approval of the formulation, labeling or the specifications of a product candidate;
- the failure to accept the manufacturing processes or facilities at our manufacturing facility or those of third-party manufacturers with which we contract;
- the potential for approval policies or regulations of the FDA, EMA or other regulatory agencies to significantly change in a manner rendering our clinical data insufficient for approval; or
- resistance to approval from the advisory committees of the FDA, EMA or other regulatory agencies for any reason including safety or efficacy concerns.

In the United States, we will be required to submit an NDA to obtain FDA approval before marketing any product candidate. An NDA must include extensive preclinical and clinical data and supporting information to establish the product candidate's safety and efficacy for each desired indication. In the case of an NDA covered by Section 505(b)(2) of the Federal Food, Drug, and Cosmetic Act, or the FFDCA, we may rely in part on data not developed by us and for which we have not obtained a right of reference or use, including published scientific literature or the FDA's findings of safety and/or effectiveness for a previously approved drug. The NDA must also include significant information regarding the chemistry, manufacturing and controls for the product. The FDA may further inspect our manufacturing facilities to ensure that the facilities can manufacture any product candidate and any product, if and when approved, in compliance with the applicable regulatory requirements, as well as inspect our clinical trial sites to ensure that our trials are properly conducted. Obtaining approval of an NDA is a lengthy, expensive and uncertain process, and approval may not be obtained. Upon submission of an NDA, the FDA must make an initial determination that the application is sufficiently complete to accept the submission for filing. We cannot be certain that any submissions will be accepted for filing and review by the FDA, or ultimately be approved. If the application is not accepted for review or approval, the FDA may require that we conduct additional clinical or preclinical trials, or take other actions before it will reconsider our application. If the FDA requires additional trials or data, we would incur increased costs and delays in the marketing approval process, which may require us to expend more resources than we have available. Even if the FDA agrees that results from our SHIELD II trial evaluating D-PLEX$_{100}$ for the prevention of SSIs in patients undergoing abdominal colorectal surgery with large incisions are sufficient to support the submission of an NDA, the FDA may determine that the data from this trial support a narrower indication than we may propose, if the FDA were to approve such NDA at all. In addition, the FDA may not consider any additional information to be complete or sufficient to support approval.

Regulatory authorities outside of the United States, such as in the EU, also have requirements for approval of drugs for commercial sale with which we must comply prior to marketing in those areas. Regulatory requirements can vary widely from country to country and could delay or prevent the introduction of a product candidate. Clinical trials conducted in one country may not be accepted by regulatory authorities in other countries, and obtaining regulatory approval in one country does not mean that regulatory approval will be obtained in any other country. However, the failure to obtain regulatory approval in one jurisdiction could have a negative impact on our ability to obtain approval in a different jurisdiction. Approval processes vary among countries and can involve additional product candidate testing and validation and additional administrative review periods. Seeking foreign regulatory approval could require additional non-clinical studies or clinical trials, which could be costly and time consuming. Foreign regulatory approval may include all of the risks associated with obtaining FDA approval. For all of these reasons, if we seek foreign regulatory approval for any product candidate, we may not obtain such approvals on a timely basis, if at all.

Even if we eventually complete clinical testing and receive approval of any regulatory filing for a product candidate, the FDA may grant approval contingent on the performance of costly and potentially time-consuming additional post-approval clinical trials or subject to contraindications, black box warnings, restrictive surveillance or Risk Evaluation and Mitigation Strategies, or REMS. Further, the FDA, EMA or other foreign regulatory authorities may also approve a product candidate for a more limited indication or a narrower patient population than we originally requested, and these regulatory authorities may not approve the labeling that we believe is necessary or desirable for the successful commercialization of any product candidate. Following any approval for commercial sale of a product candidate, certain changes to the product, such as changes in manufacturing processes and additional labeling claims, as well as new safety information, will be subject to additional FDA notification, or review and approval. Also, regulatory approval for any product candidate may be withdrawn. To the extent we seek regulatory approval in foreign countries, we may face challenges similar to those described above with regulatory authorities in applicable jurisdictions. Any delay in obtaining, or inability to obtain, applicable regulatory approval for D-PLEX$_{100}$ or any future product candidate would delay or prevent commercialization of such product candidate and would thus negatively impact our business, results of operations and prospects.

Clinical drug development is difficult to design and implement and involves a lengthy and expensive process with uncertain outcomes.

Clinical testing is expensive and can take many years to complete, and its outcome is inherently uncertain. A failure of one or more of our clinical trials can occur at any time during the clinical trial process. We do not know whether future clinical trials, if any, will begin on time, need to be redesigned, enroll an adequate number of patients on time or be completed on schedule, if at all. Clinical trials can be delayed, suspended or terminated for a variety of reasons, including failure to:

- generate sufficient preclinical, toxicology, or other *in vivo* or *in vitro* data to support the initiation or continuation of clinical trials;
- obtain regulatory approval, or feedback on trial design, in order to commence a trial;

- identify, recruit and train suitable clinical investigators;
- reach agreement on acceptable terms with prospective contract research organizations, or CROs, and clinical trial sites, the terms of which can be subject to extensive negotiation and may vary significantly among CROs and clinical trial sites, and have such CROs and sites effect the proper and timely conduct of our clinical trials;
- obtain and maintain IRB approval at each clinical trial site;
- identify, recruit and enroll suitable patients to participate in a trial;
- have a sufficient number of patients complete a trial or return for post-treatment follow-up;
- ensure clinical investigators and clinical trial sites observe trial protocol or continue to participate in a trial;
- address any patient safety concerns that arise during the course of a trial;
- address any conflicts with new or existing laws or regulations;
- add a sufficient number of clinical trial sites;
- manufacture sufficient quantities at the required quality of product candidate for use in clinical trials; or
- raise sufficient capital to fund a trial.

We may also experience numerous unforeseen events during, or as a result of, clinical trials that could delay or prevent our ability to receive marketing approval or commercialize any product candidate, including:

- we may receive feedback from regulatory authorities that requires us to modify the design of our clinical trials;
- clinical trials of a product candidate may produce negative or inconclusive results, and we may decide, or regulators may require us, to conduct additional clinical trials or abandon drug development programs;
- the number of patients required for clinical trials of a product candidate may be larger than we anticipate, enrollment in these clinical trials may be slower than we anticipate or participants may drop out of these clinical trials at a higher rate than we anticipate;
- our third-party contractors may fail to comply with regulatory requirements or meet their contractual obligations to us in a timely manner, or at all;
- regulators or IRBs may not authorize us or our investigators to commence a clinical trial or conduct a clinical trial at a prospective trial site or amend a trial protocol;
- we may have delays in reaching or fail to reach agreement on acceptable clinical trial contracts or clinical trial protocols with prospective trial sites and CROs;
- we or our investigators might have to suspend or terminate clinical trials of a product candidate for various reasons, including non-compliance with regulatory requirements, a finding that a product candidate have undesirable side effects or other unexpected characteristics, or a finding that the participants are being exposed to unacceptable health risks;
- the cost of clinical trials of a product candidate may be greater than we anticipate;
- the supply or quality of a product candidate or other materials necessary to conduct clinical trials of such product candidate may be insufficient or inadequate;

- there may be changes in government regulations or administrative actions;
- a product candidate may have undesirable adverse effects or other unexpected characteristics;
- we may not be able to demonstrate that a produce candidate's clinical and other benefits outweigh its safety risks;
- we may not be able to demonstrate that a product candidate provides an advantage over current standards of care of future competitive therapies in development;
- regulators may revise the requirements for approving a product candidate, or such requirements may not be as we anticipate; and
- any future collaborators that conduct clinical trials may face any of the above issues, and may conduct clinical trials in ways they view as advantageous to them but that are suboptimal for us.

In addition, disruptions caused by the COVID-19 pandemic caused and may continue to increase the likelihood that we encounter such difficulties in initiating, enrolling, conducting or completing our planned and ongoing clinical trials. We may also encounter delays if a clinical trial is suspended or terminated by us, by the IRBs of the institutions in which such trials are being conducted, by the trial's data safety monitoring board, by the FDA, EMA or other regulatory agencies. Such authorities may suspend or terminate one or more of our clinical trials due to a number of factors, including our failure to conduct the clinical trial in accordance with relevant regulatory requirements or clinical protocols, inspection of the clinical trial operations or site by the FDA, EMA or other regulatory agencies resulting in the imposition of a clinical hold, unforeseen safety issues or adverse side effects, failure to demonstrate a benefit from using a drug, changes in governmental regulations or administrative actions or lack of adequate funding to continue the clinical trial.

Further, conducting clinical trials outside of the United States, as we have done and continue to do and plan to expand for D-PLEX$_{100}$ and any future product candidates, presents additional risks that may delay completion of our clinical trials. These risks include the failure of enrolled patients in the countries outside of the United States to adhere to clinical protocol as a result of differences in healthcare services or cultural customs, managing additional administrative burdens associated with foreign regulatory schemes, as well as political and economic risks relevant to such foreign countries.

If we experience delays in completing any clinical trial of a product candidate or successfully obtaining regulatory approval, the commercial prospects of such product candidate may be harmed, and our ability to generate product revenues from such product candidate will be delayed. In addition, any delays in completing our clinical trials will increase our costs, slow down our product candidate development and approval process and jeopardize our ability to commence product sales and generate revenues. Any of these occurrences may significantly harm our business and financial condition. In addition, many of the factors that cause, or lead to, a delay in the commencement or completion of clinical trials may also ultimately lead to the denial of regulatory approval of our product candidates.

The results of earlier studies and trials may not be predictive of future trial results, and our clinical trials may fail to adequately demonstrate the safety and efficacy of our product candidates.

Results from preclinical studies or early-stage clinical trials are not necessarily predictive of future clinical trial results. Preclinical tests and Phase 1 and Phase 2 clinical trials are primarily designed to test safety, to study pharmacokinetics and pharmacodynamics and to understand the side effects of product candidates at various doses and schedules. Success in preclinical or animal studies and early clinical trials does not ensure that later, large-scale efficacy trials will be successful, nor does it predict final results. Our product candidates may fail to show the desired safety and efficacy in clinical development despite positive results in preclinical studies or after having successfully advanced through initial clinical trials. This failure might cause us to abandon further development of D-PLEX$_{100}$ for the prevention of SSIs, which is currently our most advanced product candidate. Further, data obtained from the SHIELD I pivotal clinical trial are not necessarily predictive of future results from the ongoing SHIELD II pivotal trial, and are susceptible to varying interpretations, which could delay, limit or prevent regulatory approval. For example, even if the ongoing SHIELD II trial focuses on patients undergoing surgeries with incisions greater than 20 cm based on positive results observed in the SHIELD I pre-specified subgroup ITT analysis of a total of 423 subjects with large incisions (>20 centimeters), there is significant risk that we will fail to reproduce the same results or achieve favorable results in SHIELD II at all and receive regulatory approval. Further, data obtained from pivotal clinical studies are susceptible to varying interpretations, which could delay, limit or prevent regulatory approval.

There is a high failure rate for product candidates proceeding through clinical trials. Many companies in the pharmaceutical industry have suffered significant setbacks in late-stage clinical trials even after achieving promising results in preclinical testing and earlier-stage clinical trials. Data obtained from preclinical and clinical activities are 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. 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 efficacy and safety of a product candidate. Frequently, product candidates that have shown promising results in early clinical trials have subsequently suffered significant setbacks in later clinical trials. Additionally, even if we are able to complete clinical trials, the results may not be sufficient to obtain regulatory approval for our product candidates.

Interim, "top-line" and preliminary data from our clinical trials that we announce or publish from time to time may change as more patient data become available and are subject to audit and verification procedures that could result in material changes in the final data.

From time to time, we may publicly disclose top-line or preliminary data from our clinical trials, which is based on a preliminary analysis of then-available data, and the results and related findings and conclusions are subject to change following a more comprehensive review of the data related to the particular study or trial. We also make assumptions, estimations, calculations and conclusions as part of our analyses of data, and we may not have received or had the opportunity to fully and carefully evaluate all data. As a result, the top-line or preliminary results that we report may differ from future results of the same trials, or different conclusions or considerations may qualify such results, once additional data have been received and fully evaluated. Top-line or preliminary data also remain subject to audit and verification procedures that may result in the final data being materially different from the top-line or preliminary data we previously published. As a result, top-line and preliminary data should be viewed with caution until the final data are available.

From time to time, we may also disclose interim data from our preclinical studies and clinical trials. Interim data from clinical trials that we may complete are subject to the risk that one or more of the clinical outcomes may materially change as patient enrollment continues and more patient data become available. Adverse differences between interim data and final data could significantly harm our business prospects. Further, disclosure of interim data by us or by our competitors could result in volatility in the price of our Ordinary Shares.

Further, others, including regulatory agencies, may not accept or agree with our assumptions, estimates, calculations, conclusions or analyses or may interpret or weigh the importance of data differently, which could impact the value of the particular program, the approvability or commercialization of the particular product candidate or product and our company in general. In addition, the information we choose to publicly disclose regarding a particular study or clinical trial is based on what is typically extensive information, and you or others may not agree with what we determine is material or otherwise appropriate information to include in our disclosure.

If the interim, top-line or preliminary data that we report differ from actual results, or if others, including regulatory authorities, disagree with the conclusions reached, our ability to obtain approval for, and commercialize, our product candidates may be harmed, which could harm our business, operating results, prospects or financial condition.

If the FDA does not conclude that D-PLEX$_{100}$ satisfies the requirements under Section 505(b)(2) of the FFDCA, or Section 505(b)(2), or if we are unable to utilize the hybrid application pathway in the EU, or if the requirements are not as we expect, the approval pathway for D-PLEX$_{100}$ will likely take significantly longer, cost significantly more and entail significantly greater complications and risks than anticipated, and in either case may not be successful.

We intend to utilize the FDA's Section 505(b)(2) regulatory pathway, and the hybrid application pathway in the EU, which is analogous to the Section 505(b)(2) pathway, to seek approval of D-PLEX$_{100}$. The Drug Price Competition and Patent Term Restoration Act of 1984, also known as the Hatch-Waxman Act, added Section 505(b)(2) to the FFDCA. Section 505(b)(2) permits the filing of an NDA where at least some of the information required for approval comes from trials or studies that were not conducted by or for the applicant, and for which the applicant has not received a right of reference or use from the person by or for whom the investigations were conducted, which we believe could expedite the development program for D-PLEX$_{100}$ by potentially decreasing the amount of preclinical and clinical data that we would need to generate in order to obtain FDA approval. However, while we believe that D-PLEX$_{100}$ is a reformulation of an already-approved drug and, therefore, will be eligible for submission of an NDA under Section 505(b)(2), the FDA may disagree and determine that D-PLEX$_{100}$ is not eligible for review under such regulatory pathway.

If we are unable to pursue these regulatory pathways as anticipated, we may need to conduct additional preclinical experiments and clinical trials, provide additional data and information and meet additional standards for regulatory approval. If this were to occur, the time and financial resources required to obtain FDA approval for D-PLEX$_{100}$, and complications and risks associated with D-PLEX$_{100}$, would likely increase significantly. Moreover, inability to pursue the Section 505(b)(2) or similar regulatory pathway could result in new competitive products reaching the market more quickly than D-PLEX$_{100}$ or any future product candidates, which would likely harm our competitive position and prospects. Even if we are allowed to pursue the Section 505(b)(2) or similar regulatory pathway, D-PLEX$_{100}$ may not receive the requisite approvals for commercialization, and there is no guarantee the 505(b)(2) or similar pathway would ultimately lead to faster product development or earlier approval.

In addition, notwithstanding the approval of a number of products by the FDA under Section 505(b)(2) over the last few years, certain competitors and others have objected to the FDA's interpretation of Section 505(b)(2). If the FDA's interpretation of Section 505(b)(2) is successfully challenged, the FDA may be required to change its 505(b)(2) policies and practices, which could delay or even prevent the FDA from approving any NDA that we submit under Section 505(b)(2). In addition, the pharmaceutical industry is highly competitive, and Section 505(b)(2) NDAs are subject to special requirements designed to protect the patent rights of sponsors of previously approved drugs that are referenced in a Section 505(b)(2) NDA. These requirements may give rise to patent litigation and mandatory delays in approval of our potential future NDAs for up to 30 months depending on the outcome of any litigation. It is also not uncommon for a manufacturer of an approved product to file a citizen petition with the FDA seeking to delay approval of, or impose additional approval requirements for, pending competing products. If successful, such petitions can significantly delay, or even prevent, the approval of the new product. However, even if the FDA ultimately denies such a petition, the FDA may substantially delay approval while it considers and responds to the petition.

Moreover, even if D-PLEX$_{100}$ or any future product candidates are approved under the Section 505(b)(2) pathway, as the case may be, the approval may be subject to limitations on the indicated uses for which the products may be marketed or to other conditions of approval, or may contain requirements for costly post-marketing testing and surveillance to monitor the safety or efficacy of the products.

PLEX is a novel technology, which makes it difficult to accurately and reliably predict the time and cost of development and of subsequently obtaining regulatory approval of D-PLEX$_{100}$ or any future PLEX product candidates.

We have concentrated our efforts and product research on our PLEX drug delivery technology, and our future success depends on the successful development of this technology and products based on it. There can be no assurance that any development problems we experience in the future related to our product candidates will not cause significant delays or unanticipated costs, or that such development problems can be solved. We may be unable to maintain and further develop sustainable, reproducible and scalable manufacturing processes, or transfer these processes to collaborators, which may prevent us from completing our clinical studies or commercializing our products on a timely or profitable basis, if at all. To our knowledge, no regulatory authority has granted approval to any person or entity, including us, to market and commercialize therapeutics using our novel delivery system. We may never receive approval to market and commercialize any product candidate that utilizes PLEX.

As an organization, we may be unable to successfully complete clinical development for any product candidates we may develop, including D-PLEX$_{100}$.

We will need to successfully complete pivotal clinical trials in order to obtain the approval of the FDA, EMA or other regulatory agencies to market D-PLEX$_{100}$ or any future product candidates. Carrying out clinical trials and the submission of a successful NDA is a complicated process. As an organization, we have limited experience in conducting later stage or pivotal clinical trials and have limited experience in preparing, submitting and prosecuting regulatory filings. Consequently, we may be unable to successfully and efficiently execute and complete necessary clinical trials, including our ongoing SHIELD II Phase 3 trial, in a way that leads to marketing approval of D-PLEX$_{100}$. We may require more time and incur greater costs than our competitors and may not succeed in obtaining regulatory approvals of product candidates that we develop. Failure to commence or complete, or delays in, our planned clinical trials, could prevent us from or delay us in commercializing D-PLEX$_{100}$. See "Risks Related to Our Reliance on Third Parties". We rely on third parties to conduct certain elements of our preclinical and clinical trials and perform other tasks for us. If these third parties do not successfully carry out their contractual duties, meet expected deadlines or comply with regulatory requirements, we may not be able to obtain regulatory approval for or commercialize our product candidates.

We may find it difficult to enroll patients in our clinical trials due to various reasons, including possible disruption due to the COVID-19 pandemic, which could delay or prevent us from proceeding with such trials.

Identifying and qualifying patients to participate in our clinical trials is critical to our success. The timing of our clinical trials depends in part on the speed at which we can recruit patients to participate in testing our product candidates, and we may experience delays in our clinical trials if we encounter difficulties in enrollment. Patient enrollment and retention in clinical trials depends on many factors, including the size of the patient population, the nature of the trial protocol, our ability to recruit clinical trial investigators with the appropriate competencies and experience, the existing body of safety and efficacy data with respect to the study drug, the number and nature of competing treatments and ongoing clinical trials of competing drugs for the same indication, the proximity of patients to clinical sites, clinicians' and patients' perceptions as to the potential advantages of the product candidate being studied in relation to other available therapies, including any drugs that may be approved for the indications we are investigating, the eligibility criteria for the trials, our ability to obtain and maintain patient consents and the risk that patients enrolled in clinical trials will drop out of the trials before completion. We have experienced and may further continue to experience disruptions in patient enrollment due to the COVID-19 pandemic, including difficulties in initiating clinical sites and enrolling and retaining participants, the diversion of healthcare resources away from clinical trials and challenges related to travel or quarantine policies that may be implemented.

We may not be able to identify, recruit and enroll a sufficient number of patients to complete our clinical trials because of the perceived risks and benefits of the product candidate under study, the availability and efficacy of competing therapies and clinical trials, the proximity and availability of clinical trial sites for prospective patients and the patient referral practices of physicians. We may also face challenges in identifying trial sites and enrolling patients in global trials such as our ongoing SHIELD II Phase 3 trial of D-PLEX$_{100}$. If patients are unwilling to participate in our trials for any reason, the timeline for recruiting patients, conducting trials and obtaining regulatory approval of potential products will be delayed.

Our product candidates and the administration of our product candidates may cause undesirable side effects or have other properties that could delay or prevent their regulatory approval, limit the commercial profile of an approved label or result in significant negative consequences following marketing approval, if any.

Undesirable side effects, including toxicology, caused by D-PLEX$_{100}$ or any future product candidates, or the drugs encapsulated by such product candidates, could cause us or regulatory authorities to interrupt, delay or halt clinical trials and could result in a more restrictive label or the delay or denial of regulatory approval by the FDA, EMA or other regulatory agencies. Results of our trials could reveal a high and unacceptable severity and prevalence of these or other side effects. In such an event, our clinical studies could be suspended or terminated, and the FDA, EMA or other regulatory agencies could order us to cease further development of or deny or withdraw approval of our product candidates for any or all targeted indications. Moreover, 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 or not the product candidate being studied caused these conditions.

Drug-related, drug-product related, formulation-related and administration-related side effects could affect patient recruitment, the ability of enrolled patients to complete the clinical trials or result in potential product liability claims, which could exceed our clinical trial insurance coverage. We do not currently have product liability insurance and do not anticipate obtaining product liability insurance until such time as we have received FDA, EMA or other comparable foreign authority marketing approval for one of our product candidates and such product is being provided to patients outside of clinical trials.

Additionally, if one or more of our product candidates receives marketing approval, and we or others later identify undesirable side effects caused by such products, a number of potentially significant negative consequences could result, including but not limited to:

- regulatory authorities may suspend or withdraw approvals of such product;
- regulatory authorities may require additional warnings on the label, such as a "black box" warning or contraindication;
- additional restrictions may be imposed on the marketing of the particular product or the manufacturing processes for the product or any component thereof;

- we may be required to create a REMS, which could include a medication guide outlining the risks of such side effects for distribution to patients, a communication plan for healthcare providers and/or other elements to assure safe use;
- we may be required to recall a product, 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;
- the product may become less competitive; and
- our reputation may suffer.

Any of these events could prevent us from achieving or maintaining market acceptance of the particular product candidate, if approved, and could significantly harm our business, results of operations and prospects.

Even if we complete the necessary clinical trials, we cannot predict when, or if, we will obtain regulatory approval to commercialize any of our product candidates, and the approval may be for a narrower indication than we seek or be subject to other limitations or restrictions that limit its commercial profile.

We cannot commercialize a product candidate until the appropriate regulatory authorities have reviewed and approved the product candidate. Even if our current or future product candidates meet safety and efficacy endpoints in pivotal clinical trials, the regulatory authorities may not complete their review processes in a timely manner, or we may not be able to obtain regulatory approval. Additional delays may result if an FDA Advisory Committee or other regulatory authority recommends non-approval or restrictions on approval. This may include approval of a product candidate for more limited indications than requested or they may impose significant limitations in the form of warnings. 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.

Regulatory authorities also may approve a product candidate for more limited indications than requested or they may impose significant limitations in the form of warnings or a REMS. These regulatory authorities may require precautions or contra-indications with respect to conditions of use or they may grant approval subject to the performance of costly post-marketing clinical trials. In addition, regulatory authorities may not approve the labeling claims that are necessary or desirable for the successful commercialization of any of our product candidates. For example, the FDA may disagree that our Phase 3 trial evaluating D-PLEX$_{100}$ is sufficient to support either NDA submissions seeking approval for the specific indications under evaluation in our ongoing and potential future Phase 3 trials or NDA submissions seeking approval for broader indications covering the prevention of SSIs. Although we intend to pursue a broad label for D-PLEX$_{100}$, to date we have not had any discussions with, nor received any feedback from, the FDA with respect to the possibility of pursuing a label broader than the prevention of SSIs following abdominal surgery. Even if the FDA were to agree that these trials were sufficient to support one or more NDA submissions, the FDA may determine that the data from these trials support more narrow indications than we may propose, if the FDA were to approve such NDA submissions at all. If the FDA does not agree that our ongoing and potential future Phase 3 trials support the submission of an NDA for any indication, we will be required to conduct additional clinical trials to support our proposed indications. Any of the foregoing scenarios could materially harm the commercial prospects for our product candidates and materially and adversely affect our business, financial condition, results of operations and prospects.

Although D-PLEX$_{100}$ has been granted Qualified Infectious Disease Product designation by the FDA for the prevention of sternal wound infection after cardiac surgery, for the prevention of post-abdominal surgery incisional infection, and for prevention of post-colorectal SSIs, these designations do not guarantee a shorter FDA review process, or that D-PLEX$_{100}$ will ultimately be approved by the FDA for any indication.

Under the Generating Antibiotic Incentives Now Act, or GAIN Act, the FDA may designate a product as a "qualified infectious disease product," or QIDP. In order to receive this designation, a drug must qualify as an antibacterial or antifungal drug for human use intended to treat serious or life-threatening infections, including those caused by either (1) an antibacterial or antifungal resistant pathogen, including novel or emerging infectious pathogens, or (2) a so-called "qualifying pathogen" found on a list of potentially dangerous, drug-resistant organisms established and maintained by the FDA under the GAIN Act. A sponsor must request such designation before submitting a marketing application. We requested and received QIDP designations for D-PLEX$_{100}$ for the prevention of sternal wound infection after cardiac surgery, for the prevention of post-abdominal surgery incisional infection and for prevention of post-colorectal SSIs. We anticipate that the QIDP designations will provide, among other benefits, an overall increased level of communication with the FDA during the development process. The benefits of QIDP designation also include eligibility for priority review and an extension by an additional five years of any non-patent market exclusivity period awarded, such as a five-year exclusivity period awarded for a new molecular entity, or a three-year market exclusivity period awarded to an applicant whose application relies on new clinical investigations essential to the approval. This extension is in addition to any pediatric exclusivity extension that may be awarded. GAIN Act exclusivity may not be awarded if the indication for which we obtain approval does not meet the definition of a qualified infectious disease product. However, there is limited precedent for understanding the way in which the GAIN Act will be implemented. Receipt of QIDP designation in practice may not result in a faster development process, review or approval compared to drugs considered for approval under conventional FDA procedures, and does not assure ultimate approval by the FDA or related exclusivity benefits.

Fast Track Designation from the FDA may not actually lead to a faster development or regulatory review or approval process.

We received Fast Track Designation from the FDA for D-PLEX$_{100}$ for topical use for the prevention of post-cardiac surgery sternal infection, for the prevention of post abdominal surgery incisional infection and for prevention of post-colorectal SSIs.

If a product candidate is intended for the treatment of a serious or life-threatening condition and the product candidate demonstrates the potential to address unmet medical needs for this condition, the product sponsor may apply for Fast Track Designation. The FDA has broad discretion whether or not to grant this designation, so even if we believe one of our product candidates is eligible for this designation, we cannot assure you that the FDA would decide to grant it. Even if we do receive Fast Track Designation, such as the Fast Track Designation received for D-PLEX$_{100}$, we may not experience a faster development process, review or approval compared to conventional FDA procedures. The FDA may withdraw Fast Track Designation if it believes that the designation is no longer supported by data from our clinical development program.

Breakthrough therapy designation by the FDA may not lead to a faster development or regulatory review or approval process.

We received a breakthrough therapy designation for D-PLEX$_{100}$ for the prevention of SSIs in patients undergoing elective colorectal surgery. A breakthrough therapy is defined as a product candidate that is intended, alone or in combination with one or more other drugs, to treat a serious or life-threatening disease or condition, and preliminary clinical evidence indicates that the product candidate may demonstrate substantial improvement over existing therapies on one or more clinically significant endpoints, such as substantial treatment effects observed early in clinical development. For product candidates that have been designated as breakthrough therapies, interaction and communication between the FDA and the sponsor of the trial can help to identify the most efficient path for clinical development while minimizing the number of patients placed in ineffective control regimens. Product candidates designated as breakthrough therapies by the FDA are also eligible for priority review if supported by clinical data at the time of the submission of the biologics license application, or BLA.

However, the receipt of a breakthrough therapy designation for a product candidate may not result in a faster development process, review or approval compared to product candidates considered for approval under conventional FDA procedures and it would not assure ultimate approval by the FDA. In addition, even if one or more of our product candidates qualify as breakthrough therapies, the FDA may later decide that the product candidate no longer meets the conditions for qualification, or it may decide that the time period for FDA review or approval will not be shortened.

Eligibility by EMA for submission of a MAA in the EU under the centralized procedure may not eventually lead to an approval for submission of a MAA under the centralized procedure nor a faster regulatory review or approval process.

In September 2022, we received confirmation from the EMA that D-PLEX$_{100}$ is eligible for submission of an application for an EU Marketing Authorisation (centralized Procedure) under Article 3(2)b – Therapeutic innovation (EC) No 726/2004. The centralized process eligibility is granted to D-PLEX$_{100}$ under the Therapeutic Innovation criteria which underscores that D-PLEX$_{100}$ potentially provides a new alternative to patients in preventing post abdominal SSIs.

However, the receipt of a confirmation from the EMA that D-PLEX$_{100}$ is eligible for submission of a MAA in the EU under the EMA's centralized procedure may not eventually result in an approval by the EMA that D-PLEX$_{100}$ is eligible for submission of a MAA in the EU under the Agency's centralized procedure nor result in a faster review or approval compared to product candidates considered for approval under conventional EMA national procedures and it would not assure ultimate approval by the EMA. In addition, even if D-PLEX$_{100}$ is eligible for submission of a MAA in the under the Agency's centralized procedure, the EMA may later decide that the product candidate no longer meets the conditions for qualification.

Even if we obtain regulatory approval for a product candidate, our products and business will remain subject to ongoing regulatory obligations and review.

If our product candidates are approved, they will be subject to ongoing regulatory requirements for manufacturing, labeling, packaging, storage, advertising, promotion, sampling, record-keeping, conduct of post-marketing studies and submission of safety, efficacy and other post-market information, including both federal and state requirements in the United States and comparable requirements outside of the United States. Accordingly, we and others with whom we work must continue to expend time, money and effort in all areas of regulatory compliance, including manufacturing, production and quality control.

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 safety and efficacy of the product candidate. The FDA may also require a REMS as a condition of approval of our product candidates, which could include requirements for a medication guide, physician communication plans or additional elements to ensure safe use, such as restricted distribution methods, patient registries and other risk minimization tools. We will also be required to report certain adverse reactions and production problems, if any, to the FDA, EMA or other regulatory agencies and to comply with requirements concerning advertising and promotion for our products. Promotional communications with respect to prescription drugs are subject to a variety of legal and regulatory restrictions and must be consistent with the information in the product's approved label. As such, we may not promote our products for indications or uses for which they do not have FDA, EMA or other regulatory agency approval. The holder of an approved NDA must also submit new or supplemental applications and obtain FDA approval for certain changes to the approved product, product labeling, or manufacturing process. We could also be asked to conduct post-marketing clinical trials to verify the safety and efficacy of our product candidates in general or in specific patient subsets. An unsuccessful post-marketing trial or failure to complete such a clinical trial could result in the withdrawal of marketing approval. Furthermore, any new legislation addressing drug safety issues could result in delays in product development or commercialization or increased costs to assure compliance. Foreign regulatory authorities impose similar requirements. If a regulatory agency discovers previously unknown problems with a product, such as adverse events of unanticipated severity or frequency, or disagrees with the promotion, marketing or labeling of a product, such regulatory agency may impose restrictions on that product or us, including requiring withdrawal of the product from the market. If we fail to comply with applicable regulatory requirements, a regulatory agency or enforcement authority may, among other things:

- issue warning letters asserting that we are in violation of the law;
- seek an injunction or impose civil or criminal penalties or monetary fines;
- suspend or withdraw regulatory approval;
- suspend any of our ongoing clinical trials;
- refuse to approve pending applications or supplements to approved applications submitted by us or our strategic partners;
- restrict the marketing or manufacturing of our products;
- seize or detain products, or require a product recall;
- refuse to permit the import or export of our product candidates; or
- refuse to allow us to enter into 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. Any failure to comply with ongoing regulatory requirements may significantly and adversely affect our ability to commercialize and generate revenue from our product candidates. If regulatory sanctions are applied or if regulatory approval is withdrawn, the value of our company and our operating results will be adversely affected.

The FDA's and other regulatory authorities' policies may change, and additional government regulations may be enacted that could prevent, limit or delay regulatory approval of our product candidates. 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 adversely affect our business, prospects, financial condition and results of operations.

We also cannot predict the likelihood, nature or extent of government regulation that may arise from future legislation or administrative or executive action, either in the United States or abroad.

Disruptions at the FDA and other government agencies caused by funding shortages or global health concerns could hinder their ability to hire, retain or deploy key leadership and other personnel, or otherwise prevent new or modified products from being developed, approved or commercialized in a timely manner or at all, which could negatively impact our business.

The ability of the FDA to review and approve new products can be affected by a variety of factors, including government budget and funding levels, statutory, regulatory, and policy changes, the FDA's ability to hire and retain key personnel and accept the payment of user fees, and other events that may otherwise affect the FDA's ability to perform routine functions. Average review times at the agency have fluctuated in recent years as a result. In addition, government funding of other government agencies that fund research and development activities is subject to the political process, which is inherently fluid and unpredictable. Disruptions at the FDA and other agencies may also slow the time necessary for new drugs or modifications to approved drugs to be reviewed and/or approved by necessary government agencies, which would adversely affect our business. For example, over the last several years, including for 35 days beginning on December 22, 2018, the U.S. government has shut down several times and certain regulatory agencies, such as the FDA, have had to furlough critical FDA employees and stop critical activities.

Separately, in response to the COVID-19 pandemic, the FDA postponed most foreign and routine surveillance inspections of domestic manufacturing facilities. In the absence of in-person surveillance inspections of manufacturing facilities, the FDA relied and may in the future rely on alternative tools to evaluate facilities. Regulatory authorities outside the United States adopted similar restrictions or other policy measures in response to the COVID-19 pandemic.

If a prolonged government shutdown occurs, or if global health concerns prevent the FDA or other regulatory authorities from conducting their regular inspections, reviews, or other regulatory activities, it could significantly impact the ability of the FDA or other regulatory authorities to timely review and process our regulatory submissions, which could have a material adverse effect on our business.

We may be subject, directly or indirectly, to U.S. federal and state healthcare fraud and abuse laws, false claims laws, healthcare provider payment transparency laws and health information privacy and security laws. If we are unable to comply, or have not fully complied, with such laws, we could face substantial penalties.

Our current and future operations may be directly or indirectly through our relationships with U.S. healthcare providers, patients and other persons and entities, subject to broadly applicable fraud and abuse and other healthcare laws and regulations that may constrain our business or financial arrangements and relationships through which we research, market, sell and distribute our products in the United States. In addition, we may be subject to patient privacy regulation by both the federal government and the states in which we conduct our business. The laws that may affect our ability to operate include:

- The U.S. Anti-Kickback Statute prohibits, among other things, any person or entity from knowingly and willfully offering, paying, soliciting, receiving or providing any remuneration, directly or indirectly, overtly or covertly, to induce or in return for purchasing, leasing, ordering or arranging for or recommending the purchase, lease or order of any item or service reimbursable, in whole or in part, under Medicare, Medicaid or other U.S. federal healthcare programs. The U.S. Anti-Kickback Statute has been interpreted to apply to arrangements between pharmaceutical manufacturers on the one hand and prescribers, purchasers, and formulary managers, among others, on the other. There are a number of statutory exceptions and regulatory safe harbors protecting some common activities from prosecution, but the exceptions and safe harbors are drawn narrowly and require strict compliance in order to offer protection.

- The U.S. federal false claims laws, including the False Claims Act, or FCA, and civil monetary penalties laws, which prohibit any person or entity from, among other things, knowingly presenting, or causing to be presented, a false, fictitious or fraudulent claim for payment to, or approval by, the U.S. federal government or knowingly making, using or causing to be made or used a false record or statement material to a false or fraudulent claim to the U.S. federal government. As a result of a modification made by the Fraud Enforcement and Recovery Act of 2009, a claim includes "any request or demand" for money or property presented to the U.S. government. In addition, manufacturers can be held liable under the FCA even when they do not submit claims directly to government third-party payors if they are deemed to "cause" the submission of false or fraudulent claims. The FCA also permits a private individual acting as a "whistleblower" to bring actions on behalf of the federal government alleging violations of the FCA and to share in any monetary recovery. FCA liability is potentially significant in the healthcare industry because the statute provides for treble damages and mandatory penalties per false claim or statement. Government enforcement agencies and private whistleblowers have investigated pharmaceutical companies for or asserted liability under the FCA for a variety of alleged promotional, marketing and other activities, such as providing free product to customers with the expectation that the customers would bill federal programs for the product; providing consulting fees and other benefits to physicians to induce them to prescribe products; engaging in promotion for "off-label" uses; and submitting inflated best price information to the Medicaid Rebate Program.

- The U.S. Health Insurance Portability and Accountability Act of 1996, or HIPAA, prohibits, among other actions, knowingly and willfully executing, or attempting to execute, a scheme to defraud any healthcare benefit program, including private third-party payors, knowingly and willfully embezzling or stealing from a healthcare benefit program, willfully obstructing a criminal investigation of a healthcare offense, and knowingly and willfully falsifying, concealing or covering up a material fact or making any materially false, fictitious or fraudulent statement in connection with the delivery of or payment for healthcare benefits, items or services.

- The Physician Payments Sunshine Act, enacted as part of the Patient Protection and Affordable Care Act, as amended by the Health Care and Education Reconciliation Act of 2010, or collectively, the ACA, imposes, among other things, annual reporting requirements for covered manufacturers for certain payments and "transfers of value" provided to physicians (defined to include doctors, dentists, optometrists, podiatrists and chiropractors), certain other healthcare professionals (such as physician assistants and nurse practitioners), and teaching hospitals, as well as ownership and investment interests held by the physicians described above and their immediate family members.

- HIPAA, as amended by the Health Information Technology for Economic and Clinical Health Act, or HITECH, and their respective implementing regulations established standards to protect individuals' medical records and other individually identifiable health information (collectively defined as "protected health information"). This legislation requires appropriate safeguards to protect the privacy of protected health information and sets limits and conditions on the uses and disclosures that may be made of such information without an individual's authorization. HIPAA also gives individuals rights over their protected health information, and imposes, among other things, specified requirements relating to the privacy, security and transmission of individually identifiable health information held by covered entities, which include certain healthcare providers, health plans and healthcare clearinghouses, and their business associates, which include individuals or entities that perform services for covered entities that involve the creation, use, maintenance or disclosure of, individually identifiable health information as well as their covered subcontractors. HITECH also created new tiers of civil monetary penalties, amended HIPAA to make civil and criminal penalties directly applicable to business associates, and gave state attorneys general new authority to file civil actions for damages or injunctions in U.S. federal courts to enforce the federal HIPAA laws and seek attorneys' fees and costs associated with pursuing federal civil actions. In addition, state laws govern the privacy and security of health information in specified circumstances, many of which differ from each other in significant ways and may not have the same effect, thus complicating compliance efforts.

- European and other foreign law equivalents of each of the laws, including reporting requirements detailing interactions with and payments to healthcare providers.

Many states have analogous state laws and regulations, such as state anti-kickback and false claims laws, that may apply to our business practices, including but not limited to, research, distribution, sales or marketing arrangements and claims involving healthcare items or services reimbursed by non-governmental third-party payors, including private insurers. In addition, certain states require pharmaceutical companies to comply with the pharmaceutical industry's voluntary compliance guidelines and the relevant compliance guidance promulgated by the U.S. federal government. Certain states and local jurisdictions require drug manufacturers to report information related to payments and other transfers of value to physicians and other healthcare providers and register pharmaceutical sales representatives. Additionally, certain states also require pharmaceutical companies to file reports relating to pricing information or marketing expenditures and have 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.

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. In addition, the ACA has strengthened these laws. For example, health care reform legislation, has among other things, amended the intent requirement of the U.S. Anti-Kickback statute and certain criminal healthcare fraud statutes. A person or entity no longer needs to have actual knowledge of this statute or specific intent to violate it. Moreover, the ACA provides that the government may assert that a claim including items or services resulting from a violation of the federal anti-kickback statute constitutes a false or fraudulent claim for purposes of the False Claims Act.

Ensuring that our internal operations and business arrangements with third parties comply with applicable healthcare laws and regulations will likely be costly. It is possible that governmental authorities will conclude that our business practices, including arrangements we may have with physicians and other healthcare providers, some of whom may receive stock options as compensation for services provided, do 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 were 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 civil, criminal and administrative penalties, damages, fines, disgorgement, imprisonment, possible exclusion from government funded healthcare programs, contractual damages, reputational harm, diminished profits and future earnings, additional reporting obligations and oversight if we become subject to a corporate integrity agreement or other agreement to resolve allegations of non-compliance with these laws, and curtailment of our operations, any of which could substantially disrupt our operations. If the physicians or other providers or entities with whom we expect to do business are found not to be in compliance with applicable laws, they may be subject to criminal, civil or administrative sanctions, including exclusions from government funded healthcare programs.

Legislative or regulatory healthcare reforms in the United States may make it more difficult and costly for us to obtain regulatory clearance or approval of our product candidates and to produce, market and distribute our products after clearance or approval is obtained.

From time to time, legislation is drafted and introduced in Congress that could significantly change the statutory provisions governing the regulatory clearance or approval, manufacture and marketing of regulated products or the reimbursement thereof. In addition, FDA regulations and guidance are often revised or reinterpreted by the FDA in ways that may significantly affect our business and our products. Any new regulations or revisions or reinterpretations of existing regulations may impose additional costs or lengthen review times of our product candidates. We cannot determine what effect changes in regulations, statutes, legal interpretation or policies, when and if promulgated, enacted or adopted may have on our business in the future. Such changes could, among other things, require:

- changes to manufacturing methods;
- change in protocol design;
- additional treatment arm (control);
- recall, replacement, or discontinuance of one or more of our products; and
- additional recordkeeping.

In addition, in the United States, there have been a number of legislative and regulatory proposals to change the health care system in ways that could affect our ability to sell our products profitably. The pharmaceutical industry in the United States, as an example, has been affected by the passage of the ACA, which, among other things, imposed new fees on entities that manufacture or import certain branded prescription drugs and expanded pharmaceutical manufacturer obligations to provide discounts and rebates to certain government programs. There have been executive, judicial and Congressional challenges to certain aspects of the ACA. For example, on June 17, 2021, the U.S. Supreme Court dismissed a challenge on procedural grounds that argued the ACA is unconstitutional in its entirety because the "individual mandate" was repealed by Congress. On August 16, 2022, President Biden signed the Inflation Reduction Act of 2022, or IRA, into law, which among other things, extends enhanced subsidies for individuals purchasing health insurance coverage in ACA marketplaces through plan year 2025. The IRA also eliminates the "donut hole" under the Medicare Part D program beginning in 2025 by significantly lowering the beneficiary maximum out-of-pocket cost and creating a new manufacturer discount program. It is possible that the ACA will be subject to judicial or Congressional challenges in the future. It is unclear how any such challenges and the healthcare reform measures of the Biden administration will impact the ACA and our business.

Other legislative changes have been proposed and adopted in the United States since the ACA was enacted. These changes include, among others, aggregate reductions to Medicare payments to providers of up to 2% per fiscal year, which went into effect in 2013 and, due to subsequent legislative amendments to the statute, will remain in effect until 2032 unless additional Congressional action is taken. Congress is considering additional health reform measures.

Further, there has been particular and increasing legislative and enforcement interest in the United States with respect to drug pricing practices in recent years, particularly with respect to drugs that have been subject to relatively large price increases over relatively short time periods. There have been several recent U.S. Presidential executive orders, Congressional inquiries and proposed bills designed to, among other things, bring more transparency to drug pricing, reduce the cost of prescription drugs under Medicare, review the relationship between pricing and manufacturer patient programs, and reform government program reimbursement methodologies for drugs.

For example, in July 2021, the Biden administration released an executive order, "Promoting Competition in the American Economy," with multiple provisions aimed at prescription drugs. In response to President Biden's executive order, on September 9, 2021, the Department of Health and Human Services, or HHS, released a Comprehensive Plan for Addressing High Drug Prices that outlines principles for drug pricing reform and sets out a variety of potential legislative policies that Congress could pursue as well as potential administrative actions HHS can take to advance these principles. Further, the IRA, among other things (i) directs HHS to negotiate the price of certain high-expenditure, single-source drugs and biologics covered under Medicare and (ii) imposes rebates under Medicare Part B and Medicare Part D to penalize price increases that outpace inflation. These provisions will take effect progressively starting in fiscal year 2023. On August 29, 2023, HHS announced the list of the first ten drugs that will be subject to price negotiations, although the Medicare drug price negotiation program is currently subject to legal challenges. It is currently unclear how the IRA will be implemented but is likely to have a significant impact on the pharmaceutical industry. Further in response to the Biden administration's October 2022 executive order, on February 14, 2023, HHS released a report outlining three new models for testing by the Centers for Medicare & Medicare Services, or CMS, Innovation Center which will be evaluated on their ability to lower the cost of drugs, promote accessibility, and improve quality of care. It is unclear whether the models will be utilized in any health reform measures in the future. Further, on December 7, 2023, the Biden administration announced an initiative to control the price of prescription drugs through the use of march-in rights under the Bayh-Dole Act. On December 8, 2023, the National Institute of Standards and Technology published for comment a Draft Interagency Guidance Framework for Considering the Exercise of March-In Rights which for the first time includes the price of a product as one factor an agency can use when deciding to exercise march-in rights. While march-in rights have not previously been exercised, it is uncertain if that will continue under the new framework. Individual states in the United States have also become increasingly active in passing legislation and implementing regulations designed to control pharmaceutical product pricing, including price or patient reimbursement constraints, discounts, restrictions on certain product access and marketing cost disclosure and transparency measures, and in some cases, designed to encourage importation from other countries and bulk purchasing. For example, on January 5, 2024, the FDA approved Florida's Section 804 Importation Program (SIP) proposal to import certain drugs from Canada for specific state healthcare programs. It is unclear how this program will be implemented, including which drugs will be chosen, and whether it will be subject to legal challenges in the United States or Canada. Other states have also submitted SIP proposals that are pending review by the FDA. Any such approved importation plans, when implemented, may result in lower drug prices for products covered by those programs. In the future, there will likely continue to be proposals relating to the reform of the U.S. healthcare system, some of which could further limit coverage and reimbursement of drug products, including our product candidates. Any reduction in reimbursement from Medicare or other government programs may result in a similar reduction in payments from private payors. Our results of operations could be adversely affected by the ACA and by other health care reforms that may be enacted or adopted in the future.

We face intense competition in an environment of rapid technological change and the possibility that our competitors may develop products and drug delivery systems that are similar, more advanced or more effective than ours, which may adversely affect our financial condition and our ability to successfully market or commercialize our product candidates.

The pharmaceutical industry in which we operate is intensely competitive and subject to rapid and significant technological change. We are currently aware of various existing therapies in the market and in development that may in the future compete with our product candidates, including other therapies that address the management of SSIs, as well as other drug delivery mechanisms that utilize polymer and/or lipid technology to deliver APIs at the local level. Other approaches may also emerge for the prevention or treatment of any of the indications on which we focus, and new technologies may emerge in localized drug delivery.

We have competitors both in the United States and internationally, including major multinational pharmaceutical companies and specialty pharmaceutical companies. Our competitors may succeed in developing, acquiring or licensing on an exclusive basis products that are more effective or less costly than any product candidate that we may develop, or achieve earlier patent protection, regulatory approval, product commercialization and market penetration than we do. 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. See "Item 4. B. — Business Overview — Competition."

Even if we obtain and maintain approval for D-PLEX$_{100}$ or our other product candidates from the FDA, we may never obtain approval outside of the United States, which would limit our market opportunities and adversely affect our business.

Approval of a product candidate in the United States by the FDA does not ensure approval of such product candidate by regulatory authorities in other countries or jurisdictions, and approval by one foreign regulatory authority does not ensure approval by regulatory authorities in other foreign countries or by the FDA. However, the failure to obtain approval from the FDA or other regulatory authorities may negatively impact our ability to obtain approval in other foreign countries. Sales of D-PLEX$_{100}$ or our other product candidates outside of the United States will be subject to foreign regulatory requirements governing clinical trials and marketing approval. Even if the FDA grants marketing approval for a product candidate, comparable regulatory authorities of foreign countries also must approve the manufacturing and marketing of the product candidate in those countries. Approval procedures vary among jurisdictions and can involve requirements and administrative review periods different from, and more onerous than, those in the United States, including additional preclinical studies or clinical trials. In many countries outside the United States, a product candidate must be approved for reimbursement before it can be approved for sale in that country. In some cases, the price that we intend to charge for our product candidates, if approved, is also subject to approval.

We intend to submit a marketing authorization application to the EMA for approval of D-PLEX$_{100}$ in the EU, but obtaining such approval from the European Commission following the opinion of the EMA is a lengthy and expensive process. Even if a product candidate is approved, the applicable regulatory agency may limit the indications for which the product may be marketed, require extensive warnings on the product labeling or require expensive and time-consuming additional clinical trials or reporting as conditions of approval. Regulatory authorities in countries outside of the United States and the EU also have requirements for approval of product candidates with which we must comply prior to marketing in those countries. Obtaining foreign regulatory approvals and compliance with foreign regulatory requirements could result in significant delays, difficulties and costs for us and could delay or prevent the introduction of our product candidates in certain countries.

Further, clinical trials conducted in one country may not be accepted by regulatory authorities in other countries. Also, regulatory approval for a product candidate may be withdrawn. If we fail to comply with the regulatory requirements, our target market will be reduced and our ability to realize the full market potential of D-PLEX$_{100}$ or our other product candidates will be harmed and our business, financial condition, results of operations and prospects will be adversely affected.

The misuse or off-label use of our products may harm our reputation in the marketplace, result in injuries that lead to product liability suits or result in costly investigations, fines or sanctions by regulatory bodies if we are deemed to have engaged in the promotion of these uses, any of which could be costly to our business.

Prescription drugs may be promoted only for the approved indications in accordance with the approved label. The FDA and other agencies actively enforce the laws and regulations prohibiting the promotion of off-label uses, and a company that is found to have improperly promoted off-label uses may be subject to significant liability. If the FDA does not agree that our data support the submission of an NDA seeking approval for the prevention of SSIs, we will train our marketing and sales personnel to not promote our products, if approved, for any off label uses. We cannot, however, prevent a physician from using our products off-label, when in the physician's independent professional medical judgment, he or she deems it appropriate. For example, if we obtain approval of D-PLEX$_{100}$ for the prevention of SSIs in patients undergoing abdominal surgery, physicians may nevertheless decide to use D-PLEX$_{100}$ in an attempt to prevent infections in connection with other types of surgeries, and there may be increased risk of injury to patients if physicians attempt to use our products for these uses for which they are not approved. While the FDA does not regulate the behavior of physicians in their choice of treatments, the FDA does restrict manufacturer's communications on the subject of off-label use of their products. Furthermore, the use of our products for indications other than those approved by the FDA, or any foreign regulatory body may not effectively treat such conditions, which could harm our reputation in the marketplace among physicians and patients.

If the FDA, EMA or any foreign regulatory body determines that our promotional materials or training constitute promotion of an off-label use, it could request that we modify our training or promotional materials or subject us to regulatory or enforcement actions, including the issuance or imposition of an untitled letter, which is used for violators that do not necessitate a warning letter, injunction, seizure, civil fine or criminal penalties. It is also possible that other federal, state or foreign enforcement authorities might take action under other regulatory authority, such as false claims laws, if they consider our business activities to constitute promotion of an off-label use, which could result in significant penalties, including, but not limited to, criminal, civil and administrative penalties, damages, fines, disgorgement, exclusion from participation in government healthcare programs and the curtailment of our operations.

Risks Related to our Reliance on Third Parties

We rely on third parties to conduct certain elements of our preclinical studies and clinical trials and perform other tasks for us. If these third parties do not successfully carry out their contractual duties, meet expected deadlines or comply with regulatory requirements, 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-party vendors, including CROs, to monitor and manage data for our ongoing preclinical studies and clinical trials. If our 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. We rely on these CROs for execution of our preclinical studies and clinical trials, and we control only certain aspects of their activities. Nevertheless, we are responsible for ensuring that each of our studies is conducted in accordance with the applicable protocol, legal, regulatory and scientific standards, and our reliance on the vendors and CROs does not relieve us of our regulatory responsibilities. We and our CROs and other vendors are required to comply with good clinical practice, cGMP, the Helsinki Declaration, the International Conference on Harmonization Guideline for Good Clinical Practice, applicable European Commission Directives on Clinical Trials, laws and regulations applicable to clinical trials conducted in other territories, and good laboratory practices, or GLP, which are regulations and guidelines enforced by the FDA, the Competent Authorities of the Member States of the European Economic Area, or EEA, and comparable foreign regulatory authorities for all of our product candidates in clinical development. Regulatory authorities enforce these regulations through periodic inspections of study sponsors, principal investigators, study sites and other contractors. If we or any of our CROs or vendors fail to comply with applicable regulations, including Good Clinical Practice, or GCP, and cGMP regulations, the clinical data generated in our clinical studies may be deemed unreliable and the FDA, EMA or comparable foreign regulatory authorities may require us to perform additional clinical trials before approving our marketing applications. Our failure to comply with these regulations may require us to repeat clinical trials, which would delay the regulatory approval process.

If any of our relationships with these third-party CROs or vendors terminate, we may not be able to enter into arrangements with alternative CROs or vendors or do so on commercially reasonable terms. In addition, our CROs are not our employees, and, except for remedies available to us under our agreements with such CROs, we cannot control whether or not they devote sufficient time and resources to our ongoing clinical, nonclinical and preclinical programs. 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. CROs may also generate higher costs than anticipated, which could adversely affect our results of operations and the commercial prospects for our product candidates, increase our costs and delay our ability to generate revenue.

Replacing or adding additional CROs involves additional cost and requires management time and focus. In addition, there is a natural transition period when a new CRO commences work. As a result, delays occur, which can materially impact our ability to meet our desired clinical development timelines. Though we carefully manage our relationships with our CROs, we may encounter similar challenges or delays in the future, which could have a material adverse impact on our business, financial condition and prospects.

We rely on third parties to manufacture the raw materials, including the active pharmaceutical ingredient that we use to create our product candidates. Our business could be harmed if existing and prospective third parties fail to provide us with sufficient quantities of these materials and products or fail to do so at acceptable quality levels or prices.

We rely on third- party suppliers for certain raw materials necessary to manufacture our product candidates for our preclinical studies and clinical trials. Some of these raw materials are difficult to source. Because there are a limited number of suppliers for these raw materials, we may need to engage alternate suppliers to prevent a possible disruption of the manufacture of the materials necessary to produce our product candidates for our clinical trials, and if approved, ultimately for commercial sale. In several cases, we rely on a sole provider, and there may be a need to identify additional providers in the future. We do not have any control over the availability of raw materials. If we or our manufacturers are unable to purchase these raw materials on acceptable terms, at sufficient quality levels, or in adequate quantities, if at all, the development and commercialization of our product candidates or any future product candidates, would be delayed or there would be a shortage in supply, which would impair our ability to meet our development objectives for our product candidates or generate revenues from the sale of any approved products.

Even following our establishment of our own cGMP-compliant manufacturing capabilities, we intend to continue to rely on third- party suppliers for these raw materials, which will continue to expose us to manufacturing risks 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.

Certain of our raw material suppliers will be required to become cGMP-compliant and establish a drug master file for the applicable ingredient before we can submit our NDA for D-PLEX$_{100}$. If these suppliers do not successfully carry out their contractual duties or manufacture our raw materials in accordance with regulatory requirements, we will not be able to submit our NDA as planned or complete, or may be delayed in completing, the clinical trials required for approval of D-PLEX$_{100}$. In such instances, we may need to locate an appropriate replacement third-party relationship, which may not be readily available or on acceptable terms, which would cause additional delay or increased expense prior to the approval of D-PLEX$_{100}$ and would thereby have a material adverse effect on our business, financial condition, results of operations and prospects.

Additionally, we have not yet entered into binding agreements with certain third-party manufacturers to produce the raw materials and products that we use to manufacture our product candidates. Although we intend to rely on third-party manufacturers for the raw materials and products to support the manufacturing of our product candidates for commercialization, we have not yet entered into agreements with certain manufacturers. We may be unable to negotiate binding agreements with the manufacturers to support our commercialization activities at commercially reasonable terms.

Although we have established our own manufacturing facility, we may utilize third parties as needed to conduct our product manufacturing. Therefore, we are subject to the risk that these third parties may not perform satisfactorily.

Although we expect that our manufacturing facility will be the primary source of clinical and commercial supply for D-PLEX$_{100}$ for at least the first 48 months following a commercial launch, if approved, we intend to evaluate potential third-party manufacturing capabilities if necessary to meet further commercial demand if and when required. In the event that we engage third-party manufacturers and they do not successfully carry out their contractual duties, meet expected deadlines or manufacture D-PLEX$_{100}$ in accordance with regulatory requirements or if there are disagreements between us and any third-party manufacturer, we may be delayed in producing sufficient clinical and commercial supply of D-PLEX$_{100}$ or other product candidates. In such instances, we may need to locate an appropriate replacement third-party relationship, which may not be readily available or on acceptable terms, which would cause additional delay or increased expense and would thereby have a material adverse effect on our business, financial condition, results of operations and prospects.

The manufacture of pharmaceutical products is complex and requires significant expertise and capital investment, including the development of advanced manufacturing techniques and process controls. We and our contract manufacturers must comply with cGMP requirements. In the event that our contract manufacturers fail to meet cGMP requirements, we may be delayed or unable to supply our products. In addition, manufacturers of pharmaceutical products often encounter difficulties in production, particularly in scaling up and validating initial production and contamination controls. These problems include difficulties with production costs and yields, quality control, including stability of the product, quality assurance testing, operator error, and shortages of qualified personnel, as well as compliance with strictly enforced federal, state and foreign regulations. Furthermore, if microbial, viral or other contaminations are discovered in our product candidates or in the manufacturing facilities in which our product candidates are made, such manufacturing facilities may need to be closed for an extended period of time to investigate and remedy the contamination.

We also rely or may in the future rely on third- party manufacturers to conduct quality control reviews, packaging and serialization services for our product candidates or any approved products. We cannot assure you that any stability, sterility or other issues relating to the manufacture of any of our product candidates or any approved products will not occur in the future.

Additionally, our third-party manufacturers may experience manufacturing difficulties due to resource constraints or as a result of labor disputes or unstable political environments. If our third-party manufacturers were to encounter any of these difficulties, our ability to provide any products to patients, once approved, would be jeopardized. Any adverse developments affecting commercial manufacturing may result in shipment delays, inventory shortages, lot failures, product withdrawals or recalls or other interruptions in the supply of an approved product. We may also have to take inventory write-offs and incur other charges and expenses for products that fail to meet specifications, undertake costly remediation efforts or seek more costly manufacturing alternatives. Accordingly, failures or difficulties faced at any level of our supply chain could materially adversely affect our business and delay and could have a material adverse effect on our business, prospects, financial condition and results of operations. Some of these events could be the basis for FDA action, including injunction, recall, seizure or total or partial suspension of product manufacture.

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

Because we rely on third parties to provide us with the materials that we use to develop and, if appropriate in the future, manufacture our product candidates or approved products, we may, at times, share trade secrets and intellectual property with such third parties. 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, such as trade secrets and intellectual property. 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 trade secrets or other unauthorized use or disclosure would impair our competitive position and may have a material adverse effect on our business.

Despite our efforts to protect our trade secrets and knowhow, 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 and knowhow would impair our competitive position and have an adverse impact on our business, financial condition, results of operations and prospects.

Risks Related to Our Intellectual Property

If we are unable to obtain and maintain effective patent rights for our product candidates or any future product candidates, we may not be able to compete effectively in our markets. If we are unable to protect the confidentiality of our trade secrets or know-how, such proprietary information may be used by others to compete against us.

We rely upon a combination of patents, trade secret protection and confidentiality agreements to protect the intellectual property related to our technologies and product candidates. Our success depends in large part on our ability to obtain and maintain patent and other intellectual property protection in the United States and in other countries with respect to our proprietary technology and product candidates.

We have sought to protect our proprietary position by filing patent applications in the United States and in other countries, with respect to our novel technologies and product candidates, which are important to our business. Patent prosecution is expensive and time consuming, and we may not be able to file and prosecute all necessary or desirable patent applications at a reasonable cost or in a timely manner. It is also possible that we will fail to identify patentable aspects of our research and development output before it is too late to obtain patent protection.

As of March 6, 2024, our portfolio of owned patents and patent applications consists of eight families that protect our technology, including 153 issued patents, including utility and composition of matter patents, two patent applications that have been allowed, and 19 pending patent applications in the United States, Canada, China, Europe, Japan, Israel, the Eurasian Patent Organization, Hong-Kong, India, Mexico, New Zealand, the Philippines, Singapore, South Korea and Thailand. We cannot offer any assurances about which, if any, patents will issue, the breadth of any such patent or whether any issued patents will be found invalid and unenforceable or will be threatened by third parties. Any successful opposition to these patents or any other patents owned by or licensed to us after patent issuance could deprive us of rights necessary for the successful commercialization of any product candidates that we may develop. Further, if we encounter delays in regulatory approvals, the period of time during which we could market a product candidate under patent protection could be reduced.

Further, the patent position of pharmaceutical companies generally is highly uncertain and involves complex legal and factual questions for which legal principles remain unsolved. This renders the patent prosecution process particularly expensive and time-consuming. There is no assurance that all potentially relevant prior art relating to our patent applications has been found, which can invalidate a patent or prevent a patent from issuing from a pending patent application. Even if patents do successfully issue, and even if such patents cover our product candidates, third parties may challenge their validity, enforceability, or scope, which may result in such patents being narrowed, found unenforceable or invalidated. Furthermore, even if they are unchallenged, our patent applications and any future patents may not adequately protect our intellectual property, provide exclusivity for our product candidates, or prevent others from designing around our claims. Any of these outcomes could impair our ability to prevent competition from third parties, which may have an adverse impact on our business.

If we cannot obtain and maintain effective patent rights for our product candidates, we may not be able to compete effectively, and our business and results of operations would be harmed.

We may not have sufficient patent lifespan to effectively protect our products and business.

Patents have a limited lifespan. In the United States, the natural expiration of a patent is generally 20 years after its priority date. Although various regulatory exclusivity extensions may be available, including pursuant to the QIDP designations we have received for D-PLEX$_{100}$, the life of a patent, and the protection it affords, is limited. Even if any of our patent applications mature into issued patents, if we do not have sufficient patent terms or regulatory exclusivity to protect our products, our business and results of operations will be adversely affected.

Patent policy and rule changes could increase the uncertainties and costs surrounding the prosecution of our patent applications and the enforcement or defense of any issued patents.

Changes in either the patent laws or interpretation of the patent laws in the United States and other countries may diminish the value of any patents that may issue from our patent applications or narrow the scope of our patent protection. The laws of foreign countries may not protect our rights to the same extent as the laws of the United States. Publications of discoveries in the scientific literature often lag behind the actual discoveries, and patent applications in the United States and other jurisdictions are typically not published until 18 months after filing, or in some cases not at all. We therefore cannot be certain that we or our licensors were the first to make the invention claimed in our owned and licensed patent or pending applications, or that we or our licensor were the first to file for patent protection of such inventions. Assuming the other requirements for patentability are met, for United States patent applications filed prior to March 15, 2013, the first to conceive a claimed invention is entitled to the patent, while outside the United States, the first to file a patent application is entitled to the patent. After March 15, 2013, under the Leahy-Smith America Invents Act, or the AIA, the United States has moved to a first to file system. The AIA also includes a number of significant changes that affect the way patent applications are prosecuted and may also affect patent litigation. The courts have yet to address many of these provisions and the applicability of the AIA and new regulations on specific patents discussed herein have not been determined and would need to be reviewed. In general, the AIA and its implementation could increase the uncertainties and costs surrounding the prosecution of our patent applications and the enforcement or defense of any issued patents, all of which could have a material adverse effect on our business and financial condition.

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 and our business may be adversely affected.

Our registered or unregistered trademarks or trade names may be challenged, infringed, circumvented or declared generic or determined to be infringing on other marks. We may not be able to protect our rights to these trademarks and trade names, which we need to build name recognition by potential partners or customers in our markets of interest. 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. If other entities use trademarks similar to ours in different jurisdictions, or have senior rights to ours, it could interfere with our use of our current trademarks throughout the world.

If we are unable to maintain effective proprietary rights for our product candidates or any future product candidates, we may not be able to compete effectively in our markets.

In addition to the protection afforded by any patents that have been or may be granted, 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. We seek to protect our proprietary technology and processes, in part, by entering into confidentiality agreements with our employees, consultants, scientific advisors and contractors. We also seek to preserve the integrity and confidentiality of our data, trade secrets and intellectual property by maintaining the 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 or security measures may be breached, and we may not have adequate remedies for any breach. In addition, our trade secrets and intellectual property may otherwise become known or be independently discovered by competitors.

Although we expect all of our employees and consultants to assign their inventions to us, and all of our employees, consultants, advisors and any third parties who have access to our proprietary know-how, information, or technology to enter into confidentiality agreements, we cannot provide any assurances that all such agreements have been duly executed or that our trade secrets and other confidential proprietary information will not be disclosed or that competitors will not otherwise gain access to our trade secrets or independently develop substantially equivalent information and techniques. Misappropriation or unauthorized disclosure of our trade secrets and intellectual property could impair our competitive position and may have a material adverse effect on our business. Additionally, if the steps taken to maintain our trade secrets and intellectual property are deemed inadequate, we may have insufficient recourse against third parties for misappropriating the trade secret.

Intellectual property rights of third parties could adversely affect our ability to commercialize our product candidates, and we might be required to litigate or obtain licenses from third parties in order to develop or market our product candidate. Such litigation or licenses could be costly or not available on commercially reasonable terms.

It is inherently difficult to conclusively assess our freedom to operate without infringing on third- party rights. Our competitive position may suffer if patents issued to third parties or other third- party intellectual property rights cover our product candidates or elements thereof, or our manufacturing or uses relevant to our development plans. In such cases, we may not be in a position to develop or commercialize products or our product candidates unless we successfully pursue litigation to nullify or invalidate the third-party intellectual property right concerned or enter into a license agreement with the intellectual property right holder, if available on commercially reasonable terms. There may also be pending patent applications that if they result in issued patents, could be alleged to be infringed by our product candidates. If such an infringement claim should be brought and be successful, we may be required to pay substantial damages, be forced to abandon our product candidates or seek a license from any patent holders. No assurances can be given that a license will be available on commercially reasonable terms, if at all.

It is also possible that we have failed to identify relevant third-party patents or applications. For example, U.S. applications filed before November 29, 2000, and certain U.S. applications filed after that date that will not be filed outside the U.S. remain confidential until patents issue. Patent applications in the U.S. and elsewhere are published approximately 18 months after the earliest filing to which priority is claimed, with such earliest filing date being commonly referred to as the priority date. Therefore, patent applications covering our product candidates or platform technology could have been filed by others without our knowledge. Additionally, pending patent applications which have been published can, subject to certain limitations, be later amended in a manner that could cover our platform technologies, our product candidates or the use of our product candidates. Third- party intellectual property right holders may also actively bring infringement claims against us. We cannot guarantee that we will be able to successfully settle or otherwise resolve such infringement claims. If we are unable to successfully settle future claims on terms acceptable to us, we may be required to engage in or continue costly, unpredictable and time-consuming litigation and may be prevented from or experience substantial delays in pursuing the development of and/or marketing of our product candidates. If we fail in any such dispute, in addition to being forced to pay damages, we may be temporarily or permanently prohibited from commercializing our product candidates that are held to be infringing. We might, if possible, also be forced to redesign our product candidates so that we no longer infringe the third- party intellectual property rights. Any of these events, even if we were ultimately to prevail, could require us to divert substantial financial and management resources that we would otherwise be able to devote to our business.

Third-party claims of intellectual property infringement may prevent or delay our development and commercialization efforts.

Our commercial success depends in part on our avoiding infringement of the patents and proprietary rights of third parties. There have been many lawsuits and other proceedings involving patent and other intellectual property rights in the biotechnology and pharmaceutical industries, including patent infringement lawsuits, interferences, oppositions and reexamination proceedings before the United States Patent and Trademark Office, or USPTO, and corresponding foreign patent offices. Numerous U.S. and foreign issued patents and pending patent applications, which are owned by third parties, exist in the fields in which we are developing product candidates. As the pharmaceutical industry expands and more patents are issued, the risk increases that our product candidates may be subject to claims of infringement of the patent rights of third parties.

Third parties may assert that we are employing their proprietary technology without authorization. There may be third-party patents or patent applications with claims to materials, formulations, methods of manufacture, or methods for treatment related to the use or manufacture of our product candidates. Because patent applications can take many years to issue, there may be currently pending patent applications that may later result in issued patents that our product candidates may infringe. In addition, third parties may obtain patents in the future and claim that use of our technologies infringes upon these patents. If any third-party patents were held by a court of competent jurisdiction to cover the manufacturing process of any of our product candidates, any materials formed during the manufacturing process or any final product itself, the holders of any such patents may be able to block our ability to commercialize such product candidates unless we obtain a license under the applicable patents, or until such patents expire or are finally determined to be invalid or unenforceable.

Similarly, if any third-party patents were held by a court of competent jurisdiction to cover aspects of our formulations, processes for manufacture, or methods of use, the holders of any such patents may be able to block our ability to develop and commercialize the applicable product candidate unless we obtain a license or until such patent expires or is finally determined to be invalid or unenforceable. In either case, such a license may not be available on commercially reasonable terms or at all.

Parties making claims against us may obtain injunctive or other equitable relief, which could effectively block our ability to further develop and commercialize one or more of our product candidates. Defense of these claims, regardless of their merit, would involve substantial litigation expense and would be a substantial diversion of employee resources from our business. In the event of a successful claim of infringement against us, we may have to pay substantial damages, including treble damages and attorneys' fees for willful infringement, pay royalties, redesign our infringing products or obtain one or more licenses from third parties, which may be impossible or require substantial time and monetary expenditure.

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

Because our programs may require the use of proprietary rights held by third parties, the growth of our business will likely depend in part on our ability to acquire, in-license, or use these proprietary rights. In addition, our product candidates may require specific formulations to work effectively and efficiently and the rights to these formulations may be held by others. We may be unable to acquire or in-license any compositions, methods of use, processes, or other third-party intellectual property rights from third parties that we identify as necessary for our product candidates. The licensing and acquisition of third-party intellectual property rights is a competitive area, and a number of more established companies are also pursuing 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, cash resources, and greater clinical development and commercialization capabilities.

For example, we sometimes collaborate with academic institutions to accelerate our preclinical research or development under written agreements with these institutions. Typically, these institutions 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.

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. If we are unable to successfully obtain rights to required third-party intellectual property rights, we may have to abandon development of that program and our business and financial condition could suffer.

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

Competitors may infringe our intellectual property or that of our licensors that we may acquire in the future. If we or a future licensing partner were to initiate legal proceedings against a third party to enforce a patent covering one of our product candidates, the defendant could counterclaim that the patent covering our product candidate is invalid and/or unenforceable. In patent litigation in the United States, defendant counterclaims alleging invalidity and/or unenforceability are commonplace. Grounds for a validity challenge could be an alleged failure to meet any of several statutory requirements, including lack of novelty, obviousness, or non-enablement. Grounds for an unenforceability assertion could be an allegation that someone connected with prosecution of the patent withheld relevant information from the USPTO, or made a misleading statement, during prosecution. Under the AIA, the validity of U.S. patents may also be challenged in post-grant proceedings before the USPTO. The outcome following legal assertions of invalidity and unenforceability is unpredictable.

Interference proceedings provoked by third parties or brought by us or declared by the USPTO may be necessary to determine the priority of inventions with respect to our patent or patent applications or those of our licensors. An unfavorable outcome could require us to cease using the related technology or to attempt to license rights to it from the prevailing party. Our business could be harmed if the prevailing party does not offer us a license on commercially reasonable terms. Our defense of litigation or interference proceedings may fail and, even if successful, may result in substantial costs and distract our management and other employees. In addition, the uncertainties associated with litigation could have a material adverse effect on our ability to raise the funds necessary to continue our clinical trials, continue our research programs, license necessary technology from third parties, or enter into development partnerships that would help us bring our product candidates to market.

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. There could also be public announcements of the results of hearings, motions, or other interim proceedings or developments. If securities analysts or investors perceive these results to be negative, it could have a material adverse effect on the price of our Ordinary Shares.

We may be subject to claims that our employees, consultants, or independent contractors have wrongfully used or disclosed confidential information of third parties or that our employees have wrongfully used or disclosed alleged trade secrets of their former employers.

We employ individuals who were previously employed at universities or other biotechnology or pharmaceutical companies, including our competitors or potential competitors. Although we try to ensure that our employees, consultants and independent contractors do not use the proprietary information or know-how of others in their work for us, we may be subject to claims that we or our employees, consultants, or independent contractors have inadvertently or otherwise used or disclosed intellectual property, including trade secrets or other proprietary information, of any of our employees' former employers or other third parties. 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 or personnel, which could adversely impact our business. Even if we are successful in defending against such claims, litigation could result in substantial costs and be a distraction to management and other employees.

We may be subject to claims challenging the inventorship of our intellectual property.

We may be subject to claims that former employees, collaborators or other third parties have an interest in or right to compensation with respect to our current patent and patent applications, future patents or other intellectual property as an inventor or co-inventor. For example, we may have inventorship disputes arise from conflicting obligations of consultants or others who are involved in developing our product candidates. Litigation may be necessary to defend against these and other claims challenging inventorship or claiming the right to compensation. If we fail in defending any such claims, in addition to paying monetary damages, we may lose valuable intellectual property rights, such as exclusive ownership of, or right to use, valuable intellectual property. Such an outcome could have a material adverse effect on our business. Even if we are successful in defending against such claims, litigation could result in substantial costs and be a distraction to management and other employees. To the extent that our employees have not effectively waived the right to compensation with respect to inventions that they helped create, they may be able to assert claims for compensation with respect to our future revenue. As a result, we may receive less revenue from future products if such claims are successful which in turn could impact our future profitability.

Changes in United States and international patent law could diminish the value of patents in general, thereby impairing our ability to protect our products.

Our success is heavily dependent on intellectual property. Obtaining and enforcing patents in the pharmaceutical industry involves both technological and legal complexity. Therefore, obtaining and enforcing these patents is costly, time consuming and inherently uncertain. In addition, the United States has recently enacted and is currently implementing wide-ranging patent reform legislation. Recent United States Supreme Court rulings have narrowed the scope of patent protection available in certain circumstances and weakened the rights of patent owners in certain situations. In addition to increasing uncertainty with regard to our ability to obtain patents in the future, this combination of events has created uncertainty with respect to the value of patents, once obtained. Depending on future actions by the United States Congress, the federal courts and the USPTO, the laws and regulations governing patents could change in unpredictable ways that would weaken our ability to obtain patents or to enforce patents that we might obtain in the future.

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 may be less extensive than those in 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.

Competitors may use our technologies in jurisdictions where we have not obtained patent protection to develop their own product candidates and may also 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. Future 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 or methods of treatment, which could make it difficult for us to stop the marketing of competing products in violation of our proprietary rights generally. Proceedings to enforce our patent rights in foreign jurisdictions, whether or not successful, could result in substantial costs and divert our efforts and attention from other aspects of our business, could put our future 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.

Kreos Capital VI (Expert Fund) LP may seize our owned equipment, intellectual property and all shares we hold in PolyPid Inc. and PolyPid Pharma SRL if we fail to repay a loan.

On April 5, 2022, we entered into a secured loan agreement, or the Loan Agreement, for up to $15 million with Kreos Capital VI (Expert Fund) LP, or Kreos. For more information regarding the Loan Agreement please see "Item 5.C- Liquidity and Capital Resources". Under the Loan Agreement, we granted Kreos a first priority fixed charge over all of our owned equipment and intellectual property, including without limitation, copyrights, patents, trademarks and trade names, as well as all shares we hold in PolyPid Inc. and PolyPid Pharma SRL. That means that our owned equipment, intellectual property assets and our ownership of the shares of PolyPid Inc. and PolyPid Pharma SRL are used as collateral for the loan. Additionally, PolyPid Inc. entered into a guaranty agreement with Kreos, all as security for monies borrowed by us under the Loan Agreement. Kreos may seize our owned equipment, intellectual property all shares we hold in PolyPid Inc. and PolyPid Pharma SRL if we fail to repay the loan, which could materially and adversely affect our operations. On March 29, 2023, we entered into an amendment to the Credit Line. Pursuant to this amendment, 70% of the remaining principal and interest repayments will be delayed and repaid on a monthly equal basis from August 2024 to May 2026. The amended secured loan now bears interest at a rate of 10.00%, and we will pay a restructuring fee to Kreos consisting of 1.00% on close of the amendment and an incremental 3.00% at maturity. In return for this additional deferral of repayment, Kreos has the right to receive a potential claw back payment on account of the then outstanding principal amount. This claw back mechanism will be triggered by additional incoming funds from future partnership agreement or additional financing. If triggered, the minimum claw back to be paid is $1.5 million but will not exceed $3 million. Further, the outstanding warrants Kreos received were repriced to have an exercise price of $12.60 per share.

Risks Related to Our Business Operations

Due to our limited resources and access to capital, we must, and have in the past decided to, prioritize development of certain product candidates over other potential candidates. These decisions may prove to have been wrong and may adversely affect our revenues.

Because we have limited resources and access to capital to fund our operations, we must decide which product candidates to pursue and the amount of resources to allocate to each. Our decisions concerning the allocation of research, collaboration, management and financial resources toward particular product candidates may not lead to the development of viable commercial products and may divert resources away from better opportunities. Similarly, our decisions to delay, terminate or collaborate with third parties in respect of certain product development programs may also prove not to be optimal and could cause us to miss valuable opportunities. If we make incorrect determinations regarding the market potential of our product candidates or misread trends in the pharmaceutical industry, in particular for our lead product candidate, our business, financial condition and results of operations could be materially adversely affected.

We may not be successful in our efforts to identify, discover or license additional product candidates.

Although a substantial amount of our effort will focus on the continued clinical testing, potential approval and commercialization of D-PLEX$_{100}$, the success of our business also depends upon our ability to identify, discover or license additional product candidates. Our research programs or licensing efforts may fail to yield additional product candidates for clinical development for a number of reasons, including: lack of financial or personnel resources to acquire or discover additional product candidates; new product candidates may not succeed in preclinical or clinical testing, or may be shown to have harmful side effects or may have other characteristics that may make them unmarketable or unlikely to receive marketing approval; our competitors may develop alternatives that render our product candidates obsolete or less attractive; the market for a product candidate may change during our development program so that such product may become unprofitable to continue to develop; new product candidates may not be capable of being produced in commercial quantities at an acceptable cost, or at all; and new product candidates may not be accepted as safe and effective by patients, the medical community, or third-party payors.

We may be forced to abandon our development efforts for a program or programs that are unsuccessful, or we may not be able to identify, license, or discover additional product candidates, which would have a material adverse effect on our business and could potentially cause us to cease operations. Further, research programs to identify new product candidates require substantial technical, financial and human resources. We may focus our efforts and resources on potential programs or product candidates that ultimately prove to be unsuccessful.

European data collection is governed by restrictive regulations governing the collection, use, processing and cross-border transfer of personal information. Failure to comply with such regulations may result in substantial fines, other administrative penalties and civil claims being brought against us.

We may collect, process, use or transfer personal information from individuals located in the EU in connection with our business, including in connection with conducting clinical trials in the EU. Additionally, we intend to commercialize D-PLEX$_{100}$, and any of our product candidates that receive marketing approval, in the EU. The collection and use of personal health data in the EU is governed by the provisions of the General Data Protection Regulation ((EU) 2016/679), or the GDPR, along with other European Union and country-specific laws and regulations. The United Kingdom and Switzerland have also adopted data protection laws and regulations. These legislative acts (together with regulations and guidelines) impose requirements relating to having legal bases for processing personal information relating to identifiable individuals and transferring such information outside of the EEA, including to the United States, providing details to those individuals regarding the processing of their personal information, keeping personal information secure, having data processing agreements with third parties who process personal information, responding to individuals' requests to exercise their rights in respect of their personal information, reporting security breaches involving personal data to the competent national data protection authority and affected individuals, appointing data protection officers, conducting data protection impact assessments and record-keeping. The GDPR imposes additional responsibilities and liabilities in relation to personal data that we process, and we may be required to put in place additional mechanisms ensuring compliance with the new data protection rules. Failure to comply with the requirements of the GDPR and related national data protection laws of the member states of the EU may result in substantial fines, other administrative penalties and civil claims being brought against us, which could have a material adverse effect on our business, prospects, financial condition and results of operations.

The United Kingdom's withdrawal from the EU may adversely impact our ability to obtain regulatory approvals of our product candidates in the United Kingdom, result in restrictions or imposition of taxes and duties for importing our product candidates into the United Kingdom, and may require us to incur additional expenses in order to develop, manufacture and commercialize our product candidates in the United Kingdom.

Following the result of a referendum in 2016, the United Kingdom left the EU on January 31, 2020, commonly referred to as Brexit. A trade and cooperation agreement that outlines the future and trading relationship between the United Kingdom and the EU was agreed to in December 2020.

Since a significant proportion of the regulatory framework in the United Kingdom applicable to our business and our product candidates is derived from European Union directives and regulations, Brexit has had, and will continue to have, a material impact on the regulatory regime with respect to the development, manufacture, importation, approval and commercialization of our product candidates in the United Kingdom. For example, Great Britain is no longer covered by the centralized procedures for obtaining European Union-wide marketing authorizations from the EMA, and a separate marketing authorization will be required to market our product candidates, including D-PLEX$_{100}$ in Great Britain. It is currently unclear whether the Medicines & Healthcare products Regulatory Agency in the United Kingdom is sufficiently prepared to handle the increased volume of marketing authorization applications that it is likely to receive. Any delay in obtaining, or an inability to obtain, any marketing approvals, as a result of Brexit or otherwise, would delay or prevent us from commercializing our product candidates in the United Kingdom and limit our ability to generate revenue and achieve and sustain profitability. We could face significant additional expenses to obtain regulatory approval for our products in the United Kingdom.

If we fail to comply with environmental, health and safety laws and regulations, we could become subject to fines or penalties or incur costs that could have a material adverse effect on the success of our business.

Our research, development and manufacturing activities and our third- party manufacturers' and suppliers' activities involve the controlled storage, use and disposal of hazardous materials, including the components of our product candidates and other hazardous compounds. We and our manufacturers and suppliers are subject to laws and regulations governing the use, manufacture, storage, handling and disposal of these hazardous materials. In some cases, these hazardous materials and various wastes resulting from their use are stored at our and our manufacturers' facilities pending their use and disposal. We cannot eliminate the risk of contamination, which could cause an interruption of our commercialization efforts, research and development efforts and business operations, environmental damage resulting in costly clean-up and liabilities under applicable laws and regulations governing the use, storage, handling and disposal of these materials and specified waste products. Although we believe that the safety procedures utilized by our third-party manufacturers for handling and disposing of these materials generally comply with the standards prescribed by these laws and regulations, we cannot guarantee that this is the case or eliminate the risk of accidental contamination or injury from these materials. In such an event, we may be held liable for any resulting damages, such liability could exceed our resources, and state or federal or other applicable authorities may curtail our use of certain materials and/or interrupt our business operations. Furthermore, environmental laws and regulations are complex, change frequently and have tended to become more stringent. We cannot predict the impact of such changes and cannot be certain of our future compliance. We do not currently carry biological or hazardous waste insurance coverage.

Our employees and independent contractors may engage in misconduct or other improper activities, including noncompliance with regulatory standards and requirements.

We are exposed to the risk of fraud or other misconduct by our employees and independent contractors. Misconduct by these parties could include intentional failures to comply with FDA regulations, provide accurate information to the FDA, comply with manufacturing standards we may establish, comply with federal and state healthcare fraud and abuse laws and regulations, 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 may restrict or prohibit a wide range of pricing, discounting, marketing and promotion, sales commission, customer incentive programs and other business arrangements. Employee and independent contractor misconduct could also involve the improper use of information obtained in the course of clinical trials, including individually identifiable information, creating fraudulent data in our preclinical studies or clinical trials or illegal misappropriation of product candidates, which could result in regulatory sanctions and serious harm to our reputation. It is not always possible to identify and deter misconduct by employees and other third parties, and the precautions we take to detect and prevent this activity may not be effective in controlling unknown or unmanaged risks or losses or in protecting us from governmental investigations or other actions or lawsuits stemming from a failure to be in compliance with such laws or regulations. Additionally, we are subject to the risk that a person or government could allege such fraud or other misconduct, even if none occurred. 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, including the imposition of significant fines or other sanctions.

Under applicable employment laws, we may not be able to enforce covenants not to compete and therefore may be unable to prevent our competitors from benefiting from the expertise of some of our former employees.

We generally enter into non-competition agreements with our employees and certain key consultants. These agreements prohibit our employees and certain key consultants, if they cease working for us, from competing directly with us or working for our competitors or clients for a limited period of time. We may be unable to enforce these agreements under the laws of the jurisdictions in which our employees work and it may be difficult for us to restrict our competitors from benefitting from the expertise our former employees or consultants developed while working for us.

For example, Israeli courts have required employers seeking to enforce non-compete undertakings of a former employee to demonstrate that the competitive activities of the former employee will harm one of a limited number of material interests of the employer which have been recognized by the courts, such as the secrecy of a company's confidential commercial information or the protection of its intellectual property. If we cannot demonstrate that such interests will be harmed, we may be unable to prevent our competitors from benefiting from the expertise of our former employees or consultants and our ability to remain competitive may be diminished.

International expansion of our business exposes us to business, regulatory, political, operational, financial and economic risks associated with doing business outside of the United States or Israel.

Other than our headquarters and other operations which are located in Israel (as further described below), we currently have limited international operations, but our business strategy incorporates potentially significant international expansion, particularly in anticipation of approval of our product candidates. We plan to retain sales representatives and third- party distributors and conduct physician, infectious disease specialist, hospital pharmacist and patient association outreach activities, as well as clinical trials, outside of the United States, European Union and Israel. Doing business internationally involves a number of risks, including but not limited to:

- multiple, conflicting and changing laws and regulations such as privacy regulations, tax laws, export and import restrictions, employment laws, regulatory requirements and other governmental approvals, permits, and licenses;
- failure by us to obtain regulatory approvals for the use of our product candidates in various countries;
- additional potentially relevant third-party patent rights;
- complexities and difficulties in obtaining protection and enforcing our intellectual property;
- difficulties in staffing and managing foreign operations;
- complexities associated with managing multiple third-party payor reimbursement regimes, government payors, prince controls or patient self-pay systems;
- limits in our ability to penetrate international markets;
- financial risks, such as longer payment cycles, difficulty collecting accounts receivable, the impact of local and regional financial crises on demand and payment for our products and exposure to foreign currency exchange rate fluctuations;
- an outbreak of a contagious disease, including COVID-19, which may cause us or our distributors, third- party vendors and manufacturers and/or customers to temporarily suspend our or their respective operations in the affected city or country;
- natural disasters, political and economic instability, including wars (such as the war between Israel and Hamas), terrorism, and political unrest, boycotts, curtailment of trade, and other business restrictions;
- certain expenses including, among others, expenses for travel, translation and insurance; and
- regulatory and compliance risks that relate to maintaining accurate information and control over sales and activities that may fall within the purview of the U.S. Foreign Corrupt Practices Act its books and records provisions, or its anti-bribery provisions.

Any of these factors could significantly harm our future international expansion and operations and, consequently, our results of operations.

Our business and operations have been and may further be adversely affected by the COVID-19 global pandemic.

Our business and operations have been and, although COVID-19 pandemic declined globally, may further be adversely affected by the effects of the COVID-19 virus. The COVID-19 pandemic has resulted in travel and other restrictions in order to reduce the spread of the disease, including public health directives and orders in Israel, the United States and the EU that, among other things and for various periods of time, directed individuals to shelter at their places of residence, directed businesses and governmental agencies to cease non-essential operations at physical locations, prohibited certain non-essential gatherings and events and ordered cessation of non-essential travel. Government orders or other restrictions on the conduct of business operations related to the COVID-19 pandemic may negatively impact productivity and may disrupt our ongoing research and development activities and our clinical programs and timelines, the magnitude of which will depend, in part, on the length and severity of the restrictions and other limitations on our ability to conduct our business in the ordinary course. Further, such orders also may impact the availability or cost of materials, which would disrupt our supply chain and manufacturing efforts and could affect our ability to conduct ongoing and planned clinical trials and preparatory activities.

Risks Related to Commercialization of Our Product Candidates

We have limited manufacturing experience and could experience production problems that result in delays in our development or commercialization programs or otherwise adversely affect our business.

We have limited experience manufacturing D-PLEX$_{100}$. Although we have established our own manufacturing facility to support current and future clinical trials, and have received regulatory approvals for clinical manufacturing, and an initial commercial launch, we may be unable to produce commercial materials or meet demand for D-PLEX$_{100}$ if we are unable to receive or maintain commercial regulatory approvals for our facility. Any such failure could delay or prevent our development of D-PLEX$_{100}$ and would have a material adverse effect on our business, financial condition and results of operations.

Although we have increased the scale of our manufacturing process in order to produce sufficient quantities of D-PLEX$_{100}$ for our ongoing and planned clinical trials and at least the first 48 months following a commercial launch, if D-PLEX$_{100}$ is approved, in the future we may need to increase the scale or capacity of our manufacturing process either at our facility or at third-party manufacturers, or both. We may not be successful in producing sufficient quantities of D-PLEX$_{100}$, due to several factors, including equipment malfunctions, facility contamination, technical process challenges, raw material shortages or contamination, natural disasters, disruption in utility services, human error or disruptions in the operations of our suppliers. Problems with the manufacturing process, even minor deviations from the normal process, could result in product defects or manufacturing failures that result in lot failures, product recalls, product liability claims or insufficient inventory. We may encounter problems achieving adequate quantities and quality of clinical- and commercial-grade materials that meet FDA, EMA or other applicable standards or specifications with consistent and acceptable production yields and costs.

Slight deviations in the manufacturing process, including those affecting quality attributes and stability, may result in unacceptable changes in the product that could result in lot failures or product recalls. There is no assurance we will not experience such failures at our own manufacturing facility or that of a third party in the future. Lot failures or product recalls could cause delays in product supply or clinical trials, which could be costly to us and otherwise harm our business, financial condition, results of operations and prospects.

We also may encounter problems hiring and retaining the experienced specialist scientific, quality assurance, quality control and manufacturing personnel needed to operate our manufacturing process, which could result in delays in our production or difficulties in maintaining compliance with applicable regulatory requirements.

Any problems in our manufacturing process or facilities could make us a less attractive collaborator for potential partners, including biopharmaceutical companies, which could limit our access to additional attractive development programs.

We currently have no marketing and sales organization. If we are unable to establish sales and marketing capabilities or enter into agreements with third parties to market and sell our product candidates, we may be unable to generate any product revenue.

We have no experience selling and marketing our product candidates, and we currently have no marketing or sales organization. To successfully commercialize any product candidates that may result from our development programs, we will need to develop these capabilities, either on our own or with others. If our product candidates receive regulatory approval, we intend to establish a sales and marketing organization independently or by utilizing experienced third parties with technical expertise and supporting distribution capabilities to commercialize our product candidates in major markets, all of which will be expensive, difficult and time consuming. Any failure or delay in the development of our internal sales, marketing and distribution capabilities would adversely impact our ability to commercialize our product candidates.

Further, given our lack of prior experience in marketing and selling pharmaceutical products, our initial estimate of the size of the required sales force may be materially more or less than the size of the sales force actually required to effectively commercialize our product candidates. As such, we may be required to hire sales representatives and third-party distributors to adequately support the commercialization of our product candidates, or we may incur excess costs if we hire more sales representatives than necessary. With respect to certain geographical markets, we may enter into collaborations with other entities to utilize their local marketing and distribution capabilities, but we may be unable to enter into such agreements on favorable terms, if at all. We also may enter into collaborations with large pharmaceutical companies to develop and commercialize product candidates. If our future collaborators do not commit sufficient resources to develop and commercialize our future products, if any, and we are unable to develop the necessary marketing capabilities on our own, we will be unable to generate sufficient product revenue to sustain our business. We may compete with companies that currently have extensive and well-funded marketing and sales operations. Without an internal team or the support of a third party to perform marketing and sales functions, we may be unable to compete successfully against these more established companies.

Our efforts to educate the medical community, including physicians, hospital pharmacists and third-party payors on the benefits of our product candidates may require significant resources and may never be successful. If any of our product candidates are approved but fail to achieve market acceptance among physicians, patients or third-party payors, we will not be able to generate significant revenues from such product, which could have a material adverse effect on our business, financial condition, results of operations and prospects.

We are subject to significant regulatory oversight with respect to manufacturing our product candidates. Delays in establishing and 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.

The preparation of drug products for clinical trials or commercial sale is subject to extensive regulation. Before we can begin to commercially manufacture D-PLEX$_{100}$ or any product candidate, whether in a third-party facility or in our own facility, we must obtain regulatory approvals from the Israeli Ministry of Health, or MOH, the FDA and similar regulatory agencies, as applicable for our manufacturing process and facility. A manufacturing authorization must also be obtained from the appropriate regulatory authorities in the EU and worldwide. In addition, we must pass a pre-approval inspection of our manufacturing facility by the FDA before D-PLEX$_{100,}$ or any product candidate can obtain marketing approval. 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 is found to be out of compliance 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. For example, in the past, a cGMP audit by the MOH of the manufacturing process in the facility of our contract manufacturer for D-PLEX$_{100}$ resulted in certain critical observations, which have since been resolved. There can be no guarantee, however, that future inspections by regulatory authorities of our manufacturing facilities or those of our contract manufacturers will result in MOH's agreement that these critical observations have been resolved or that similar inspectional observations will not be identified. If we do not demonstrate to the satisfaction of the applicable regulator that our manufacturing facilities, or those of our contract manufacturers, are in compliance with applicable requirements, we may be materially delayed in the development of our product candidates, which would materially harm our business. 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 control to assure 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.

Our failure 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 any approved products and our product candidates.

Operating our own manufacturing facility will require additional investment, will be time-consuming and may be subject to delays, including because of shortage of labor or compliance with regulatory requirements. In addition, operating a manufacturing facility may cost more than we currently anticipate. Delays or problems in the build out of our manufacturing facility may adversely impact our ability to provide supply for the development and commercialization of D-PLEX$_{100}$ as well as our financial condition.

If we receive marketing approval for our product candidates, sales will be limited unless the product achieves broad market acceptance by physicians, hospital administrators, third-party payors, hospital pharmacists, infectious disease specialists and others in the medical community.

The commercial success of our product candidates will depend upon the acceptance of the product by the medical community, including physicians, hospital administrators, healthcare third-party payors, hospital pharmacists, infectious disease specialists and patients. The degree of market acceptance of any approved product will depend on a number of factors, including:

- the demonstration of clinical safety and efficacy of our product candidates in clinical trials;
- the efficacy, potential and perceived advantages of our product candidates over alternative treatments;
- the cost of treatment relative to the cost of treating SSIs;
- the prevalence and severity of any adverse side effects;
- the prevalence and severity of the disease the product is designed to treat or prevent;
- product labeling or product insert requirements of the FDA or other regulatory authorities, including any limitations or warnings contained in a product's approved labeling;
- distribution and use restrictions imposed by the FDA or agreed to by us as part of a mandatory or voluntary risk management plan;
- our ability to obtain adequate reimbursement;
- the demonstration of the effectiveness of our product candidates in reducing the cost of treatment;
- the strength of marketing and distribution support;
- the timing of market introduction of competitive products;
- the availability of products and their ability to meet market demand; and
- publicity concerning our product candidates or competing products and treatments.

If our product candidates are approved but do not achieve an adequate level of acceptance by physicians, hospital administrators, third-party payors, hospital pharmacists, infectious disease specialists and patients, we may not generate sufficient revenue from the product, and we may not become or remain profitable. In addition, our efforts to educate the medical community and third-party payors on the benefits of our product candidates may require significant resources and may never be successful.

It may be difficult for us to profitably sell our product candidates if reimbursement for these products, or the procedures in which they are used, is limited by government authorities and/or third-party payor policies.

In addition to any healthcare reform measures which may affect reimbursement, market acceptance and sales of our product candidates, if approved, will depend on, in part, the extent to which the procedures utilizing our product candidates, performed by health care providers, will be covered by third-party payors, such as government health care programs, commercial insurance and managed care organizations. Our product candidates will be purchased or provided by health care providers for utilization in certain surgical procedures. In the event health care providers and patients accept our product candidates as medically useful, cost effective and safe, there is uncertainty regarding whether our product candidates will be directly reimbursed, reimbursed through a bundled payment or if the product candidates will be included in another type of value-based reimbursement program. Third-party payors determine the extent to which new products or procedures will be covered as a benefit under their plans and the level of reimbursement for any covered product or procedure which may utilize a covered product.

When used in connection with surgical and certain other procedures, our product candidates may not be reimbursed separately but their cost may instead be bundled as part of the payment received by the provider for the procedure. Treating physicians are unlikely to use and order our products unless coverage is provided, and the reimbursement is adequate to cover all or a significant portion of the cost of the procedures which utilize our products. A decision by a third-party payor not to cover or adequately reimburse for our product candidates or procedures using our product candidates, could reduce physician utilization of our products once approved. Therefore, coverage and adequate reimbursement for procedures which utilize new products is critical to the acceptance of such new products.

A primary trend in the U.S. healthcare industry and elsewhere has been cost containment, including price controls, restrictions on coverage and reimbursement and requirements for substitution of less expensive products and procedures. Third-party payors decide which products and procedures they will pay for and establish reimbursement and co-payment levels. Government and other third-party payors are increasingly challenging the prices charged for health care products and procedures, examining the cost effectiveness of procedures, and the products used in such procedures, in addition to their safety and efficacy, and limiting or attempting to limit both coverage and the level of reimbursement. We cannot be sure that coverage will be available for our product candidates, if approved, or, if coverage is available, the level of direct or indirect reimbursement.

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 very intense. As a result, increasingly high barriers are being erected to the successful commercialization of new products. Further, the adoption and implementation of any future governmental cost containment or other health reform initiative may result in additional downward pressure on the price that we may receive for any approved product.

Reimbursement by a third-party payor may depend upon a number of factors including the third-party payor's determination that use of a product is:

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

In the United States, third-party payors, including private and governmental payors such as the Medicare and Medicaid programs, play an important role in determining the extent to which procedures using new products will be covered and reimbursed. The Medicare and Medicaid programs are increasingly used as models for how private payors and other governmental payors develop their coverage and reimbursement policies. It is difficult to predict at this time what third-party payors will decide with respect to reimbursement for fundamentally novel products such as ours, as there is no body of established practices and precedents for these new products.

Obtaining coverage and reimbursement approval for a product from a government or other third-party payor is a time-consuming and costly process that could require us to provide supporting scientific, clinical and cost effectiveness data for the use of our products to the payor. Additionally, we may not be able to provide data sufficient to gain acceptance with respect to coverage and reimbursement. We cannot be sure that coverage or adequate reimbursement will be available for our product candidates, if approved. Also, we cannot be sure that reimbursement amounts will not reduce the demand for, or the price of, our future products. If reimbursement is not available, or is available only to limited levels, we may not be able to commercialize our product candidates, or achieve profitably at all, even if approved.

Our business entails a significant risk of clinical trial and/or product liability and our ability to obtain sufficient insurance coverage could have a material effect on our business, financial condition, results of operations or prospects.

Our business exposes us to significant clinical trial and/or product liability risks inherent in the development, testing, manufacturing and marketing of therapeutic treatments. Clinical trial and/or product liability claims could delay or prevent completion of our development programs. If we succeed in marketing products, product liability claims could result in an FDA investigation of the safety and effectiveness of our products, our manufacturing processes and facilities or our marketing programs and potentially a recall of our products or more serious enforcement action, limitations on the approved indications for which they may be used or suspension or withdrawal of approvals. Regardless of the merits or eventual outcome, liability claims may also result in decreased demand for our products, injury to our reputation, costs to defend the related litigation, a diversion of management's time and our resources, substantial monetary awards to trial participants or patients and a decline in our company valuation. While we currently have clinical trial liability insurance, we do not have product liability insurance and do not anticipate obtaining product liability insurance until such time as we have received FDA or other comparable foreign authority approval for a product and there is a product that is being provided to patients outside of clinical trials. Any insurance we have or may obtain may not provide sufficient coverage against potential liabilities. In some countries, the institution or the doctors involved do not have sufficient insurance to cover their activities. Furthermore, clinical trial and product liability insurance are becoming increasingly expensive. As a result, we may be unable to obtain sufficient insurance at a reasonable cost to protect us against losses caused by clinical trial and product liability claims that could have a material adverse effect on our business.

Risks Related to Ownership of Our Ordinary Shares

Our executive officers, directors and principal shareholders will maintain the ability to exert significant control over matters submitted to our shareholders for approval.

As of March 6, 2024, our executive officers, directors and principal shareholders who own more than 5% of our outstanding Ordinary Shares, in the aggregate, beneficially own a substantial majority of our ordinary shares. As a result, if these shareholders were to act together, they would be able to exert significant influence over all matters submitted to our shareholders for approval (including a prospective acquisition or other change of control of our company), as well as our management and affairs.

We may be or may become classified as a passive foreign investment company. If we are or become classified as a passive foreign investment company, our U.S. shareholders may suffer adverse tax consequences as a result.

Generally, for any taxable year, if at least 75% of our gross income is passive income, or at least 50% of the value of our assets is attributable to assets that produce passive income or are held for the production of passive income, including cash, we would be characterized as a passive foreign investment company, or PFIC, for U.S. federal income tax purposes. For purposes of these tests, passive income includes dividends, interest gains from commodities and securities transactions, the excess of gains over losses from the disposition of assets which produce passive income (including amounts derived by reason of the temporary investment of funds raised in offerings of our shares) and rents and royalties other than rents and royalties which are received from unrelated parties in connection with the active conduct of a trade or business. If we are characterized as a PFIC, our U.S. shareholders may suffer adverse tax consequences, including having gains realized on the sale of our Ordinary Shares treated as ordinary income, rather than capital gain, the loss of the preferential rate applicable to dividends received on our Ordinary Shares by individuals who are U.S. holders, and having interest charges apply to distributions by us and gains from the sales of our shares.

Our status as a PFIC will depend on the nature and composition of our income and the nature, composition and value of our assets (which, assuming we are not a "controlled foreign corporation," or a CFC, under Section 957(a) of the Internal Revenue Code of 1986, as amended, or the Code, for the year being tested, may be determined based on the fair market value of each asset, with the value of goodwill and going concern value determined in large part by reference to the market value of our Ordinary Shares, which may be volatile). Based upon the estimated value of our assets, including any goodwill, and the nature and estimated composition of our income and assets, we may be classified as a PFIC for the taxable year ended December 31, 2023, and in future taxable years. In particular, so long as we do not generate revenue from operations for any taxable year and do not receive any research and development grants, or even if we receive a research and development grant, if such grant does not constitute gross income for United States federal income tax purposes, we likely will be classified as a PFIC for such taxable year. Because the determination of whether we are a PFIC for any taxable year is a factual determination made annually after the end of each taxable year, there can be no assurance that we will not be considered a PFIC in any taxable year.

The tax consequences that would apply if we were classified as a PFIC would also be different from those described above if a U.S. shareholder were able to make a valid qualified electing fund, or QEF, election. At this time, we do not expect to provide U.S. shareholders with the information necessary for a U.S. shareholder to make a QEF election. Prospective investors should assume that a QEF election will not be available.

If a United States person is treated as owning at least 10% of our shares, such holder may be subject to adverse U.S. federal income tax consequences.

If a United States person is treated as owning (directly, indirectly or constructively) at least 10% of the value or voting power of our shares, such person may be treated as a "United States shareholder" with respect to each "controlled foreign corporation" in our group (if any). Because our group includes one or more U.S. subsidiaries, we expect that certain of our non-U.S. subsidiaries will be treated as controlled foreign corporations (regardless of whether we are or are not treated as a controlled foreign corporation). A United States shareholder of a controlled foreign corporation may be required to annually report and include in its U.S. taxable income its pro rata share of "Subpart F income," "global intangible low-taxed income" and investments in U.S. property by controlled foreign corporations, whether or not we make any distributions. An individual that is a United States shareholder with respect to a controlled foreign corporation generally would not be allowed certain tax deductions or foreign tax credits that would be allowed to a United States shareholder that is a U.S. corporation. A failure to comply with these reporting obligations may subject you to significant monetary penalties and may prevent the statute of limitations with respect to your U.S. federal income tax return for the year for which reporting was due from starting. We cannot provide any assurances that we will assist investors in determining whether any of our non-U.S. subsidiaries are treated as a controlled foreign corporation or whether such investor is treated as a United States shareholder with respect to any of such controlled foreign corporations or furnish to any United States shareholders information that may be necessary to comply with the aforementioned reporting and tax paying obligations. A United States investor should consult their own advisors regarding the potential application of these rules to its investment in the shares.

As a foreign private issuer, we are permitted, and intend, to follow certain home country corporate governance practices instead of otherwise applicable Nasdaq requirements, and we will not be subject to certain U.S. securities laws including, but not limited to, U.S. proxy rules and the filing of certain Exchange Act reports.

As a foreign private issuer, we will be permitted, and intend, to follow certain home country corporate governance practices instead of those otherwise required by the Nasdaq Stock Market for domestic U.S. issuers. Following our home country governance practices as opposed to the requirements that would otherwise apply to a U.S. company listed on The Nasdaq Capital Market may provide less protection to you than what is accorded to investors under the listing rules of Nasdaq applicable to domestic U.S. issuers.

As a foreign private issuer, we will be exempt from the rules and regulations under the Securities Exchange Act of 1934, or the Exchange Act, related to the furnishing and content of proxy statements, including the applicable compensation disclosure requirements. Nevertheless, pursuant to regulations promulgated under the Israeli Companies Law, 5759-1999, or the Israeli Companies Law, we are required to disclose the annual compensation of our five most highly compensated office holders on an individual basis. Such disclosure will not be as extensive as that required of a U.S. domestic issuer. Our officers, directors and principal shareholders will also be exempt from the reporting and short-swing profit recovery provisions contained in Section 16 of the Exchange Act. In addition, we will not be required under the Exchange Act to file reports and financial statements with the SEC as frequently or as promptly as U.S. domestic companies whose securities are registered under the Exchange Act, and we will be exempt from filing quarterly reports with the SEC under the Exchange Act. Moreover, we will not be required to comply with Regulation FD, which restricts the selective disclosure of material information, although we intend to voluntarily adopt a corporate disclosure policy substantially similar to Regulation FD. These exemptions and leniencies will reduce the frequency and scope of information and protections to which you may otherwise have been eligible in relation to a U.S. domestic issuer.

We would lose our foreign private issuer status if a majority of our shares are owned by U.S. residents and a majority of our directors or executive officers are U.S. citizens or residents or we fail to meet additional requirements necessary to avoid loss of foreign private issuer status. The regulatory and compliance costs to us under U.S. securities laws as a U.S. domestic issuer may be significantly higher. If we are not a foreign private issuer, we will be required to file periodic reports and registration statements on U.S. domestic issuer forms with the SEC, which are more detailed and extensive than the forms available to a foreign private issuer. We may also be required to modify certain of our policies to comply with accepted governance practices associated with U.S. domestic issuers. Such conversion and modifications will involve additional costs. In addition, we would lose our ability to rely upon exemptions from certain corporate governance requirements on U.S. stock exchanges that are available to foreign private issuers.

We are an emerging growth company and the reduced disclosure requirements applicable to emerging growth companies may make our Ordinary Shares less attractive to investors.

We are an emerging growth company, as defined in the Jumpstart Our Business Startups Act, or the JOBS Act, and we may take advantage of certain exemptions from various requirements that are applicable to other public companies that are not emerging growth companies.

For as long as we remain an emerging growth company we are permitted and intend to rely on exemptions from certain disclosure requirements that are applicable to other public companies that are not "emerging growth companies." These exemptions include:

- not being required to comply with the auditor attestation requirements in the assessment of our internal control over financial reporting;
- Section 107 of the JOBS Act, which provides that an "emerging growth company" can take advantage of the extended transition period provided in Section 7(a)(2)(B) of the Securities Act of 1933, as amended, or the Securities Act, for complying with new or revised accounting standards. This means that an "emerging growth company" can delay the adoption of certain accounting standards until those standards would otherwise apply to private companies. We have elected to delay such adoption of new or revised accounting standards. As a result of this adoption, our financial statements may not be comparable to companies that comply with the public company effective date;
- not being required to comply with any requirement that may be adopted by the Public Company Accounting Oversight Board regarding mandatory audit firm rotation or a supplement to the auditor's report providing additional information about the audit and the financial statements;
- reduced disclosure obligations regarding executive compensation; and
- exemptions from the requirements of holding a nonbinding advisory vote on executive compensation and shareholder approval of any golden parachute payments not previously approved.

We will remain an emerging growth company until the earliest of: (i) the last day of our fiscal year during which we have total annual gross revenues of at least $1.235 billion; (ii) December 31, 2025; (iii) the date on which we have, during the previous three-year period, issued more than $1.0 billion in non-convertible debt; or (iv) the date on which we are deemed to be a "large accelerated filer" under the Exchange Act. We have opted out of the extended transition period made available to emerging growth companies to comply with newly adopted public company accounting requirements.

When we are no longer deemed to be an emerging growth company, we will not be entitled to the exemptions provided in the JOBS Act discussed above. We cannot predict if investors will find our Ordinary Shares less attractive as a result of our reliance on exemptions under the JOBS Act. If some investors find our Ordinary Shares less attractive as a result, there may be a less active trading market for our Ordinary Shares and our share price may be more volatile.

Risks Related to Israeli Law and Our Operations in Israel

We conduct our operations in Israel. Conditions in Israel, including the recent attack by Hamas and other terrorist organizations and Israel's war against them, may affect our operations.

Our headquarters and principal offices and most of our operations are located in the State of Israel. In addition, all of our key employees and officers are residents of Israel. Accordingly, political, economic and military conditions in Israel and the surrounding region may directly affect our business.

Any hostilities involving Israel or the interruption or curtailment of trade between Israel and its present trading partners, or a significant downturn in the economic or financial condition of Israel, could adversely affect our operations. Ongoing and revived hostilities or other Israeli political or economic factors could harm our operations, product development and results of operations.

On October 7, 2023, an unprecedented attack was launched against Israel by terrorists from the Hamas terrorist organization that infiltrated Israel's southern border from the Gaza Strip and in other areas within the state of Israel attacking civilians and military targets while simultaneously launching extensive rocket attacks on the Israeli population. In response, the Security Cabinet of the State of Israel declared war against Hamas. To date, the State of Israel continues to be at war with Hamas.

Since the war broke out on October 7, 2023, our operations have not been adversely affected by this situation. However, at this time, it is not possible to predict the intensity or duration of the war, nor can we predict how this war will ultimately affect Israel's economy in general and we continue to monitor the situation closely and examine the potential disruptions that could adversely affect our operations.

In connection with the Israeli security cabinet's declaration of war against Hamas and possible hostilities with other organizations, several hundred thousand Israeli military reservists were drafted to perform immediate military service. As of March 6, 2024, only one of our current employees in Israel, who is not a management or key employee, has been called to active military duty. We rely on service providers located in Israel and have entered into certain agreements with Israeli counterparties. Employees of such service providers or contractual counterparties may be called for service in the current or future wars or other armed conflicts with Hamas and such persons may be absent from their positions for a period of time. As of March 6, 2024, we have not been impacted by any absences of personnel at our service providers or counterparties located in Israel. However, military service call ups that result in absences of personnel from us, our service providers or contractual counterparties in Israel may disrupt our operations and absences for an extended period of time may materially and adversely affect our business, prospects, financial condition and results of operations.

Following the attack by Hamas on Israel's southern border, Hezbollah, a terrorist organization in Lebanon has also launched missile, rocket, and shooting attacks against Israeli military sites, troops, and Israeli towns in northern Israel. In response to these attacks, the Israeli army has carried out a number of targeted strikes on sites belonging to Hezbollah in southern Lebanon. It is possible that other terrorist organizations, including Palestinian military organizations in the West Bank, as well as other hostile countries, such as Iran, will join the hostilities. Such hostilities may include terror and missile attacks. Any hostilities involving Israel or the interruption or curtailment of trade between Israel and its trading partners could adversely affect our operations and results of operations. Our insurance policies do not cover losses that may occur as a result of events associated with war and terrorism.

Although the Israeli government currently covers the reinstatement value of direct damages that are caused by terrorist attacks or acts of war, we cannot assure you that this government coverage will be maintained or that it will sufficiently cover our potential damages. Any losses or damages incurred by us could have a material adverse effect on our business. Any armed conflicts or political instability in the region would likely negatively affect business conditions and could harm our results of operations.

Several countries, principally in the Middle East, still restrict doing business with Israel and Israeli companies, and additional countries may impose restrictions on doing business with Israel and Israeli companies, whether as a result of hostilities in the region or otherwise. In addition, there have been increased efforts by activists to cause companies and consumers to boycott Israeli goods and cooperation with Israeli-related entities based on Israeli government policies. Such actions, particularly if they become more widespread, may adversely impact our ability to collaborate with other third parties. Any hostilities involving Israel, any interruption or curtailment of trade or scientific cooperation between Israel and its present partners, or a significant downturn in the economic or financial condition of Israel could adversely affect our business, financial condition and operations. Moreover, we cannot predict how this war will ultimately affect Israel's economy in general, which may involve a downgrade in Israel's credit rating by rating agencies (such as the recent downgrade by Moody's of its credit rating of Israel from A1 to A2, as well as the downgrade of its outlook rating from "stable" to "negative"). We may also be targeted by cyber terrorists specifically because we are an Israeli-related company.

Furthermore, the Israeli government is currently pursuing extensive changes to Israel's judicial system, which have sparked extensive political debate. In response to the foregoing developments, a series of civil unrests and demonstrations throughout Israel took place. Additionally, individuals, organizations, and institutions, both within and outside of Israel, have voiced concerns that the proposed changes may negatively impact the business environment in Israel including due to reluctance of foreign investors to invest or conduct business in Israel, as well as to increased currency fluctuations, downgrades in credit rating, increased interest rates, increased volatility in securities markets, and other changes in macroeconomic conditions. Such proposed changes may also adversely affect the labor market in Israel or lead to political instability or civil unrest. To the extent that any of these negative developments do occur, they may have an adverse effect on our business, our results of operations and our ability to raise additional funds, if deemed necessary by our management and board of directors.

Our operations are subject to currency and interest rate fluctuations.

Although our functional currency is the U.S. dollar, and our financial records are maintained in U.S. dollars, we also incur expenses in Euros and NIS. In the future, we expect that a substantial portion of our revenues will be generated in U.S. dollars, Euros and other foreign currencies, although we currently incur a significant portion of our expenses in currencies other than U.S. dollars, mainly NIS. As a result, we are affected by foreign currency exchange fluctuations through both translation risk and transaction risk, and our financial results may be affected by fluctuations in the exchange rates of currencies in the countries in which our prospective product candidates may be sold. We currently partially hedge our foreign currency exchange rate risk to decrease the risk of financial exposure from fluctuations in the exchange rates of our principal operating currencies, but these hedge agreements may not be sufficient to fully protect us from the risks related to exchange rate fluctuations.

We received Israeli government grants for certain of our research and development activities, the terms of which may require us to pay royalties and to satisfy specified conditions in order to manufacture products and transfer technologies outside of Israel. If we fail to satisfy these conditions, we may be required to pay penalties and refund grants previously received.

Our research and development efforts have been financed in part through royalty-bearing and non-royalty-bearing grants in an aggregate amount of $6.6 million that we received from the IIA as of March 6, 2024. The last IIA approved research and development grants ended on November 30, 2022. With respect to the royalty-bearing grants we are committed to pay royalties at a rate of 3.0% on sales proceeds from our products that were developed under IIA programs up to the total amount of grants received, linked to the U.S. dollar and bearing interest. Until October 25, 2023, the interest was calculated at a rate based on 12-month LIBOR applicable to U.S. dollar deposits. However, on October 25, 2023, the IIA published a directive concerning changes in royalties to address the expiration of the LIBOR. Under such directive, regarding IIA grants approved by the IIA prior to January 1, 2024 but which are outstanding thereafter, as of January 1, 2024 the annual interest is calculated at a rate based on 12-month SOFR, or at an alternative rate published by the Bank of Israel plus 0.71513%; and, for grants approved on or following January 1, 2024 the annual interest shall be the higher of (i) the 12 months SOFR interest rate, plus 1%, or (ii) a fixed annual interest rate of 4%.

As of December 31, 2023, our contingent liabilities regarding IIA grants received by us were in an aggregate amount of $4.9 million. We are further required to comply with the requirements of the Israeli Encouragement of Industrial Research, Development and Technological Innovation Law, 5744-1984, as amended, and related regulations, or the Research Law, with respect to those past grants. When a company develops know-how, technology or products using IIA grants, the terms of these grants and the Research Law restrict the transfer or license of such know-how, and the transfer of manufacturing or manufacturing rights of such products, technologies or know-how outside of Israel, without the prior approval of the IIA. Therefore, the discretionary approval of an IIA committee would be required for any transfer or license to third parties inside or outside of Israel of know how or for the transfer outside of Israel of manufacturing or manufacturing rights related to those aspects of such technologies. We may not receive those approvals. Furthermore, the IIA may impose certain conditions on any arrangement under which it permits us to transfer technology or development.

The transfer or license of IIA-supported technology or know-how outside of Israel and the transfer of manufacturing of IIA-supported products, technology or know-how outside of Israel may involve the payment of significant amounts, depending upon the value of the transferred or licensed technology or know-how, our research and development expenses, the amount of IIA support, the time of completion of the IIA-supported research project and other factors. These restrictions and requirements for payment may impair our ability to sell, license or otherwise transfer our technology assets outside of Israel or to outsource or transfer development or manufacturing activities with respect to any product or technology outside of Israel. Furthermore, the consideration available to our shareholders in a transaction involving the transfer outside of Israel of technology or know-how developed with IIA funding (such as a merger or similar transaction) may be reduced by any amounts that we are required to pay to the IIA.

Provisions of Israeli law and our amended and restated articles of association may delay, prevent or otherwise impede a merger with, or an acquisition of, us, which could prevent a change of control, even when the terms of such a transaction are favorable to us and our shareholders.

Israeli corporate law regulates mergers, requires tender offers for acquisitions of shares above specified thresholds, requires special approvals for transactions involving directors, officers or significant shareholders and regulates other matters that may be relevant to such types of transactions. For example, a merger may not be consummated unless at least 50 days have passed from the date on which a merger proposal is filed by each merging company with the Israel Registrar of Companies and at least 30 days have passed from the date on which the shareholders of both merging companies have approved the merger. In addition, a majority of each class of securities of the target company must approve a merger. Moreover, a tender offer for all of a company's issued and outstanding shares can only be completed if the acquirer receives positive responses from the holders of at least 95% of the issued share capital. Completion of the tender offer also requires approval of a majority of the offerees that do not have a personal interest in the tender offer, unless, following consummation of the tender offer, the acquirer would hold at least 98% of the Company's outstanding shares. Furthermore, the shareholders, including those who indicated their acceptance of the tender offer, may, at any time within six months following the completion of the tender offer, claim that the consideration for the acquisition of the shares does not reflect their fair market value, and petition an Israeli court to alter the consideration for the acquisition accordingly, unless the acquirer stipulated in its tender offer that a shareholder that accepts the offer may not seek such appraisal rights, and the acquirer or the company published all required information with respect to the tender offer prior to the tender offer's response date.

Furthermore, Israeli tax considerations may make potential transactions unappealing to us or to our shareholders whose country of residence does not have a tax treaty with Israel granting tax relief to such shareholders from Israeli tax. For example, Israeli tax law does not recognize tax-free share exchanges to the same extent as U.S. tax law. With respect to mergers, Israeli tax law allows for tax deferral in certain circumstances but makes the deferral contingent on the fulfillment of a number of conditions, including, in some cases, a holding period of two years from the date of the transaction during which sales and dispositions of shares of the participating companies are subject to certain restrictions. Moreover, with respect to certain share swap transactions, the tax deferral is limited in time, and when such time expires, the tax becomes payable even if no disposition of the shares has occurred. These provisions could delay, prevent or impede an acquisition of us or our merger with another company, even if such an acquisition or merger would be beneficial to us or to our shareholders.

It may be difficult to enforce a judgment of a U.S. court against us and our executive officers and directors in Israel or the United States, to assert U.S. securities laws claims in Israel or to serve process on our executive officers and directors and these experts.

We were incorporated in Israel. Substantially all of our executive officers and directors reside outside of the United States, and all of our assets and most of the assets of these persons are located outside of the United States. Therefore, a judgment obtained against us, or any of these persons, including a judgment based on the civil liability provisions of the U.S. federal securities laws, may not be collectible in the United States and may not be enforced by an Israeli court. It also may be difficult for you to effect service of process on these persons in the United States or to assert U.S. securities law claims in original actions instituted in Israel. Additionally, it may be difficult for an investor, or any other person or entity, to initiate an action with respect to U.S. securities laws in Israel. Israeli courts may refuse to hear a claim based on an alleged violation of U.S. securities laws reasoning that Israel is not the most appropriate forum in which to bring such a claim. In addition, even if an Israeli court agrees to hear a claim, it may determine that Israeli law and not U.S. law is applicable to the claim. If U.S. law is found to be applicable, the content of applicable U.S. law must be proven as a fact by expert witnesses, which can be a time consuming and costly process. Certain matters of procedure will also be governed by Israeli law. There is little binding case law in Israel that addresses the matters described above. As a result of the difficulty associated with enforcing a judgment against us in Israel, you may not be able to collect any damages awarded by either a U.S. or foreign court.

Your rights and responsibilities as a shareholder will be governed in key respects by Israeli laws, which differs in some material respects from the rights and responsibilities of shareholders of U.S. companies.

The rights and responsibilities of the holders of our Ordinary Shares are governed by our amended and restated articles of association and by Israeli law. These rights and responsibilities differ in some material respects from the rights and responsibilities of shareholders in U.S. companies. In particular, a shareholder of an Israeli company has a duty to act in good faith and in a customary manner in exercising its rights and performing its obligations towards the company and other shareholders, and to refrain from abusing its power in such company, including, among other things, in voting at a general meeting of shareholders on matters such as amendments to a company's amended and restated articles of association, increases in a company's authorized share capital, mergers and acquisitions and related party transactions requiring shareholder approval, as well as a general duty to refrain from discriminating against other shareholders. In addition, a shareholder who is aware that it possesses the power to determine the outcome of a vote at a meeting of the shareholders or to appoint or prevent the appointment of a director or executive officer in the company has a duty of fairness toward the company. However, Israeli law does not define the substance of this duty of fairness. See "Item 6.C. Board Practices— Duties of Shareholders" for additional information. There is limited case law available to assist us in understanding the nature of these duties or the implications of these provisions. These provisions may be interpreted to impose additional obligations and liabilities on holders of our Ordinary Shares that are not typically imposed on shareholders of U.S. companies.

General Risk Factors

The market price of our Ordinary Shares may be highly volatile, and you may not be able to resell your Ordinary Shares at or above the price you paid.

The trading price of our Ordinary Shares is likely to be volatile. The stock market in general, and the market for pharmaceutical companies in particular, has experienced extreme volatility that has often been unrelated to the operating performance of particular companies, which has resulted in decreased stock prices for many companies notwithstanding the lack of a fundamental change in their underlying business models or prospects. Broad market and industry factors may negatively affect the market price of our Ordinary Shares, regardless of our actual operating performance. As a result of this volatility, you may not be able to sell your Ordinary Shares at or above the price you paid. The following factors, in addition to other risk factors described in this section, may have a significant impact on the market price of our Ordinary Shares:

- inability to obtain the approvals necessary to commence further clinical trials;
- unsatisfactory results of clinical trials, whether final or interim;
- announcements of regulatory approvals or the failure to obtain them, or specific label indications or patient populations for their use, or changes or delays in the regulatory review process;
- announcements of therapeutic innovations or new products by us or our competitors;
- adverse actions taken by regulatory agencies with respect to our clinical trials, manufacturing supply chain or sales and marketing activities;
- changes or developments in laws or regulations applicable to any candidate product in any of our platforms;
- changes in the structure of healthcare payment systems;
- any adverse changes to our relationship with manufacturers or suppliers, especially manufacturers of candidate products;
- any intellectual property infringement actions in which we may become involved;
- announcements concerning our competitors or the pharmaceutical industry in general;
- achievement of expected product sales and profitability or our failure to meet expectations;
- our commencement of, or involvement in, litigation;
- any major changes in our Board of Directors or management;
- the impact of the war between Israel and Hamas;
- legislation in the United States or any other territory relating to the sale or pricing of pharmaceuticals; and
- coordinated buying or selling activity in our Ordinary Shares, including market manipulation.

If our quarterly operating results fall below the expectations of investors or securities analysts, the price of our Ordinary Shares could decline substantially. Furthermore, any quarterly fluctuations in our operating results may, in turn, cause the price of our stock to fluctuate substantially. We believe that quarterly comparisons of our financial results are not necessarily meaningful and should not be relied upon as an indication of our future performance.

In the past, following periods of volatility in the market price of a company's securities, securities class-action litigation often has been instituted against that company. Such litigation, if instituted against us, could cause us to incur substantial costs to defend such claims and divert management's attention and resources, which could seriously harm our business, financial condition, results of operations and prospects.

Our business and operations would suffer in the event of computer system failures, cyber-attacks or a deficiency in our cybersecurity.

Despite the implementation of security measures intended to secure our data against impermissible access and to preserve the integrity and confidentiality of our data, our internal computer systems, and those of third parties on which we rely, are vulnerable to damage from computer viruses, malware, natural disasters, terrorism, war, telecommunication and electrical failures, cyber-attacks or cyber-intrusions over the Internet, attachments to emails, persons inside our organization, or persons with access to systems inside our organization. The risk of a security breach or disruption, particularly through cyber attacks or cyber intrusion, including by computer hackers, foreign governments, and cyber terrorists, has generally increased as the number, intensity and sophistication of attempted attacks and intrusions from around the world have increased. Moreover, following COVID-19, our employees are frequently working from their homes and remotely access our IT networks. Such remote working mode creates the risk of attacking the end-point user stations, connection channels and gateways. If such an event was to occur and cause interruptions in our operations, it could result in a material disruption of our drug development programs. For example, the loss of clinical trial data from completed or ongoing or planned clinical trials could result in delays in our regulatory approval efforts and significantly increase our costs to recover or reproduce the data. To the extent that any disruption or security breach was to result in a loss of or damage to our data or applications, or inappropriate disclosure of confidential or proprietary information, we could incur material legal claims and liability, including under data privacy laws such as the GDPR, damage to our reputation, and the further development of our drug candidates could be delayed.

Our future success depends in part on our ability to retain our senior management team and to attract, retain and motivate other qualified personnel.

We are highly dependent on the members of our senior management team. The loss of their services without a proper replacement may adversely impact the achievement of our objectives. Our employees may leave our employment at any time. Recruiting and retaining other qualified employees, consultants and advisors for our business, including scientific and technical personnel, will also be critical to our success. There is currently a shortage of skilled personnel in our industry, which is likely to continue for the foreseeable future. As a result, competition for skilled personnel is intense, and the turnover rate can be high. We may not be able to attract and retain personnel on acceptable terms given the competition among numerous pharmaceutical companies for individuals with similar skill sets. In addition, failure to succeed in preclinical studies or clinical trials may make it more challenging to recruit and retain qualified personnel. The inability to recruit and retain qualified personnel, or the loss of the services of any members of our senior management team without proper replacement, may impede the progress of our research, development and commercialization objectives. We do not maintain key man insurance for our senior management team.

We will continue to incur significant increased costs as a result of operating as a public company in the United States, and our management will be required to devote substantial time to compliance initiatives.

As a public company whose Ordinary Shares are listed in the United States, we are subject to an extensive regulatory regime, requiring us, among other things, to maintain various internal controls and facilities and to prepare and file periodic and current reports and statements, including reports on the effectiveness of our internal control over financial reporting pursuant to Section 404 of the Sarbanes-Oxley Act of 2002. Complying with these requirements is costly and time consuming. In the event that we are unable to demonstrate compliance with our obligations as a public company in a timely manner, or are unable to produce timely or accurate financial statements, we may be subject to sanctions or investigations by regulatory authorities, such as the SEC or The Nasdaq Capital Market, and investors may lose confidence in our operating results and the price of our Ordinary Shares could decline.

Our independent registered public accounting firm was not engaged to perform an audit of our internal control over financial reporting, and as long as we remain an emerging growth company, as such term is defined in the JOBS Act, we will be exempt from the requirement to have an independent registered public accounting firm perform such audit. Accordingly, no such opinion was expressed or will be expressed any during any such period. Once we cease to qualify as an emerging growth company our independent registered public accounting firm will be required to attest to our management's annual assessment of the effectiveness of our internal controls over financial reporting, which will entail additional costs and expenses.

We have never paid cash dividends on our share capital, and we do not anticipate paying any cash dividends in the foreseeable future.

We have never declared or paid cash dividends on our Ordinary Shares. We currently anticipate that we will retain future earnings for the development, operation and expansion of our business and do not anticipate declaring or paying any cash dividends in the foreseeable future. As a result, capital appreciation, if any, of our Ordinary Shares will be investors' sole source of gain for the foreseeable future. In addition, Israeli law limits our ability to declare and pay dividends, and may subject our dividends to Israeli withholding taxes.

If securities or industry analysts do not publish or cease publishing research or reports about us, our business or our market, or if they adversely change their recommendations or publish negative reports regarding our business or our shares, our share price and trading volume could decline.

The trading market for our Ordinary Shares will be influenced by the research and reports that industry or securities analysts may publish about us, our business, our market or our competitors. We do not have any control over these analysts and we cannot provide any assurance that analysts will cover us or provide favorable coverage. If any of the analysts who may cover us adversely change their recommendation regarding our shares, or provide more favorable relative recommendations about our competitors, our share price would likely decline. If any analyst who may cover us were to cease coverage of our company or fail to regularly publish reports on us, we could lose visibility in the financial markets, which in turn could cause our share price or trading volume to decline.

Our amended and restated articles of association provide that, unless we consent in writing to an alternative forum, the federal district courts of the United States of America shall be the sole and exclusive forum for resolution of any complaint asserting a cause of action arising under the Securities Act, which could limit our shareholders' ability to choose the judicial forum for disputes with us, our directors, shareholders, or other employees.

As of May 5, 2023, our amended and restated articles of association provide that, unless we consent in writing to the selection of an alternative forum, the federal district courts of the United States of America shall be the exclusive forum for the resolution of any complaint asserting a cause of action arising under the Securities Act. Section 22 of the Securities Act creates concurrent jurisdiction for U.S. federal and state courts over all such Securities Act actions. Accordingly, both U.S. state and federal courts have jurisdiction to entertain such claims. To prevent having to litigate claims in multiple jurisdictions and the threat of inconsistent or contrary rulings by different courts, among other considerations, our amended and restated articles of association provide that, unless we consent in writing to the selection of an alternative forum, the federal district courts of the United States shall be the exclusive forum for the resolution of any complaint asserting a cause of action arising under the Securities Act. This exclusive forum provision will not apply to suits brought to enforce any liability or duty created by the Exchange Act, and our shareholders cannot and will not be deemed to have waived our compliance with the U.S. federal securities laws and the rules and regulations promulgated under the Securities Act or the Exchange Act as a result of our exclusive forum provision.

Any person or entity purchasing or otherwise acquiring any interest in any of our securities shall be deemed to have notice of and consented to the foregoing provision of our amended and restated articles of association. However, the enforceability of similar forum provisions (including exclusive federal forum provisions for actions, suits, or proceedings asserting a cause of action arising under the Securities Act) in other companies' organizational documents has been challenged in legal proceedings, and there is uncertainty as to whether courts would enforce the exclusive forum provision in our amended and restated articles of association. If a court were to find the exclusive forum provision contained in our amended and restated articles of association to be inapplicable or unenforceable in an action, we may incur additional costs associated with resolving such action in other jurisdictions, which could materially adversely affect our business, financial condition, and results of operations.

Although we believe the exclusive forum provision benefit us by providing increased consistency in the application of U.S. federal securities laws the Israeli Companies Law, or New York law, as applicable, in the types of lawsuits to which they apply, such exclusive forum provision may limit a shareholder's ability to bring a claim in the judicial forum that they find favorable and may increase certain litigation costs for disputes with us or any of our directors, shareholders, officers, or other employees, which may discourage lawsuits with respect to such claims against us and our current and former directors, shareholders, officers, or other employees.

ITEM 4. INFORMATION ON THE COMPANY

A. History and Development of the Company.

We were incorporated in the State of Israel on February 28, 2008. Our Ordinary Shares are currently listed for trading on the Nasdaq Capital Market under the symbol "PYPD."

Our principal executive offices are located at 18 Hasivim Street, Petach Tikva 4959376, Israel. Our telephone number in Israel is +972 (74) 719-5700. Our website address is *www.polypid.com*. The information contained on our website or available through our website is not incorporated by reference into and should not be considered a part of this annual report on Form 20-F, and the reference to our website in this annual report on Form 20-F is an inactive textual reference only. PolyPid Inc. is our agent in the United States, and its address is 372 Franklin Ave., P.O. Box 558, Nutley, NJ 07110.

We are an emerging growth company, as defined in Section 2(a) of the Securities Act, as implemented under the JOBS Act. As such, we are eligible to, and intend to, take advantage of certain exemptions from various reporting requirements applicable to other public companies that are not emerging growth companies including but not limited to not being required to comply with the auditor attestation requirements of the SEC rules under Section 404 of the Sarbanes-Oxley Act. We could remain an emerging growth company until the earlier of (1) the last day of the fiscal year (a) following the fifth anniversary of the date of our first sale of common equity securities pursuant to an effective registration statement under the Securities Act, which was in June 2020, (b) in which we have total annual gross revenue of at least $1.235 billion, or (c) in which we are deemed to be a large accelerated filer, which means the market value of our Ordinary Shares that is held by non-affiliates exceeds $700 million as of the prior June 30th, and (2) the date on which we have issued more than $1.0 billion in non-convertible debt during the prior three-year period.

We are a foreign private issuer as defined by the rules under the Securities Act and the Exchange Act. Our status as a foreign private issuer also exempts us from compliance with certain laws and regulations of the SEC and certain regulations of the Nasdaq Stock Market, including the proxy rules, the short-swing profits recapture rules, and certain governance requirements such as independent director oversight of the nomination of directors and executive compensation. In addition, we are not required to file annual, quarterly and current reports and financial statements with the SEC as frequently or as promptly as U.S. domestic companies registered under the Exchange Act.

In 2023, 2022 and 2021, our capital expenditures amounted to $0.2 million, $2.2 million and $4 million, respectively. Our current capital expenditures are primarily for manufacturing facility and equipment, computers, software, research and development equipment and office improvements substantially all in Israel, and we expect to finance these expenditures primarily from cash on hand.

B. Business Overview.

We are a Phase 3 clinical-stage biopharmaceutical company focused on developing targeted, locally administered and prolonged-release therapeutics using our proprietary PLEX technology. Our product candidates are designed to address diseases with high unmet medical needs by pairing our PLEX technology with drugs already approved by the FDA or innovative drug candidates to achieve a novel therapeutic effect. Our PLEX technology is designed to deliver drugs directly to targeted treated sites in the body at predetermined release rates and predetermined durations ranging from several days to several months. We believe that our PLEX technology and product candidates have the potential to significantly improve the management of a variety of medical conditions, including SSIs and cancer. Our lead product candidate, D-PLEX$_{100}$, is in a pivotal Phase 3 confirmatory trial for the potential approval for prevention of SSIs in patients undergoing abdominal colorectal surgery with large incisions. D-PLEX$_{100}$ pairs our novel proprietary PLEX technology with doxycycline, a first-line, broad spectrum and FDA-approved antibiotic D-PLEX$_{100}$ is administered directly into the surgical site during surgery, and provides a prolonged and continuous release of the broad-spectrum antibiotic, resulting in high local concentration of the drug for a period of 30 days for the prevention of SSIs, including SSIs caused by SoC antibiotic-resistant bacteria. Infections resulting from surgery can be fatal and create a significant public health burden despite the extensive use of systemically administered antibiotics both pre- and post-operatively and other measures taken to reduce infection risk in the intra-operative setting.

The WHO estimates that SSIs result in up to $10 billion of additional hospital costs per year in the United States alone, and a further €11 billion per year in the EU. The CDC estimates that SSIs are the costliest HAI type of event in the United States. SSIs occur in approximately 2% to 5% of all patients undergoing inpatient surgery worldwide and account for 20% of all HAIs in United States. In their last guidelines, the WHO and the CDC have labeled SSIs as a high priority unmet medical need due to the associated morbidity, mortality and economic cost burden.

We believe that D-PLEX$_{100}$, if approved, would be a significant improvement over the current SoC, which includes systemic administration of antibiotics.

We initiated two Phase 3 trials of D-PLEX$_{100}$, which we refer to as SHIELD I and SHIELD II, for the prevention of abdominal (soft tissue) SSIs in the third and fourth quarters of 2020, respectively. In May 2021, the FDA agreed in a Type B meeting that a single pivotal Phase 3 study is sufficient, provided the study results are adequate, for potential approval of a D-PLEX$_{100}$ NDA for the prevention of SSIs in colorectal surgery.

In September 2022, we announced top-line results from the SHIELD I Phase 3 study of D-PLEX$_{100}$ for the prevention of SSIs in abdominal surgery. SHIELD I study did not achieve its primary endpoint of reduction in SSIs, re-interventions due to SSIs and mortality: in the ITT population, the local administration of D-PLEX$_{100}$ and SoC (n=485) resulted in a decrease in the primary endpoint of 23% compared to SoC alone (n=489) (p=0.1520). That said, in a pre-specified subgroup ITT analysis requested by the FDA of a total of 423 subjects with large incisions (>20 centimeters), the local administration of D-PLEX$_{100}$ resulted in a significant reduction of 54% in the primary endpoint, compared to SoC alone (p=0.0032). Within the first 30 days post-surgery, SSIs decreased from 9.7% in the SoC treatment arm (n=211), as compared to 4.4% in the D-PLEX$_{100}$ treatment arm (n=212). In addition, in exploratory post hoc analysis, the SHIELD I study also showed a 34% reduction in the primary endpoint in patients with one or more patient-specific risk factors (documented obesity- body mass index (BMI) >30 kg/m2, diabetes mellitus, hypertension, peripheral vascular disease, and chronic obstructive pulmonary disease/smoking) compared to SoC (post hoc analysis; p=0.047; n=680). Together, these results suggest potential prophylactic efficacy when D-PLEX is administered concomitantly with systemic antibacterial prophylaxis in patients with increased SSI risk factors, whether procedural or patient-specific comorbidities. Patients with either of these risk profiles are readily identifiable by the surgeon in the pre- and intra-operative periods, offering the option to apply D-PLEX after fascial closure but before skin closure. The SHIELD I study demonstrated a good safety profile of D-PLEX$_{100}$: the overall incidence of TEAEs was similar between study arms with numerically lower incidences of severe and serious treatment emergent adverse events (TEAEs), and any TEAEs requiring surgical reinterventions in the D-PLEX arm compared to the SoC arm.

In November 2022, we provided the FDA with available data from the SHIELD I study as part of a Type D meeting request. Following positive Type D meeting communication with the FDA, which took place in January 2023 on the SHIELD I Phase 3 data, we now have a clear regulatory pathway towards a potential NDA submission. Based on the data, particularly the 54% reduction observed in the primary endpoint in complex surgeries in a pre-specified subgroup analysis of patients with large open incisions (p=0.0032, n=423) compared to SoC, the FDA acknowledged that the SHIELD I results may provide supportive evidence on this population and recommended that we conduct an additional study to support a potential NDA submission. The FDA stated that the ongoing SHIELD II study could potentially serve as such a study. The FDA also recognized that D-PLEX$_{100}$'s proposed indication is for the prevention of infection and has the potential for wide use.

In March 2023, we received feedback in a national scientific advice meeting from the Swedish MPA similar to the Type D meeting feedback previously received from the FDA. Swedish MPA recommended that we confirm the results with an additional Phase 3 study to support a MAA submission and confirmed that clinical safety data obtained to date in abdominal surgery studies is sufficient for a MAA submission.

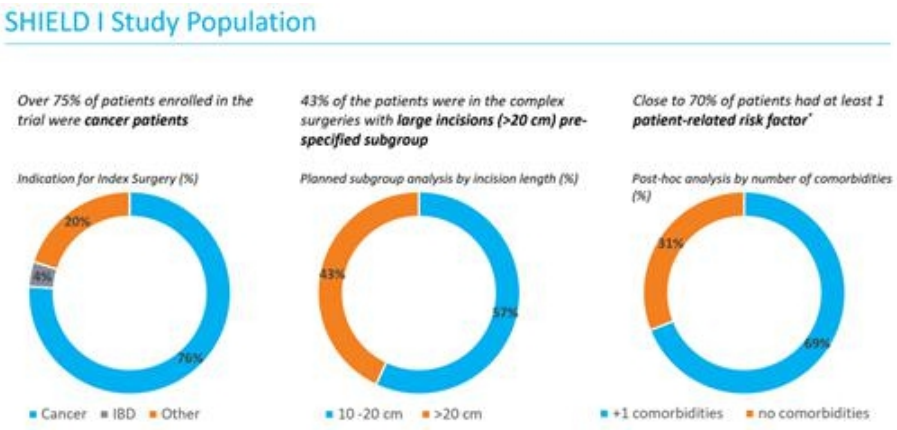


Figure 1: SHIELD I Study Population

	Incision > 20 cm		
Parameter	**D-PLEX+SOC N=212**	**SOC N=211**	**p**
Primary Endpoint	17 (8.0%)	37 (17.5%)	0.0032
Key secondary outcomes: Pre-specified analysis			
Incisional SSI rate	9/204 (4.4%)	19/196 (9.7%)	0.0410
At least 1 score of ASEPSIS >20	2/204 (1.0%)	5/196 (2.6%)	0.2231
Additional efficacy secondary outcomes: Post hoc analysis			
sSSI rate	9/204 (4.4%)	17/196 (8.7%)	0.0899
dSSI rate	0/204 (0)	2/194 (1.0%)	0.237
All-cause mortality rate	6 (2.8%)	10 (4.7%)	0.2939
Time to SSI (days)	8.0	5.0	0.0819
Surgical reintervention-any cause	9/206 (4.4%)	19/196 (9.7%)	0.0333
Incisional reintervention	0/204 (0)	4/194 (2.1%)	0.0556

Abbreviations: SSI, surgical site infection; sSSI, superficial incisional surgical site infection; dSSI, deep incisional surgical site infection; SOC, standard of care; D-PLEX, doxycycline-Polymer-Lipid Encapsulation matriX. P-values were calculated as follows: All-cause 30-day mortality rates were based on the Z test, days to SSI were based on the Wilcoxon Rank- Sum test. The rest of the parameters (categorical Yes/No variables) were based on either Cochran–Mantel–Haenszel test or the Fisher exact test.

Figure 2: SHIELD I Large-Incision Subgroup Analysis

SHIELD II is a prospective, multinational, randomized, double blind Phase 3 trial designed to assess the efficacy and safety of D-PLEX$_{100}$ administered concomitantly with SoC, compared to SoC alone arm, in the prevention of post abdominal-surgery incisional infection in patients undergoing surgeries with incisions greater than 20 cm. The primary endpoint of the trial is measured by the proportion of subjects with either an SSI event as determined by a blinded and independent adjudication committee, reintervention, or mortality for any reason within 30 days post-surgery. Patient safety will be monitored for an additional 30 days. The trial will enroll patients in centers in the United States, Europe and Israel.

We resumed recruitment into the SHIELD II trial in June 2023. As of March 6, 2024, approximately 120 patients were already enrolled. Unblinded interim analysis is planned to be conducted once approximately 400 patients complete their 30-day follow-up, which is expected mid-2024. Top-line results are expected in the second half of 2024.

In October 2019, we reported topline data from our Phase 2 clinical trial of D-PLEX$_{100}$ for the prevention of SSIs in patients undergoing abdominal (soft tissue) surgery. Patients treated with D-PLEX$_{100}$ and the SoC had a statistically significant reduction of 59% (p=0.0086) in deep or superficial incisional SSIs or mortality for any reason within 30 days of surgery, which was the primary endpoint for the trial, as compared to patients who received the SoC alone. In addition, there was a statistically significant difference (p=0.0290) in patient deaths within 60 days of surgery, with no deaths observed in the D-PLEX$_{100}$ treatment arm, as compared to five deaths observed in the standard-of-care arm. In this trial, D-PLEX$_{100}$ was observed to be generally well tolerated, with no confirmed drug-related serious adverse events, or SAEs, and did not increase wound healing impairment at the incision site as compared to the control arm.

In January 2018, we reported data from our Phase 1b/2 clinical trial of D-PLEX$_{100}$ for the prevention of sternal SSIs after cardiac surgery. None of the 58 patients treated with D-PLEX$_{100}$ and the SoC had a sternal infection within 90 days post-surgery, which was the primary endpoint of the trial, as compared to one patient in the group treated with the SoC alone, representing a 4.3% infection rate. In this trial, D-PLEX$_{100}$ was observed to be generally well tolerated, with no drug-related SAEs and no drug-related wound healing issues at the incision site. The results of this trial were published in the *Journal of Cardiac Surgery* in October 2020.

In December 2019, we initiated a potentially pivotal Phase 3 clinical trial of D-PLEX$_{100}$ for the prevention of post-cardiac sternal (bone) SSIs, and we enrolled the first patient in February 2020. We paused enrollment in this trial as we determined to initially focus on abdominal (soft tissue) surgeries.

We intend to pursue a broad label for D-PLEX$_{100}$ for the prevention of SSIs, the scope of which will depend on the clinical data generated from our Phase 3 clinical trials and discussions with the FDA and the EMA.

We intend to seek approval of D-PLEX$_{100}$ under Section 505(b)(2) of the Federal Food, Drug and Cosmetic Act, or FFDCA, which provides an abbreviated pathway for marketing approval by the FDA in the United States, and will seek approval under the comparable hybrid application pathway in the EU. Such abbreviated approval pathways may not lead to a faster development or review process compared to traditional approval pathways and do not increase the likelihood that D-PLEX$_{100}$ will receive regulatory approval in the United States or the EU. We received three QIDP designations from the FDA for D-PLEX$_{100}$ for the prevention of post-abdominal surgery incisional infection, for the prevention of sternal wound infection post-cardiac surgery, and for prevention of post-colorectal SSIs. The QIDP designation from the FDA confers, among other benefits, a five-year extension to any period of non-patent exclusivity awarded upon approval, such as a three-year period of exclusivity for new clinical investigations of previously approved products, which we expect for D-PLEX$_{100}$, if approved. Additionally, in November 2018 we received Fast Track Designation from the FDA for D-PLEX$_{100}$ for topical use for the prevention of sternal infections post-cardiac surgery, in July 2020, for the prevention of post-abdominal surgery incisional infections and in September 2021 for prevention of post-colorectal SSIs. Fast Track Designation could potentially expedite the FDA's review of D-PLEX$_{100}$ and enables early and frequent communication with the FDA as we continue to generate data from our ongoing and planned clinical trials.

In November 2020, we received breakthrough therapy designation from the FDA for the prevention of SSIs in patients undergoing elective colorectal surgery based on the clinical results of our Phase 2 trial. The breakthrough therapy designation is granted based on preliminary clinical evidence indicating that the drug may demonstrate substantial improvement over existing therapies on one or more clinically significant endpoints. The breakthrough therapy designation is designed to expedite the development and review of drugs that are intended to treat a serious or life-threatening condition so patients may have access to therapies through the FDA approval as soon as possible. The breakthrough therapy designation allows for frequent discussions with the FDA and ensures that a dedicated senior team from the FDA reviews our product filling.

In Europe, on August 2, 2022, we entered into a license, distribution and supply agreement with Mercury Pharma Group Limited, under the trade name Advanz Pharma Holdings, or Advanz, pursuant to which we granted the exclusive right to Advanz to market, advertise, promote, distribute, offer for sale, sell and import our product D-PLEX$_{100}$ for the prevention of (i) post abdominal surgery incisional infection and/or (ii) post cardiac surgery sternal infection in the EEA and the United Kingdom. The term of the license is until the later of December 31, 2035, or 10 years after the first commercial sale of D-PLEX$_{100}$. The license is also terminable by either party under certain limited circumstances.

Under the terms of the agreement, we received an upfront payment immediately upon signing and are entitled to additional development-related milestones for a total of up to €23 million (approximately $24.8 million) as follows: upfront payment of €2.5 million (approximately $2.6 million), up to €12.25 million (approximately $13.2 million) contingent upon positive top-line results of our SHIELD I Phase 3 study and additional development-related milestones of up to €8.25 million (approximately $8.9 million). Upon commercialization, we will receive up to €87 million (approximately $94 million) in sales-related milestones. In addition, we will also supply D-PLEX$_{100}$ to Advanz for a transfer price and will be entitled to royalties on net sales in double-digit percentages of up to mid-twenties.

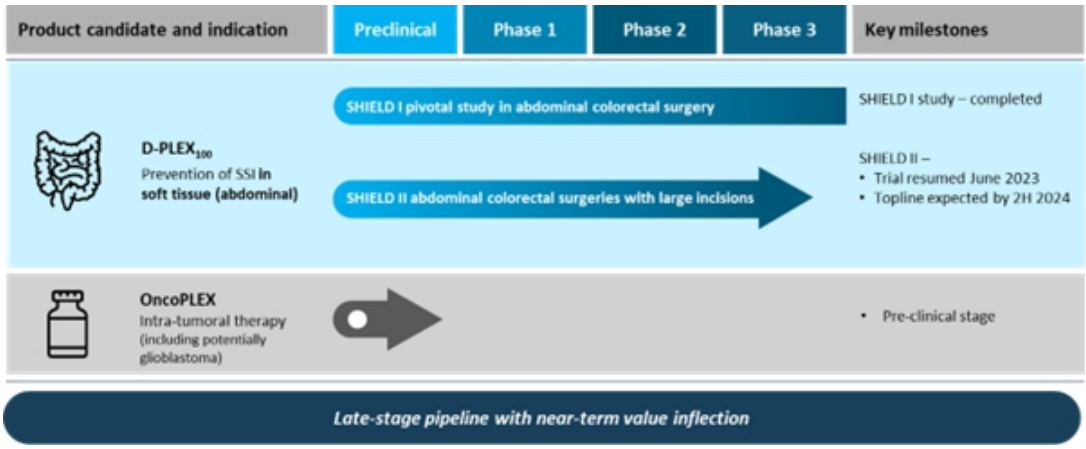
In September 2022, we received confirmation from the EMA that D-PLEX$_{100}$ is eligible for submission of a MAA in the EU under the EMA's centralized procedure. The centralized process eligibility is granted to D-PLEX$_{100}$ under the Therapeutic Innovation criteria which underscores that D-PLEX$_{100}$ potentially provides a new alternative to patients in preventing post abdominal SSIs.

In addition to our lead program D-PLEX$_{100}$, our pipeline includes an early-stage oncology program, OncoPLEX, PolyPid's lead intra-tumoral cancer therapy drug candidate. OncoPLEX utilizes our PLEX technology to provide controlled local exposure to docetaxel, one of the most widely used chemotherapy agents, directly at the tumor site for several weeks. OncoPLEX may be used as an adjuvant and applied at the intra-operative setting post-tumor resection to potentially reduce local tumor reoccurrence, the potential spreading of cancer cells, and ultimately improve the overall survival rate of cancer patients. OncoPLEX may also be used as a neoadjuvant and injected directly into the tumor to potentially reduce tumor volume and improve survival. Local delivery of drugs directly into the tumor site, especially in difficult to access tumors such as in the brain, may significantly improve the clinical outcome. The OncoPLEX intra-tumoral cancer therapy program has been evaluated successfully in various animal tumor models, both as adjuvant and neoadjuvant, including murine colon carcinoma, melanoma and glioblastoma animal models. We are currently finalizing CMC processes for OncoPLEX as we continue our efforts to begin clinical development. The intratumoral injection of the PLEX platform could be used as an interventional oncology treatment with additional chemotherapies or other types of molecules, such as antibodies, bispecific antibodies and nucleic acids.

We intend to expand research collaborations with biopharmaceutical companies leveraging our PLEX Technology. SHIELD I pharmacokinetic data validated the PLEX technology platform in a large clinical trial, providing local and controlled release of drug molecules directly at the disease target organ over a pre-determined period of time. PLEX can be paired with a wide variety of marketed drugs or product candidates, including small molecules, peptides, antibodies and nucleic acid-based drugs. Pairing biopharmaceutical companies approved drugs or product candidates with PLEX has the potential to overcome limitations in terms of efficacy or safety due to their systemic delivery and potentially extend the drug's clinical benefit and lifecycle before and after patent expiration. We intend to further engage in discussions with leading biopharmaceutical companies regarding licensing our PLEX technology for potential application in various therapeutic areas, including oncology.

We continue to invest in our state-of-the-art, sterile manufacturing facility that is cGMP certified by the Israeli Ministry of Health, or IMOH, and inspected by an EU-qualified person enabling cGMP manufacturing of D-PLEX$_{100}$ for our SHIELD II trial. We have recently successfully completed the expansion of our manufacturing capabilities and finalized the commercial process validation. We intend to use this manufacturing capacity as the basis to build a fully integrated biopharmaceutical company, supported by our in-house research and development and regulatory team and our anticipated commercial infrastructure. In September 2023, the IMOH completed a GMP audit of our manufacturing facility without any critical or major findings. The audit was conducted as part of IMOH's routine evaluation of our manufacturing process for D-PLEX$_{100}$. The audit concluded that our manufacturing facility, process and quality systems conform to the requirements of cGMP for medicinal products. This audit is also valid for Europe under the provisions of the Agreement on Conformity Assessment and Acceptance of industrial products, or ACAA, between the EU and Israel. On September 2023 we also successfully completed the production of three process validation batches of D-PLEX$_{100}$ which have started a stability program. This successful production process validation completes a substantial requirement toward our planned submission of D-PLEX$_{100}$'s NDA and MAA regulatory filings.

Our Pipeline



Our PLEX technology consists of a proprietary matrix of several thousand layers of chemically inactive and biocompatible polymers and lipids that physically embed the drug within the layers. A drug stored within the PLEX layers is released over time in a controlled manner and in customizable, predetermined amounts at the local site where it is administered. PLEX technology is designed to protect the embedded medication from the natural enzymes and other biochemicals in the body that would otherwise degrade or alter the drug. Over time, natural hydration in the body disintegrates the layers of PLEX, from the outer layer to the inner layers, which triggers a release of the medicine in an unmodified, active form. We believe that these characteristics may enable our PLEX product candidates to be efficacious using only a small fraction of the medicines required in systemic administration.

We believe our PLEX platform technology may have broad therapeutic application for other localized medical conditions. Because our PLEX technology is designed to be agnostic to the nature and size of the underlying drug, we believe it has the potential to be paired with a wide variety of currently marketed drugs or product candidates in development, including small molecules, peptides, antibodies and other proteins, as well as nucleic acid-based APIs, to create novel therapies in a broad range of locally delivered applications. We are pursuing research and development programs for our PLEX platform in a variety of other potential indications where we have identified a targeted active pharmaceutical ingredient, or API, for use with our PLEX technology, including for the treatment of cancer, inflammation and pain. We will consider licensing rights to our PLEX technology for use with various biologics and small molecules.

As of March 6, 2024, we have 153 issued patents, including utility and composition of matter patents. Additionally, we have two patent applications that have been allowed in the United States and the Philippines, and 19 pending patent applications in the United States, Australia, Brazil, Canada, China, Europe, Hong-Kong, Israel, Japan, Mexico, New Zealand, Singapore, South Korea and Thailand. Our issued patents expire between 2029 and 2035.

State-of-the-Art Manufacturing Facility

We currently lease approximately 22,000 square foot, state-of-the-art, sterile manufacturing facility in Israel to enhance supply chain control, increase our supply capacity and meet clinical demand for our ongoing and planned clinical trials of D-PLEX$_{100}$, as well as for initial commercial demand if D-PLEX$_{100}$ is approved and for manufacturing additional potential future PLEX products. The facility is designed to comply with the FDA's current good manufacturing practice, or cGMP, regulations, and EMA regulations. In 2019, the facility was cGMP certified by the IMOH and inspected by an EU-qualified person, enabling cGMP manufacturing of D-PLEX$_{100}$ for our ongoing and planned clinical trials of D-PLEX$_{100}$. The manufacturing process was scaled up to increase our commercial supply capacity to meet the expected market demand for at least 48 months from product launch. In September 2023, the IMOH completed a GMP audit of our manufacturing facility without any critical or major findings. The audit was conducted as part of IMOH's routine evaluation of our manufacturing process for D-PLEX$_{100}$. The audit concluded that our manufacturing facility, process and quality system conform to the requirements of cGMP for medicinal products. This audit is also valid for Europe under the provisions of the ACAA between the EU and Israel.

Our Strategy

Our goal is to leverage our PLEX technology to develop and commercialize a pipeline of potentially transformative therapies for the local and prolonged delivery of drugs to address diseases with high unmet medical needs. The key elements of our strategy are as follows:

- ***Successfully complete clinical development of D-PLEX$_{100}$ for the prevention of SSIs.*** We currently recruit patients under our SHIELD II trial for the prevention of SSIs in patients undergoing abdominal colorectal surgery with large incisions. As of March 6, 2024, approximately 120 patients were already enrolled. Unblinded interim analysis is planned to be conducted once approximately 400 patients complete their 30-day follow-up, which is expected mid-2024. Top-line results are expected in the second half of 2024. We intend to pursue a broad label for D-PLEX$_{100}$ for the prevention of SSIs, the scope of which will depend on the clinical data generated from our clinical trials and discussions with the FDA and the EMA. We may also seek regulatory approval of D-PLEX$_{100}$ outside of the United States and Europe.

- ***Pursue expedited regulatory pathways for our product candidates.*** We are pursuing expedited pathways to approval for our portfolio of product candidates. PLEX is paired with unmodified FDA- and/or EMA-approved drugs with established clinical safety, efficacy and tolerability. Additionally, the polymers and lipids that we use in PLEX have been used in other medical products that have been approved by the FDA and/or the EMA. Accordingly, we will pursue expedited clinical development and make regulatory submissions for our product candidates, including D-PLEX$_{100}$, that allow us to rely in part on previous findings of safety and efficacy for the API, including the Section 505(b)(2) approval pathway in the United States and the comparable hybrid application pathway in the EU. Further, D-PLEX$_{100}$ has received three QIDP designations from the FDA for the prevention of post-abdominal surgery incisional infection, for the prevention of sternal wound infection post-cardiac surgery and for prevention of post-colorectal SSIs, which will provide an increased level of communication with the FDA during the development process. We also received the FDA's Fast Track Designation for D-PLEX$_{100}$ for topical use for the prevention of post-cardiac surgery sternal infections in November 2018, in July 2020 for the prevention of post abdominal surgery incisional infections and in September 2021 for prevention of post-colorectal SSIs, which could potentially expedite the FDA's review of our NDA. We obtained breakthrough therapy designation in November 2020 for D-PLEX$_{100}$ for the prevention of SSIs in patients undergoing elective colorectal surgery.

- ***Execute on our go-to-market commercial strategy.*** If approved, we intend to launch D-PLEX$_{100}$, and other future product candidates worldwide through partnerships. We believe that partnering with leading pharmaceutical companies focusing on hospital business will be instrumental to maximize our commercial success and launch of any approved products, as we did with the agreement signed with Advanz in August 2022 for the exclusive license, distribution and supply D-PLEX$_{100}$ in the EEA and the United Kingdom. In the United States, we believe that the cost-effectiveness and potential clinical benefits of D-PLEX$_{100}$ will support its commercial launch under existing Medicare rates given the associated mortality, morbidity and cost burden of SSIs and the associated penalties imposed on hospital reimbursement from the CMS. In addition, we believe that there may be opportunities for reimbursement for D-PLEX$_{100}$ under CMS's New Technology Add-on Payment program.

- ***Expand our product pipeline for additional indications using our PLEX technology.*** In addition to the development of D-PLEX$_{100}$ for the prevention of SSIs and OncoPLEX for intra-tumoral treatment of solid tumors, PLEX has the potential for the prevention or treatment of other important, localized medical conditions. We intend to maximize the commercial potential of PLEX by exploring these additional indications, either independently or through collaborations with other biopharmaceutical companies.

- ***Pursue research collaborations with biopharmaceutical companies.*** We believe that our PLEX technology can be paired with a wide variety of marketed drugs or product candidates, including small molecules, peptides, antibodies and nucleic acid-based drugs. Many leading biopharmaceutical companies have marketed drugs or product candidates in development that have limited efficacy or safety due to systemic delivery and owing to potentially poor drug penetration from the blood stream into the needed organ or other target tissues, or viability for systemic administration due to instability, toxicity and cost. Pairing these drugs or product candidates with PLEX has the potential to address these limitations and potentially extend the drug's clinical benefit and lifecycle before and after patent expiration.

- ***Build a fully integrated biopharmaceutical company utilizing our manufacturing facility.*** Our state-of-the-art, sterile manufacturing facility is cGMP certified by the IMOH and inspected by a European Union-qualified person, enabling cGMP manufacturing of D-PLEX$_{100}$ for our ongoing and planned clinical trials in the United States, Europe and Israel. In September 2023, the IMOH completed a GMP audit of our manufacturing facility without any critical or major findings. The audit was conducted as part of IMOH's routine evaluation of our manufacturing process for D-PLEX$_{100}$. The audit concluded that our manufacturing facility, process and quality system conform to the requirements of cGMP for medicinal products. This audit is also valid for Europe under the provisions of the ACAA between the EU and Israel. Our manufacturing facility will serve to enhance supply chain processes, increase our supply capacity and meet clinical demand for our ongoing and planned clinical trials of D-PLEX$_{100}$. We estimate that our facility will meet commercial demand for at least the first 48 months following a commercial launch of D-PLEX$_{100}$, if approved. We intend to use this capacity as the basis to build a fully integrated biopharmaceutical company, supported by our in-house research and development and regulatory team and our anticipated commercial infrastructure. If necessary to meet further commercial demand in the future, we may expand our manufacturing capabilities or employ third-party contract manufacturing organizations.

The Problem: Limitations to Current Drug Delivery Systems

The systemic administration of drugs may have significant disadvantages for the treatment of localized medical conditions in the body, including limited efficacy due to poor penetration from the blood stream into the needed organ or other target tissues and challenges related to sensitivity to blood factors. These limitations are especially challenging for the prevention of SSIs during surgeries, as the surgical incision itself creates an interruption of the blood stream and therefore limits the local concentration of administered prophylactic systemic antibiotic into the surgical site. This limited efficacy often results in the need to use a significantly higher quantity of drugs over a prolonged period of time, which can result in substantial side effects. Additionally, systemic administration can be associated with complexities of drug-drug interactions in the context of polypharmacy for patients with comorbid conditions. In the case of antibiotics, systemic administration results in challenges related to the emergence of antibiotic resistance.

Localized delivery of medications for site-specific conditions may have significant advantages over systemic administration because it has the potential to increase the efficacy and clinical benefit of the treatment. Localized delivery may also reduce the risk of overall toxicity and adverse side effects, improve patient compliance and enable a much lower amount of medicine to be used in treatment. In order to address the limitations of systemic administration to treat localized medical conditions, an effective localized drug delivery system must be able to selectively deliver the needed medication to the specific target site, ensure the appropriate concentration needed and release the active medication in a controlled, consistent method over the entire desired treatment period.

Existing localized treatments, including extended release formulations based on polymer-only or lipid-only technologies, such as liposomal-based technologies, frequently suffer from one or more of the following limitations:

- ***Short release periods.*** An effective regimen to treat serious localized medical conditions, including infections, often needs to span weeks. For example, in the case of post-operative wound management, bacteria have the potential to proliferate in the wound, where blood supply is restricted. Most local delivery systems are able to generate sustained, local concentrations that are effective for only up to several days; however, the post-operative recovery phase may span for a longer period of time.

- ***Lack of controlled drug release rates.*** For a localized delivery system to be effective, it must deliver a non-toxic but adequate and constant dosage of the API to the target site throughout the release period. Current systems, often based only on polymers or only on lipids, have limited ability to control drug release rates. As a result, these systems often release the drug with an initial high burst manner, followed by a rapid decline in the release rate, ultimately generating low local drug concentration. This drug release profile is both less effective than a steadier more controlled delivery approach and may cause safety issues.

- ***Active drug degradation.*** Drugs often need to be isolated from body fluids to prevent rapid degradation and chemical changes to the underlying drug. In order to effectively administer such drugs locally over prolonged periods, the implanted drug reservoir needs to be protected until released, ideally in a non-hydrating form. We are not aware of any biodegradable, localized drug delivery systems in the market that can protect drugs from hydration inside the body over prolonged periods and subsequently release them unaltered in their active forms.

- ***Susceptibility to drug migration.*** Locally administered drugs reservoirs are more effective when they are anchored at the treatment site and unable to move or migrate in the body after application. Many localized delivery systems are susceptible to migration away from the treatment site after application.

- ***Potential chemical modifications to underlying drug.*** Currently developed localized delivery systems can modify or form chemical bonds with the underlying drug, which may alter its mechanism of action, potentially impeding the regulatory process for approval and making development longer and more expensive.

- ***Limited application to different drug types.*** Many localized delivery systems are suited only to a particular drug, or class of drugs, and are therefore limited in their broader clinical scope.

- ***Difficult to use.*** Localized delivery systems may require extensive training in their application and are difficult to use. Improper use can adversely affect the therapeutic benefit and physician acceptance of the product.

These disadvantages are significantly challenging for the management of SSIs, where the controlled and prolonged local delivery of a drug is likely to be more effective in preventing and managing an infection than a release profile of an initial high burst of drug over a shorter duration. While we believe that localized drug delivery systems are well suited for the management of SSIs, it is important for these systems to overcome these limitations in order to change the treatment paradigm for infection management.

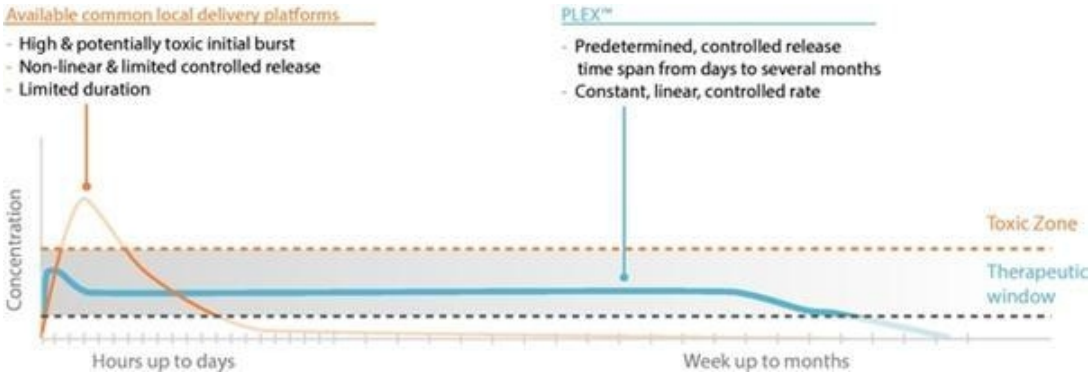
These limitations are particularly problematic in treating infection caused by bacteria that are resistant to currently available treatments, such as *methicillin-resistant Staphylococcus aureus*, or MRSA. The inability to generate a sufficiently high local concentration of a drug for an extended period of time limits the drug's effectiveness in treating antibiotic-resistant bacterial infections.

Our Solution: PLEX Technology

Our PLEX technology is designed to overcome the limitations of both systemic administration and current localized delivery systems. PLEX consists of a proprietary matrix of several thousand alternating layers of chemically-inactive and biocompatible polymers and lipids that physically embed an active medication in a protected reservoir between the layers. The technology is designed to enable localized drug delivery at customizable, predetermined release rates and durations directly at the target site over periods ranging from several days to several months. For example, D-PLEX$_{100}$ consists of approximately ten thousand layers of biodegradable polymers and lipids. Medications stored between the PLEX matrix layers are released over time in a controlled manner and in customizable, predetermined amounts by the gradual disintegration of the layers, from the outer layer to the inner layers. PLEX is designed to protect the embedded drug from the body's natural hydration and enzymes that would otherwise degrade or alter the underlying drug. Over time, natural hydration in the body disintegrates the outer layers of PLEX, which triggers release of the drug in an unmodified active form, similar to continuous direct administration, as illustrated below:

We believe PLEX has a number of key design benefits:

- ***Constant, predetermined drug release rates over prolonged periods.*** PLEX enables the pre-designed constant local release of active medication over a customizable, predetermined period to optimize the drug's clinical impact. This localized, targeted delivery is designed to generate effective and non-toxic concentration of the medications to reach clinical benefits not attainable by the systemic route. The release rate and period can be customized to range from a few days to several months based on the number of layers and the disintegration rate of the layers, as illustrated below:



- ***Direct access to, and penetration of, difficult-to-reach tissue.*** Application of our PLEX product candidates may provide long lasting treatment even in challenging medical conditions or in tissues that are not easily or safely accessible using systemic or topical modalities. This includes surgical sites or other tissues with limited or interrupted blood supply.

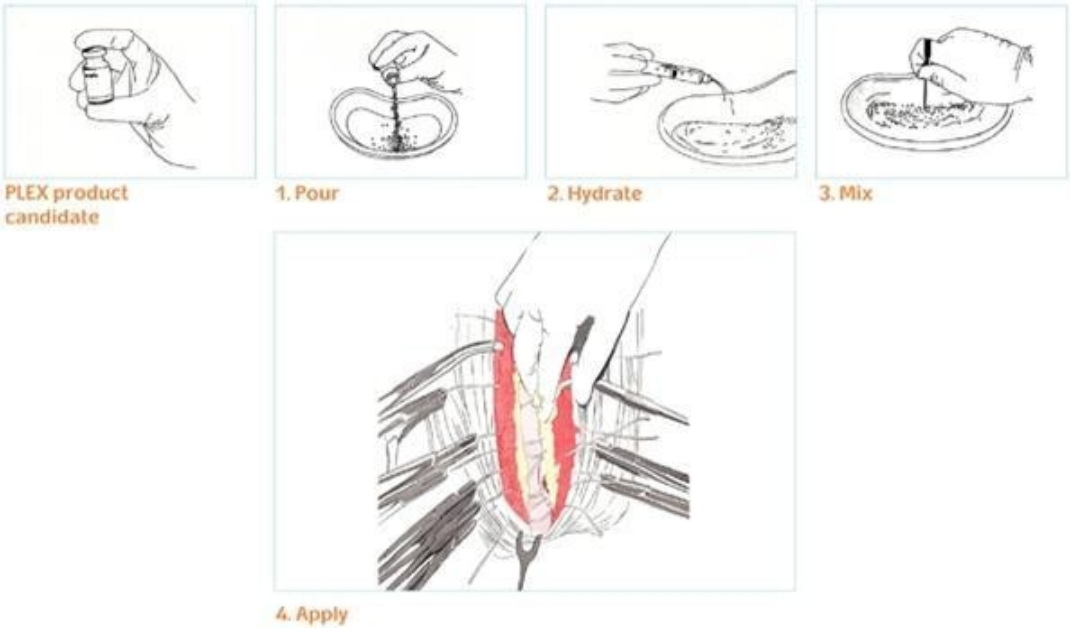
- ***Anchored to the treatment site.*** Due to their particle mass, our product PLEX based candidates remain anchored at the intended treatment site and have not been observed to move or migrate once applied.

- ***Potential for improved drug safety profile.*** Our PLEX product candidates use only a fraction of the drug required in systemic administrations of currently marketed therapies. Furthermore, the drugs in PLEX based products are physically embedded to minimize their exposure to body fluids. Through controlled release, PLEX is designed to generate local drug concentrations that are therapeutically effective but not toxic.

- ***No chemical modification required to the embedded drug.*** PLEX embedding does not require any chemical modifications to the drug, which we believe will streamline our development process by allowing us to rely in part on prior studies of safety and efficacy and maintain the already proven mechanism of action.

- ***Biocompatible.*** The PLEX matrix gradually disintegrates in the body at predetermined rates, eliminating the need for additional medical procedures to remove the medication reservoir once depleted.

- ***Easy to use.*** D-PLEX$_{100}$ is supplied as a sterile powder that can be administered locally as a powder or paste during surgery directly to a variety of tissues and solid organs, as illustrated below. No additional training is required for the surgeon or medical provider.



- ***Broad potential applicability.*** Because PLEX is designed to be agnostic to the nature and size of the underlying drug, and no chemical bonds develop between the embedded medication and the PLEX components, we believe PLEX can be used for the improvement of a wide variety of medicines, including small molecules, peptides, proteins and other nucleic acids-based drugs. In our research and development programs, we have paired PLEX with small molecules, proteins, antibodies, peptides, nucleic acids-based drugs and growth factors.

- ***Efficient and scalable manufacturing process.*** Our PLEX product candidates are manufactured using a scalable process with well-defined operations. We believe that this highly specialized and precisely controlled manufacturing process enables us to manufacture product candidates reproducibly and efficiently for clinical and commercial applications.

Benefits of D-PLEX for the Prevention of SSIs

Doxycycline received FDA approval in 1967 and is on the WHO's Essential Medicines List for drugs deemed to be among the safest and most effective for addressing important public health needs today. Doxycycline has been safely used for decades in millions of patients globally and has the following additional advantages over many other antibiotics:

- broad spectrum of anti-infective activity against both gram-positive and gram-negative bacteria;

- highly effective against *Staphylococcus aureus*, one of the most common bacteria associated with SSIs;

- potent against many MRSA strains; and

- good tissue and cell penetration.

D-PLEX$_{100}$ is designed to overcome the limitations of prophylactic systemic antibiotics in terms of activity and penetration into the surgical site because of the surgical incision that impairs the local vascularization and creates an interruption of the blood stream.

D-PLEX$_{100}$ is designed to prevent SSIs by releasing doxycycline locally to the surgical site at predetermined release rates and durations for thirty days. The plasma concentration of doxycycline following treatment with D-PLEX$_{100}$ is lower than the plasma concentration following the commonly used daily dose of orally administered doxycycline. We believe that this prolonged delivery following a single administration and subsequent high local concentrations of the antibiotic supersedes any existing antibiotic delivery system, and as such may offer advantages over systemic treatments in the prevention of SSIs, including against many antibiotic-resistant bacterial strains. We believe that, by combining doxycycline with PLEX, D-PLEX$_{100}$ has the potential to overcome these limitations and deliver significant advantages in the prevention of SSIs, including:

- localized, targeted delivery of an antibiotic at therapeutically effective concentrations for thirty days;
- significantly lower amounts of drug required, which may improve safety and reduce overall toxicity and adverse side effects due to lower systemic exposure;
- applicability to a wide range of bacteria strains that are considered resistant to commonly used antibiotics, including vancomycin-resistant bacteria, MRSA and doxycycline-resistant bacteria;
- increased penetration and access to the site of infection;
- simplicity of administration during surgery that requires no additional training;
- biodegradability of the PLEX components, such that no further procedures are required to remove the delivery system;
- minimized undesirable changes to the patient's microbiome; and
- improved patient compliance.

D-PLEX$_{100}$ has the potential to positively impact the treatment paradigm for SSIs. For example, we have observed in our clinical trials that surgeons applying D-PLEX$_{100}$ directly to an open wound during an initial surgery avoided repeated surgical interventions to treat an active infection.

Further, we believe D-PLEX$_{100}$ has the potential to treat antibiotic-resistant bacterial infections, where the required concentrations of drugs to overcome the infection cannot be delivered safely via systemic administration. In three investigator-initiated compassionate use cases, patients with severe bone bacterial infections, including MRSA, were treated with D-PLEX$_{100}$ or D-PLEX$_{1000}$, a predecessor product candidate to D-PLEX$_{100}$. After a single application of D-PLEX, the infection was eradicated in all patients. In preclinical studies, we also observed that a single application of D-PLEX$_{100}$ substantially reduced MRSA and vancomycin-resistant bacterial infections in surgical sites. Moreover, because it uses a smaller dose of doxycycline and only applied locally, we believe that D-PLEX$_{100}$ should not contribute to the growing worldwide problem of antibiotic-resistant bacteria.

The Burdens of SSIs

HAIs are infections that patients acquire when receiving medical treatment in a healthcare facility. According to the WHO, HAIs are the most frequent adverse event affecting patient safety worldwide. SSIs are the most common HAI in the United States and occur in approximately 2% to 5% of all patients undergoing inpatient surgery worldwide despite accepted antibiotic strategies intended to prevent infection. However, these figures are likely underestimated for a number of reasons, including surgeon underreporting and negative reimbursement implications, and because approximately 50% of SSIs become evident only after a patient has been discharged. Further, the incidence and morbidity of SSIs may differ based on the surgical procedure performed and underlying patient risk factors, with for instance high SSI rates in abdominal colorectal surgeries.

SSIs prolong patient recovery and cause a substantial increase in the clinical and economic burdens of surgery, due to longer hospital stays, as well as increased costs related to diagnostic tests and management of the infection. Certain patients may require readmission, subsequent surgeries and other interventions, as well as further outpatient care, due to SSIs. According to the WHO, SSIs account for an estimated $10 billion of incremental hospital costs per year in the United States and €11 billion per year in the EU. Directly attributable costs of SSIs range from approximately $11,000 to $26,000 per infection. In more complex infections involving a prosthetic joint or an antimicrobial-resistant organism, the costs per case can exceed $90,000. SSIs are associated with approximately seven to eleven additional post-operative hospital days, and patients with an SSI have a two to eleven times increased risk of death compared to infection-free patients. Following discharge from the hospital, SSI patients may also require healthcare from other community care services, further contributing to the overall economic burden of the infection. The CDC estimates that the financial costs of treating SSIs will continue to increase, both because more surgeries are being performed and because surgical patients present with increasingly complex comorbidities. Moreover, in the United States, CMS tracks SSI rates, particularly those following hysterectomies and colorectal resection surgeries, and are increasingly using these statistics to deny reimbursement claims for certain SSIs or reduce total annual CMS payments for hospitals that CMS deems to not meet certain quality metrics for the prevention of infection. CMS also publishes the SSI incidence rate for hospitals, and, consequently, hospitals have economic and reputational, in addition to human, incentives to prevent SSIs.

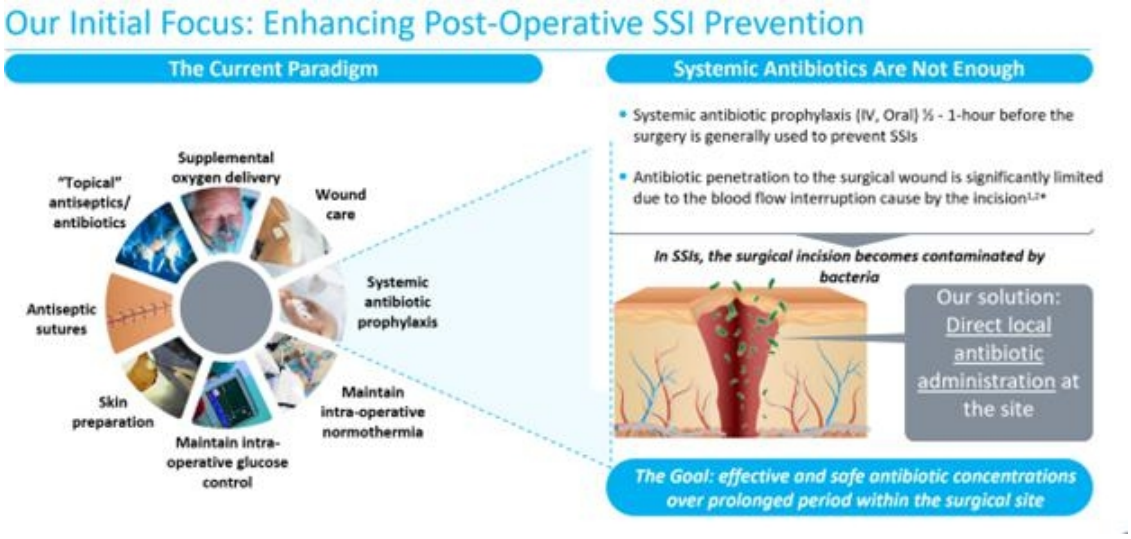


Figure 4: Our Initial Focus: Enhancing Post-Operative SSI Prevention

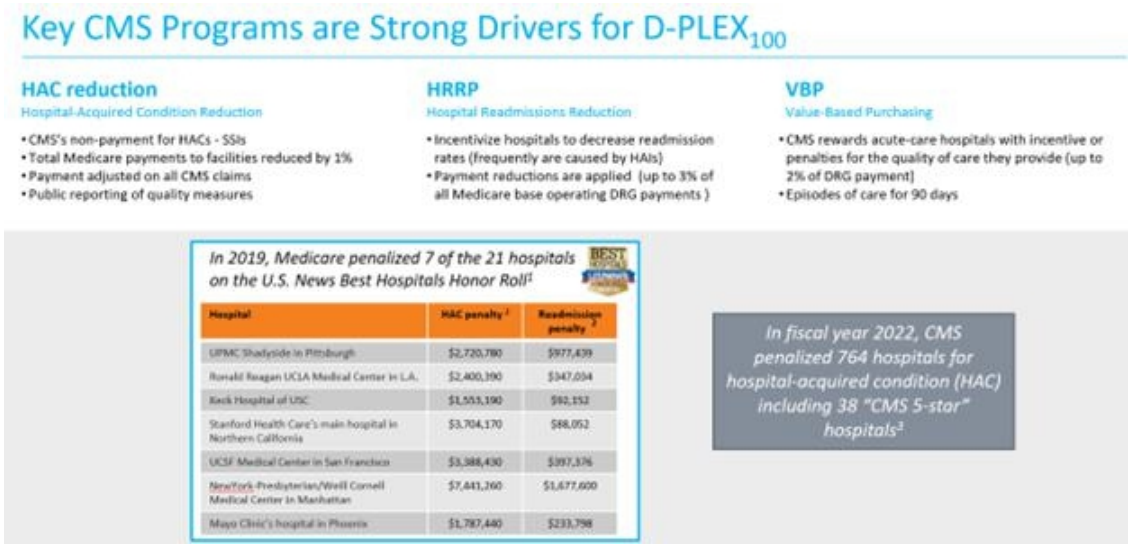


Figure 5: Key CMS Programs are Strong Drivers for D-PLEX$_{100}$

Despite the high incidence of SSIs, a large proportion of SSIs are estimated to be preventable with the use of evidence-based measures. Still, the prevention of SSIs is complex and requires the implementation of a large range of prevention and treatment approaches before, during and after surgery, which renders it difficult to apply in practice. Most significantly, the WHO, CDC and other health organizations recommend the use of prophylactic systemic antibiotics prior to surgery to help prevent SSIs; however, SSIs remain a substantial cause of morbidity, prolonged hospitalization, and mortality. Prophylactic systemic antibiotics also comes with the risk of further development of antibiotic-resistant bacteria. Prophylactic systemic antibiotics may provide adequate serum and tissue concentrations to protect from microbial contamination during the intraoperative period but have limited local bioavailability at the target tissue after the skin incision is closed. Attempts to prolong systemic antibiotic exposure after surgical closure via repeated dosing are ineffective and have been associated with increased adverse events. This is likely due to a combination of vasoconstriction, thrombosis, and the inflammatory response at the wound site, which altogether lead to wound tissue isolation from the vascular system and render additional systemic antibiotics ineffective. An alternative approach may be administering antibiotics locally, which can be released directly at the surgical site for a prolonged period, just before incision closure in the operating room.

Health Economic Benefits of D-PLEX$_{100}$

We believe that D-PLEX$_{100}$, if approved, may provide significant health economic benefits that play an important role in formulary decision making. Members of our management team have experience in applying health economic outcomes research to support the launch of successful commercial products. Our goal is to work directly with hospital customers, group purchasing organizations, integrated health networks, third-party payors, quality improvement organizations and key opinion leaders in the field of SSI prevention to deliver data showing the potential for demonstrable pharmacoeconomic benefits from the use of D-PLEX$_{100}$, if approved.

Reimbursement for surgical procedures is typically capitated or fixed by third-party payors based on the specific surgical procedure performed. However, for many patients undergoing high-risk surgeries or those with co-morbidities, the incidence of SSIs remains high, potentially leading to significant healthcare cost burdens relative to the capitated reimbursement related to prolonged lengths of stay in the hospital, readmissions and additional surgical procedures and other interventions due to the infection. In addition to the direct cost of SSIs, the prolonged length of stay impacts the hospital's capacity and its ability to admit new patients. Furthermore, hospitals continue to focus on quality improvements to reduce SSIs to support optimal reimbursement and reduced penalties under CMS initiatives, such as the Hospital Acquired Condition Reduction Program, Hospital Readmission Reduction Program and the Hospital Value-Based Purchasing Program. Following discharge from the hospital, patients with an SSI may also rely on healthcare from other community care services, which further contributes to the overall economic burden of the infection.

D-PLEX$_{100}$ is designed to be applied directly to the surgical site during the initial surgery and is intended to prevent SSIs and improve associated mortality and morbidity, with potential broader healthcare economic benefits by reducing lengths of stay in the hospital, readmissions and additional surgical and other interventions.

For example, in our Phase 1b/2 clinical trial of D-PLEX$_{100}$ for the prevention of sternal SSIs after cardiac surgery, we observed that patients treated with D-PLEX$_{100}$ plus the SoC had a 67% reduction in sternal wound discharge within 90 days post-surgery, as compared to the control arm. We also conducted a post-hoc analysis, which showed an 85% reduction in patients who were treated with intravenous antibiotics due to sternum wound discharge within 90 days post-surgery, as compared to the control arm.

We intend to complete pivotal Phase 3 trial in abdominal (soft tissue). In such trial, we plan to evaluate health economic outcomes in order to generate further evidence to potentially support approval by the FDA and EMA and, if D-PLEX$_{100}$ is approved, broad adoption among healthcare providers and third-party payors. We intend to further support any such data with publications and post-marketing studies.

Our D-PLEX$_{100}$ Market Opportunity

We are initially focused on developing D-PLEX$_{100}$ for the prevention of SSIs, where we believe there is a high unmet medical need, especially in surgeries that are at high-risk for infection or infection-related complications. Further, patients with co-morbidities, including those who are diabetic, obese, smokers, immunocompromised, aged 60 or over and those who are undergoing surgeries with a longer duration or a lengthy surgical incision, are particularly at risk for SSI-related complications, even if they are not undergoing high-risk surgeries. We believe that D-PLEX$_{100}$, if approved, also has the potential to address the needs of these patients with increased SSI risk factors.

SSIs in Soft Tissue Surgeries

SSIs are one of the most frequent complications in abdominal surgeries, and they represent a significant cause of mortality and morbidity. SSIs occur in approximately 5% to 30% of soft tissue surgeries, including approximately 10% to 15% of open abdominal surgeries, which represent the majority of the "Selected Gastrointestinal Surgeries" below. Patients undergoing colorectal surgeries are at particularly high risk of developing SSIs because of the high risk of additional bacterial contamination originating from the operated gastrointestinal organs. Abdominal SSIs are associated with an average of 7-11 additional post-operative hospital days. Patients undergoing abdominal surgery and that are subjected to an SSI are at greater risk of additional complications such as hernias, which can significantly affect health outcomes and require additional corrective surgery.

The table below provides the estimated sizes of our soft tissue surgery addressable market opportunity in selected gastrointestinal surgeries and selected gynecological and urologic surgeries in the United States and the EU-5, which, for purposes of the following data, includes France, Germany, Italy, Spain and the United Kingdom based on the number of procedures performed in 2019 according to IQVIA database as well as the rest of the world, or ROW, which, for purposes of the following data, includes India, China, Brazil and Japan, based on the number of procedures performed in 2017, according to a study we commissioned from Life Science Intelligence, Inc.

	Number of Surgeries
Selected Gastrointestinal Surgeries	
United States (2019)	4,420,605
EU-5 (2019)	3,110,556
ROW (2017)	4,789,800
Total Gastrointestinal Surgeries	12,320,961
Selected Gynecological and Urologic Surgeries	
United States (2019)	2,445,405
EU-5 (2019)	1,022,218
ROW (2017)	827,200
Total Gynecological and Urologic Surgeries	4,294,823

SSIs in Bone Surgeries

In the context of cardiac surgeries, SSIs can occur in 5% to 8% of procedures but carry a mortality rate of up to 40% for deep sternal wound infections, which are more difficult to treat than superficial infections. Deep sternal wound SSIs are associated with an average of 35 post-operative hospital days, compared with a mean of 11 days for infection-free patients. The cost of care for a patient that develops a deep sternal wound SSI can be as much as three times greater than the cost of care for an infection-free patient.

In the context of orthopedic surgeries, SSIs can occur in 0.5% to 4.0% of primary hip, knee and spine surgery and in 10% to 15% of general trauma and open fracture surgery. Orthopedic SSIs are difficult to treat and associated with lifelong infection recurrence risk of 10% to 20%, including MRSA infections. Further, bone healing may also be impaired, which can result in disabling complications, including amputation. Orthopedic SSIs have been estimated to prolong total hospital stay by a median of two weeks per patient, approximately double readmission rates and increase healthcare costs by more than 300% compared to infection-free patients.

The table below provides the estimated sizes of our bone surgery addressable market opportunity in open heart surgeries and selected orthopedic surgeries, including both primary and revision knee and hip replacements, open fractures and spine fusions, in the United States and the EU-5 based on the number of procedures performed in 2019 according to IQVIA database as well as the ROW, based on the number of procedures performed in 2017, according to a study we commissioned from Life Science Intelligence, Inc.

	Number of Surgeries
Open Sternum Surgeries	
United States (2019)	474,968
EU-5 (2019)	346,331
ROW (2017)	441,000
Total Sternum Surgeries	1,262,299
Selected Orthopedic Surgeries	
United States (2019)	4,824,213
EU-5 (2019)	4,278,020
ROW (2017)	3,922,000
Total Orthopedic Surgeries	13,024,213
TOTAL D-PLEX$_{100}$ global addressable market	**30,902,296**

Clinical Development of D-PLEX$_{100}$

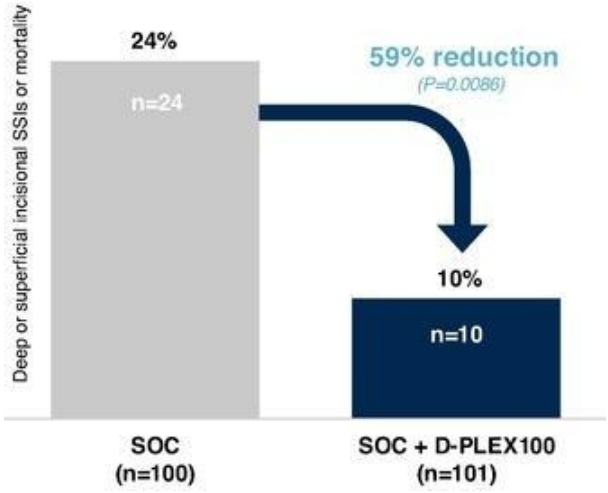
Completed Clinical Trials of D-PLEX$_{100}$ for the Prevention of SSIs

Phase 2 Clinical Trial for D-PLEX$_{100}$ in the Prevention of SSIs after Abdominal (Soft Tissue) Surgery

In October 2019, we reported topline data from our Phase 2 clinical trial of D-PLEX$_{100}$ for the prevention of superficial and deep incisional SSIs after elective abdominal colon surgery involving resection. This prospective, multicenter, randomized, controlled, single-blind, two-arm clinical trial of 201 patients assessed the safety and efficacy of D-PLEX$_{100}$ with the SoC, a prophylactic antibiotic administered intravenously prior to surgery, compared to a SoC control arm. The primary endpoint was the combination of incisional SSIs and mortality rate as measured by the number and proportion of subjects with either an SSI event, as determined by a blinded and independent adjudication committee, or mortality for any reason within 30 days post-surgery. All subjects were followed 60 days post-surgery for the assessment of safety.

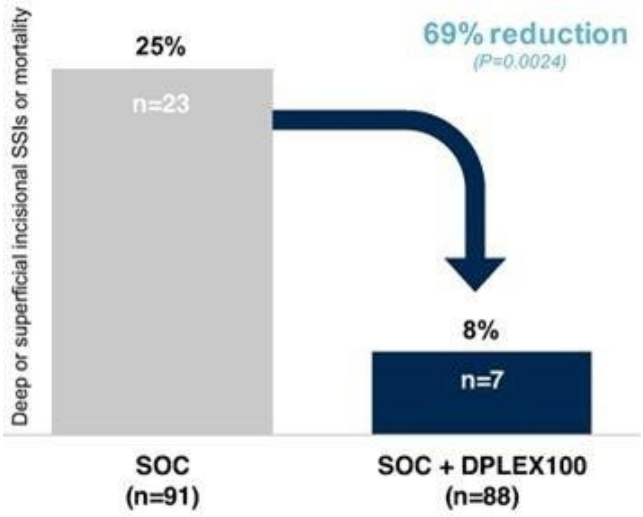
We enrolled 201 patients between the ages of 19 and 92, with a median age of 64, who underwent surgery at eight sites in Israel between October 2018 and August 2019, and 101 patients were randomly assigned to receive D-PLEX$_{100}$. Of these patients, 74% underwent surgery for cancer and 13% for treatment of Crohn's disease, and 65% of the surgeries were minimally invasive (laparoscopies) and 35% were open surgeries (laparotomies). The treatment and control arms were balanced across patient baseline characteristics such as age, sex and BMI, reason for the surgery and type of surgery performed.

Patients treated with D-PLEX$_{100}$ had a statistically significant reduction of 59% (p=0.0086) in deep or superficial incisional SSIs or mortality for any reason within 30 days of surgery, which was the primary endpoint for the trial, as compared to patients who received the SoC as illustrated below.



* A result is considered to be statistically significant when the probability of the result occurring by random chance, rather than from the efficacy of the treatment, is sufficiently low. The conventional method for determining the statistical significance of a result is known as the "p-value," which represents the probability that random chance caused the result (e.g., a p-value = 0.01 means that there is a 1% probability that the difference between the control group and the treatment group is purely due to random chance). Generally, a p-value less than 0.05 is considered statistically significant.

In addition, in the 179 patients who completed the trial without any major protocol deviations, patients treated with D-PLEX$_{100}$ achieved a statistically significant reduction of 69% (p=0.0024) in the primary endpoint events of deep or superficial incisional SSIs or mortality for any reason within 30 days of surgery as compared to patients who received the SoC, as illustrated below. Two patients in the control arm developed deep SSIs, as compared to no patients in the treatment arm.



Further, there was a statistically significant difference (p=0.0290) in patient deaths within 60 days of surgery, with no deaths observed in the D-PLEX$_{100}$ treatment arm as compared to five deaths observed in the standard-of-care arm.

D-PLEX$_{100}$ was observed to be generally well tolerated, with no confirmed drug-related SAEs, and did not increase wound healing impairment at the incision site as compared to the control arm. There were eight treatment emergent adverse events, or TEAEs, in eight patients treated with D-PLEX$_{100}$ that were determined by the blinded investigator to be possibly drug-related, as illustrated below, versus 18 TEAEs observed in 13 patients in the control arm. Patients in the treatment arm also had 15 post-operative wound infection AEs, as compared to 23 in the control arm.

	D-PLEX$_{100}$ Arm (N=99)	**Control Arm (N=100)**
Total Number of Possibly-Related TEAEs	**8**	**18**
Number of Patients with at Least One Possibly-Related TEAE	**8 (8.0)%**	**13 (13.1)%**
General disorders and administration site conditions	4 (4.0)%	3 (3.0)%
Infections and infestations	2 (2.0)%	10 (10.0)%
Injury, poisoning and procedural complications	1 (1.0)%	0 (0.0)%
Nervous system disorders	0 (0.0)%	1 (1.0)%
Skin and subcutaneous tissue disorders	0 (0.0)%	2 (2.0)%
Surgical and medical procedures	1 (1.0)%	0 (0.0)%
Vascular disorders	0 (0.0)%	1 (1.0)%

Further, patients in both the treatment arm and the control arm had a 4% rate of wound healing impairment, suggesting that D-PLEX$_{100}$ did not increase wound healing impairment. We also evaluated patients using the ASEPSIS scale, a common method of assessing wound healing based on the need for additional treatment, the presence of serious discharge, skin redness and/or drainage, the separation of deep tissue, the isolation of bacteria and the duration of inpatient stay. Patients treated with D-PLEX$_{100}$ had lower average and cumulative ASEPSIS assessment scores than patients in the control arm.

More than 70% of the bacteria strains isolated from patients' SSIs were resistant to more than one type of commonly used antibiotics, with more than 60% considered multidrug resistant bacteria.

Patient pharmacokinetic data collected from treated patients showed evidence of D-PLEX$_{100}$-released doxycycline for approximately 30 days.

Phase 1b/2 Clinical Trial for D-PLEX$_{100}$ in the Prevention of Sternal SSIs after Cardiac Surgery

In January 2018, we reported data from our Phase 1b/2 clinical trial of D-PLEX$_{100}$ for the prevention of sternal SSIs in patients undergoing cardiac surgery through median sternotomy. This two-part trial was conducted in 81 patients at four sites in Israel, with a six-month safety follow-up period. An independent, blinded adjudication committee reviewed all patients with an SSI as identified by the principal investigator.

The first part was an open label, single arm trial of 20 patients who received D-PLEX$_{100}$ together with the SoC, which generally consists of a systemic antibiotic given within one hour prior to surgery. Based on feedback from the FDA, the second part of the clinical trial was designed as a randomized and single-blinded trial of 61 patients, divided in a two-to-one ratio between treatment and control arms. This trial was not powered for statistical significance. One arm received D-PLEX$_{100}$ and the SoC, and the second arm received the SoC alone. One patient randomized to the standard-of-care arm received D-PLEX$_{100}$, and two patients randomized to the D-PLEX$_{100}$ treatment group did not receive the study drug.

None of the 58 patients treated with D-PLEX$_{100}$ and the SoC had a sternal infection within 90 days post-surgery, which was the primary endpoint of the trial, as compared to one patient in the group treated with the SoC alone, representing 4.3% infection rate. According to recent literature, the expected infection rate for patients receiving the SoC alone is 5% to 8%.

In patients treated with D-PLEX$_{100}$ plus the SoC, we observed a 67% reduction in the number of patients with sternal wound discharge within 90 days post-surgery, as compared to the control arm. We also conducted a post-hoc analysis, which showed an 85% reduction in patients who were treated with intravenous antibiotics due to sternum wound discharge within 90 days post-surgery, as compared to the control arm.

D-PLEX$_{100}$ was observed to be generally well tolerated, with no drug-related SAEs and no drug-related wound healing issues at the incision site. Patient pharmacokinetic data collected from treated patients showed evidence of D-PLEX$_{100}$-released doxycycline for approximately 30 days.

Phase 3 Clinical Trials of D-PLEX$_{100}$

Phase 3 Clinical Trial for the Prevention of SSIs after Abdominal (Soft Tissue) Surgery

Following our end of Phase 2 meeting with the FDA in February 2020, we initiated two Phase 3 clinical trials of D-PLEX$_{100}$ for the prevention of SSIs after abdominal (soft tissue) surgery. In May 2021, the FDA agreed in a Type B meeting that a single pivotal Phase 3 study is sufficient, provided the study results are adequate, for potential approval of a D-PLEX$_{100}$ NDA for the prevention of SSIs in colorectal surgery. We initiated the first Phase 3 trial (SHIELD I) in this indication in Israel in the third quarter of 2020, with additional sites in the United States and Europe. We also initiated the second Phase 3 trial (SHIELD II) in December 2020. Both trials are designed to be prospective, multinational, multicenter, randomized, controlled, two-arm, double-blinded trials to evaluate the efficacy and safety of D-PLEX$_{100}$ in combination with the SoC, which includes a prophylactic antibiotic administered prior to surgery, in patients aged 18 years and older at screening, undergoing an elective colorectal surgery involving colon or rectal resection and with at least one incision measuring greater than 7 centimeters (SHIELD II) or greater than 10 centimeter (SHIELD I).

In September 2022, we announced top-line results from the SHIELD I Phase 3 study of D-PLEX$_{100}$. SHIELD I was a prospective, multinational, randomized, double-blind Phase 3 trial designed to assess the efficacy and safety of D-PLEX$_{100}$ administered concomitantly with SoC compared to a SoC alone arm, in the prevention of post-abdominal surgery incisional infection. The primary endpoint of the trial was the combination of incisional SSIs and mortality as measured by the proportion of subjects with either an SSI event, as determined by a blinded and independent adjudication committee, re-interventions due to SSIs or mortality for any reason within 30 days post-surgery. A total of 977 patients were randomized into the study, consisting of 488 subjects in the D-PLEX$_{100}$ treatment arm and 489 patients in the control arm. SHIELD I study did not achieve its primary endpoint of reduction in SSIs, re-interventions due to SSIs and mortality: in the ITT population, the local administration of D-PLEX$_{100}$ and SoC (n=485) resulted in a decrease in the primary endpoint of 23 percent compared to SoC alone (n=489) (p=0.1520). That said, in a pre-specified subgroup ITT analysis requested by the FDA of a total of 423 subjects with large incisions (>20 centimeters), the local administration of D-PLEX$_{100}$ resulted in a significant reduction of 54 percent in the primary endpoint, compared to SoC alone (p=0.0032). Within the first 30 days post-surgery, SSIs decreased from 9.7% in the SoC treatment arm (n=211), as compared to 4.4% in the D-PLEX$_{100}$ treatment arm (n=212). In addition, SHIELD I study also showed a 34% reduction in the primary endpoint in patients with one or more personal risk factors (post hoc analysis; p=0.047; n=680) compared to SoC. Together, these results suggest potential prophylactic efficacy when D-PLEX is administered concomitantly with systemic antibacterial prophylaxis in patients with increased SSI risk factors, whether procedural or patient-specific comorbidities. Patients with either of these risk profiles are readily identifiable by the surgeon in the pre- and intra-operative periods, offering the option to apply D-PLEX$_{100}$ after fascial closure but before skin closure. The SHIELD I study demonstrated a good safety profile of D-PLEX$_{100}$: the overall incidence of TEAEs was similar between study arms with numerically lower incidences of severe and serious TEAEs, and any TEAEs requiring surgical reinterventions in the D-PLEX arm compared to the SoC arm.

In November 2022, we provided the FDA with available data from the SHIELD I study as part of a Type D meeting request. Following positive Type D meeting communication with the FDA which took place in January 2023 on the SHIELD I Phase 3 data, we have a clear regulatory pathway toward a potential NDA submission. Based on the data, particularly the 54% reduction observed in the primary endpoint in complex surgeries in a pre-specified subgroup analysis of patients with large open incisions compared to SoC (p=0.0032, n=423), the FDA acknowledged that the SHIELD I results may provide supportive evidence on this population and recommended that we conduct an additional study to support a potential NDA submission. The FDA stated that the ongoing SHIELD II study, which as of the date of the Type D meeting communication, had enrolled over 200 patients, including approximately 40 patients with the appropriate large open surgical incisions, could potentially serve as such a study. The FDA also recognized that D-PLEX$_{100}$'s proposed indication is for the prevention of infection and has the potential for wide use.

In March 2023, we received feedback in a national scientific advice meeting from the Swedish MPA similar to the Type D meeting feedback previously received from the FDA.
Swedish MPA recommended that we confirm the results with an additional Phase 3 study to support a MAA submission and confirmed that clinical safety data obtained to date in abdominal surgery studies is sufficient for a MAA submission.

In May 2023, the FDA agreed to our SHIELD II Phase 3 trial design. SHIELD II is a prospective, multinational, randomized, double blind Phase 3 trial designed to assess the efficacy and safety of D-PLEX$_{100}$ administered concomitantly with SoC, compared to SoC alone arm, in the prevention of post abdominal-surgery incisional infection in patients undergoing surgeries with incisions greater than 20 cm. The primary endpoint of the trial is measured by the proportion of subjects with either an SSI event as determined by a blinded and independent adjudication committee, reintervention, or mortality for any reason within 30 days post-surgery. Patient safety will be monitored for an additional 30 days. The trial enrolls patients in centers in the United States, Europe and Israel.

We resumed recruitment of patients in SHIELD II in June 2023. As of March 6, 2024, approximately 120 patients were already recruited. Unblinded interim analysis is planned to be conducted once approximately 400 patients complete their 30-day follow-up, which is expected mid-2024. Top-line results are expected in the second half of 2024.

Phase 3 Clinical Trial for the Prevention of Post-Cardiac Sternal (Bone) SSIs

In December 2019, we initiated a potentially pivotal Phase 3 clinical trial of D-PLEX$_{100}$ for the prevention of post-cardiac sternal (bone) SSIs, and we enrolled the first patient in February 2020. We have paused enrollment in this trial. We are currently focusing on our SHIELD II clinical trial, which we believe has the potential to serve as the basis for an NDA. We are currently evaluating next clinical steps for an open-heart surgery trial, while we ensure that the SHIELD II trial continues to progress as planned, and intend to submit the bone surgery data as a supplement after the approval of the NDA for abdominal (soft tissue) surgery.

Additional Clinical Data in Support of D-PLEX$_{100}$

We completed a clinical trial of the safety and efficacy of D-PLEX$_{1000}$, a predecessor product candidate to D-PLEX$_{100}$, for the prevention of infection in contaminated bone following open tibia fractures in 51 patients. Given that D-PLEX$_{1000}$ is another product candidate from the D-PLEX family, we believe these clinical trial results may also be relevant to the clinical development profile of D-PLEX$_{100}$. At the six-month follow-up period, patients treated with D-PLEX$_{1000}$ with the SoC had no infections or infection-related bone morbidities, including non-union of the bone, following surgery, as compared to 11.1% of the patients treated only with the SoC. D-PLEX$_{1000}$ was observed to be generally well tolerated, with no drug-related AEs.

We also conducted two pilot clinical trials of D-PLEX$_{1000}$ in a total of 19 patients with infected open long bone fractures. In these trials, patients treated with D-PLEX$_{1000}$ with the SoC had no bone infections at the treatment site in the six months following treatment. In contrast, according to recent literature the expected infection rate for patients receiving the SoC alone is 7% to 19%. Additionally, at the six-month follow up date, no deaths, amputations or drug-related SAEs were observed in the treatment arms.

We do not plan to pursue further independent development of D-PLEX$_{1000}$, as we believe the prevention of SSIs in the orthopedic market can be adequately addressed by D-PLEX$_{100}$.

OncoPLEX - Preclinical Development Program for Cancer

In addition to our lead program D-PLEX$_{100}$, our pipeline includes an early-stage Oncology program, OncoPLEX, PolyPid's lead intra-tumoral cancer therapy drug candidate. OncoPLEX utilizes PLEX technology to provide controlled local exposure to docetaxel, one of the most widely used chemotherapy agents, directly at the tumor site for few weeks to potentially reduce local tumor reoccurrence, the potential spreading of cancer cells, and ultimately improve the overall survival rate of cancer patients. Local delivery of drugs directly into the tumor site, especially in difficult to access tumors such as in the brain, may significantly improve the clinical outcome.

In December 2020, we announced positive preclinical data in a syngeneic mouse model for solid tumors of colon carcinoma using cancer cells highly resistant to docetaxel. A single local application of OncoPLEX at the intra-operative setting post tumor resection showed improved overall survival and significantly less tumor recurrence, compared to the group treated with six subsequent cycles of systemic docetaxel treatment with 2-4 days gap between cycles. In addition, reduced systemic toxicity was demonstrated following the application of OncoPLEX compared to systemic docetaxel treatment.

In September 2021 we announced positive preclinical data of Intra-tumoral OncoPLEX in Brain Cancer. We identified brain tumors as the initial target indication for OncoPLEX because there is currently almost no meaningful chemotherapeutic treatment option for brain tumors, primarily due to the limited ability of chemical agents to penetrate the blood-brain barrier. Due to the localized and prolonged nature of OncoPLEX, we believe it will be highly beneficial compared to systemic treatments, as well as the currently available local treatment, in these devastating tumors that often cannot be fully resected surgically. OncoPLEX was evaluated for tumor growth and survival in two GBM animal models. Key results included:

- OncoPLEX induced strong inhibition of tumor growth and recurrence in a partially resected human glioblastoma subcutaneous mouse model. A single local OncoPLEX application induced 98% tumor growth inhibition (day 41 post operation) compared to the untreated control ($p<0.001$), and 66% compared to multiple injections of systemic chemotherapy treatment arm ($p=0.0165$). The day 41 survival rate for OncoPLEX was much higher than the systemic treated mice, or untreated with 60%, 20%, and 10% survival, respectively.

- OncoPLEX was also tested in a GBM brain rat model. OncoPLEX, applied locally next to the non-resected tumor in the brain, showed a 40% survival rate at day 23 following the beginning of treatment, as compared to a 0% survival rate in the standard systemic treatment arm (Temozolomide 33.5 mg/kg, 5 treatment days), the placebo arm (OncoPLEX without Docetaxel) and in the untreated control arm. Only OncoPLEX significantly enhanced the overall survival compared to both the placebo arm and to the untreated arm ($p<0.02$). Local application of OncoPLEX in a rat brain model showed good safety profile at the different doses studied.

- Dose response was demonstrated for OncoPLEX in the different animal models.

We conducted in November 2021 a successful Pre-IND meeting with the FDA supporting a Phase 1/2 clinical trial of OncoPLEX as a potential part of first-line combination therapy for patients newly diagnosed with GBM.

In February 2024, we announced that we generated new preclinical data showing that OncoPLEX single intratumoral injection significantly reduced tumor growth and increased survival in two well established and commonly used tumor animal models: murine melanoma and murine colon carcinoma.

Future Development of PLEX in other Medical Applications

Our PLEX platform technology may have broad applications for other localized medical conditions other than the prevention of SSIs. We have conducted research and development for our PLEX platform in a variety of potential indications, including for the treatment of infection, cancer, inflammation and pain.

PLEX for Other Applications

In our research and development programs, we have paired PLEX with small molecules, proteins, antibodies, peptides and nucleic acids-based drugs. We continue to evaluate these research and development programs for potential development by us or in collaboration with leading biopharmaceutical companies.

Competition

The biopharmaceutical industry is intensely competitive and subject to rapid and significant technological change. Our potential competitors include large and experienced companies that have significant competitive advantages over us, such as greater financial, research and development, manufacturing, personnel and marketing resources, greater brand recognition, and more experience and expertise in obtaining marketing approvals from the FDA and foreign regulatory authorities. These companies may develop new drugs to treat the indications that we target or seek to have existing drugs approved for use in the indications that we target.

These potential competitors may therefore introduce competing products without our prior knowledge and without our ability to take preemptive measures in anticipation of their commercial launch. Competition may increase further as a result of advances in the commercial applicability of technologies and greater availability of capital for investment in this industry. Our competitors may succeed in developing, acquiring or licensing on an exclusive basis, products that are more effective, easier to administer or less costly than our product candidates.

The current SoC for preventing SSIs involves the implementation of a range of treatment and prevention measures before, during and after surgery, including prophylactic antibiotic administration, antiseptic measures and wound care. We anticipate that D-PLEX$_{100}$, if approved, could be used as a complementary part of many surgical protocols, rather than competitive, in addition to the current SoC for the prevention of SSIs. In addition, we are aware of other approved treatments that can be applied locally during or after surgery for the prevention of SSIs, including triclosan-coated antiseptic sutures, negative wound pressure therapy, the CleanCision wound retraction and protection system and a resorbable gentamicin-collagen sponge, which is approved in the EU and Canada. In orthopedic surgeries, we are aware of approved treatments for localized SSI prevention that pair bone cement or bone graft substitutes premixed with an antibiotic as developed by companies such as BoneSupport AB (STO: BONEX) or Biocomposites Ltd. Further, we are aware of prior clinical development of a vaccine against *Staphylococcus aureus* SSIs (Pfizer) that was halted due to lack of efficacy.

We may also face competition from companies that are developing localized extended release delivery systems, including, among others, Pacira Pharmaceuticals, Inc., Heron Therapeutics, Inc., Urogen Pharma Ltd. and LIDDS AB.

Manufacturing

Our PLEX product candidates are manufactured using a scalable self-assembly process with well-defined operations. This highly specialized and precisely controlled process enables us to manufacture product candidates consistently and efficiently for clinical and commercial applications. We have constructed a state-of-the-art, sterile manufacturing facility that is designed to be cGMP compliant for the production of our product candidates adjacent to our administrative headquarters in Petach Tikva, Israel. The manufacturing facility is cGMP certified by the IMOH and inspected by a European Union-qualified person, enabling cGMP manufacturing of D-PLEX$_{100}$ for our ongoing and planned clinical trials of D-PLEX$_{100}$.

We estimate that our facility will meet commercial demand for at least the first 48 months following a commercial launch of D-PLEX$_{100}$, if approved. We intend to use this capacity as the basis to build a fully integrated biopharmaceutical company, supported by our in-house research and development team and our anticipated commercial infrastructure. We have already started planning expansion of our manufacturing capabilities or employment of third-party contract manufacturing organizations to meet further commercial demand in the future.

In September 2023, the IMOH completed a GMP audit of our manufacturing facility without any critical or major findings. The audit was conducted as part of IMOH's routine evaluation of our manufacturing process for D-PLEX$_{100}$. The audit concluded that our manufacturing facility, process and quality system conform to the requirements of cGMP for medicinal products. This audit is also valid for Europe under the provisions of the ACAA between the EU and Israel.

Additionally, we rely on third parties as needed for the supply of certain raw materials necessary to manufacture our product candidates.

Marketing, Sales and Distribution

Given our current stage of development, we have limited internal marketing, sales and distribution capabilities. We have established a wholly-owned United States subsidiary, PolyPid Inc., a Delaware corporation with operations in New Jersey, to support our potential commercialization and business development efforts in the United States and our clinical development program. If approved, we intend to launch D-PLEX$_{100}$, and other future product candidates, worldwide through partnerships. We believe that pursuing commercialization relationships, including strategic alliances and licensing, with leading pharmaceutical companies having hospital business equipped to market and sell our products through their well-developed sales, marketing and distribution organizations will be instrumental to maximize our commercial success and launch of any approved products. In the United States, we believe that the cost-effectiveness and potential clinical benefits of D-PLEX$_{100}$ will support its commercial launch under existing Medicare rates given the associated mortality, morbidity and cost burden of SSIs and the associated penalties imposed on hospital reimbursement from the CMS. In addition, we believe that there may be opportunities for reimbursement for D-PLEX$_{100}$ under CMS's New Technology Add-on Payment program.

On August 2, 2022, we entered into a license, distribution and supply agreement with Advanz, pursuant to which we granted the exclusive right to Advanz to market, advertise, promote, distribute, offer for sale, sell and import our product D-PLEX$_{100}$ for the prevention of (i) post abdominal surgery incisional infection and/or (ii) post cardiac surgery sternal infection in the EEA and the United Kingdom. The term of the license is until the later of December 31, 2035, or 10 years after the first commercial sale of D-PLEX$_{100}$. The license is also terminable by either party under certain limited circumstances.

Under the terms of the agreement, we received an upfront payment immediately upon signing and are entitled to additional development-related milestones for a total of up to €23 million (approximately $24.8 million) as follows: upfront payment of €2.5 million (approximately $2.6 million), up to €12.25 million (approximately $13.2 million) contingent upon positive top-line results of our SHIELD I Phase 3 study and additional development-related milestones of up to €8.25 million (approximately $8.9 million). Upon commercialization, we will receive up to €87 million (approximately $94 million) in sales-related milestones. In addition, we will also supply D-PLEX$_{100}$ to Advanz for a transfer price and will be entitled to royalties on net sales in double-digit percentages of up to mid-twenties.

In addition, we may out-license some or all of our patent rights to more than one party to achieve the fullest development, marketing and distribution of any products we develop.

Intellectual Property

Our patent estate includes patents and patent applications with claims directed to our PLEX technology platform, D-PLEX$_{100}$ product candidate and claims for potential future product candidates. As of March 6, 2024, our patent estate includes 153 issued patents, including utility and composition of matter patents, two allowed patent applications, 19 pending patent applications for our product candidates and methods of treatment.

Our patents and patent applications primarily relate to a polymer-lipid-based platform for sustained release of an active pharmaceutical agent at a target site. We have 36 issued patents in various countries worldwide related to compositions for sustained release of an API, including a lipid-saturated matrix formed from a biodegradable polymer, as well as methods for producing such compositions and methods of treatment through the use of such compositions. We also have 18 issued patents in various countries worldwide related to compositions for sustained release of an API including a lipid-saturated matrix formed from a non-biodegradable polymer, as well as methods for producing such compositions and methods of treatment through the use of such compositions. We also have 12 issued patents in various countries worldwide related to compositions for sustained release of a nucleic agent including a lipid-saturated matrix formed from a biodegradable polymer, as well as methods for producing such compositions and methods of treatment through the use of such compositions. We also have an issued Australian patent related to compositions for sustained release of peptidic molecules, as well as methods for producing such compositions and methods of treatment through the use of such compositions. We also have 26 issued patents and one pending patent application in various countries worldwide related to methods for treating bone fractures through the use of biocompatible fillers coated with sustained release antibiotic compositions, along with 17 issued patents in various countries worldwide related to methods for treating peri-implantitis and 43 issued patents, two allowed and five pending patent applications in various countries worldwide related to methods for preventing and treating SSIs through similar processes. We also have 13 pending patent applications related to compositions and methods for the treatment of solid tumors. Our patent estate includes 11 issued United States patents as well as issued patents and/or pending patent applications in Australia, Brazil, Canada, China, the Eurasian Patent Organization, the European Patent Office, Hong-Kong, India, Israel, Japan, Mexico, New Zealand, the Philippines, Singapore, South Africa, South Korea, Thailand and the United States. Our issued patents are expected to remain in effect between 2029 and 2035.

In addition to patents, we have eight registered trademarks. “BonyPid” is registered in the European Union Intellectual Property Office and in Israel. “PolyPid” is registered in the United States, Israel, China and in the following European Union countries: Benelux, France, Germany, Spain, Austria, Italy, the United Kingdom, Ireland and Portugal. “Bacfenssi” is registered in the United States, the European Union Intellectual Property Office, Great Britain, Switzerland, Iceland, Liechtenstein, Norway, China, Israel and Russia. “Opzifend” which is registered in the United States, the European Union Intellectual Property Office, Great Britain, Switzerland, Iceland, Liechtenstein, Norway, China and Israel. “Ssisurg”, “Elyfssi” and “Bacyssio” are registered in Israel. “Baczenssi” which is registered in Great Britain and pending in the European Union Intellectual Property Office. Furthermore, we rely upon trade secrets, know-how and continuing technological innovation to develop and maintain our competitive position.

Preparing and filing patent applications is a joint endeavor of our research and development team and our in-house and external patent attorneys. Our patent attorneys conduct patent prior-art searches and then analyze the data in order to provide our research and development team with recommendations on a routine basis. This results in:

- protecting our product candidates that are under development;
- encouraging pharmaceutical companies to negotiate development agreements with us; and
- preventing competitors from attempting to design-around our inventions.

We initially submit applications to the USPTO as provisional patent applications. Then typically we continue by filing non-provisional patent applications under the PCT, which is an international patent law treaty that provides a unified procedure for filing a single initial patent application to later seek patent protection for an invention in any number of the member states of the PCT. Although a PCT application does not itself issue as a patent, it acts as a placeholder allowing the applicant to seek protection in any of the member states through national-phase applications.

Government Regulation

The FDA and comparable regulatory agencies in state and local jurisdictions and in foreign countries impose substantial requirements upon the clinical development, manufacturing and marketing of pharmaceutical products. These agencies and other federal, state and local entities regulate research and development activities and the testing, manufacture, quality control, safety, effectiveness, labeling, storage, packaging, recordkeeping, tracking, approval, import, export, distribution, advertising and promotion of our products.

U.S. Government Regulation of Drug Products

In the United States, the FDA regulates drugs under the FFDCA and its implementing regulations. The process of obtaining regulatory approvals and the subsequent compliance with applicable federal, state, local and foreign statutes and regulations requires the expenditure of substantial time and financial resources. Failure to comply with the applicable U.S. requirements at any time during the product development process, approval process or after approval, may subject an applicant to a variety of administrative or judicial sanctions, such as the FDA's refusal to approve pending NDAs, withdrawal of an approval, imposition of a clinical hold, issuance of warning letters, product recalls, product seizures, total or partial suspension of production or distribution, injunctions, fines, refusals of government contracts, restitution, disgorgement or civil or criminal penalties.

The process required by the FDA before product candidates may be marketed in the United States generally involves the following:

- nonclinical laboratory and animal tests that must be conducted in accordance with good laboratory practices;
- submission of an IND, which must become effective before clinical trials may begin;
- approval by an independent institutional review board, or IRB, for each clinical site or centrally before each trial may be initiated;
- adequate and well-controlled human clinical trials to establish the safety and efficacy of the proposed product candidate for its intended use, performed in accordance with good clinical practices, or GCPs;
- submission to the FDA of an NDA and payment of user fees;
- satisfactory completion of an FDA advisory committee review, if applicable;
- pre-approval inspection of manufacturing facilities and selected clinical investigators for their compliance with cGMP and good clinical practices, or GCPs;
- satisfactory completion of FDA audits of clinical trial sites to assure compliance with GCPs and the integrity of the clinical data;
- FDA approval of an NDA to permit commercial marketing for particular indications for use; and
- compliance with any post-approval requirements, including the potential requirement to implement a Risk Evaluation and Mitigation Strategy, or REMS, and the potential requirement to conduct post-approval studies.

The testing and approval process requires substantial time, effort and financial resources. Preclinical studies include laboratory evaluation of drug substance chemistry, pharmacology, toxicity and drug product formulation, as well as animal studies to assess potential safety and efficacy. Prior to commencing the first clinical trial with a product candidate, we must submit the results of the preclinical tests and preclinical literature, together with manufacturing information, analytical data and any available clinical data or literature, among other things, to the FDA as part of an IND. Some preclinical studies may continue even after the IND is submitted. The IND automatically becomes effective 30 days after receipt by the FDA, unless the FDA, within the 30-day time period, raises safety concerns or questions about the conduct of the clinical trial by imposing a clinical hold. In such a case, the IND sponsor and the FDA must resolve any outstanding concerns before the clinical trial can begin. Submission of an IND may not result in FDA authorization to commence a clinical trial.

Clinical trials involve the administration of the investigational new drug to human subjects under the supervision of qualified investigators in accordance with GCP requirements. A separate submission to the existing IND must be made for each successive clinical trial conducted during product development, as well as amendments to previously submitted clinical trials. Further, an independent IRB for each study site proposing to conduct the clinical trial must review and approve the plan for any clinical trial, its informed consent form and other communications to study subjects before the clinical trial commences at that site. The IRB must continue to oversee the clinical trial while it is being conducted, including any changes to the study plans.

Regulatory authorities, an IRB or the sponsor may suspend or discontinue a clinical trial at any time on various grounds, including a finding that the subjects are being exposed to an unacceptable health risk, the clinical trial is not being conducted in accordance with the FDA's or the IRB's requirements, if the drug has been associated with unexpected serious harm to subjects, or based on evolving business objectives or competitive climate. Some studies also include a data safety monitoring board, which receives special access to unblinded data during the clinical trial and may advise us to halt the clinical trial if it determines that there is an unacceptable safety risk for subjects or other grounds, such as no demonstration of efficacy.

In general, for purposes of NDA approval, human clinical trials are typically conducted in three sequential phases that may overlap.

- Phase 1—Studies are initially conducted to test the product candidate for safety, dosage tolerance, structure-activity relationships, mechanism of action, absorption, metabolism, distribution and excretion in healthy volunteers or subjects with the target disease or condition. If possible, Phase 1 clinical trials may also be used to gain an initial indication of product effectiveness.

- Phase 2—Controlled studies are conducted with groups of subjects with a specified disease or condition to provide enough data to evaluate the preliminary efficacy, optimal dosages and dosing schedule and expanded evidence of safety. Multiple Phase 2 clinical trials may be conducted to obtain information prior to beginning larger and more expansive Phase 3 clinical trials.

- Phase 3—These clinical trials are undertaken in larger subject populations to provide statistically significant evidence of clinical efficacy and to further test for safety in an expanded subject population at multiple clinical trial sites. These clinical trials are intended to establish the overall risk/benefit ratio of the product and provide an adequate basis for product labeling. These clinical trials may be done globally to support global registrations so long as the global sites are also representative of the U.S. population and the conduct of the study at global sites comports with FDA regulations and guidance, such as compliance with GCPs.

The FDA may require, or companies may pursue, additional clinical trials after a product is approved. These so-called Phase 4 studies may be made a condition to be satisfied after approval. The results of Phase 4 studies can confirm the effectiveness of a product candidate and can provide important safety information.

Clinical trials must be conducted under the supervision of qualified investigators in accordance with GCP requirements, which includes the requirements that all research subjects provide their informed consent in writing for their participation in any clinical trial, and the review and approval of the study by an IRB. Investigators must also provide information to the clinical trial sponsors to allow the sponsors to make specified financial disclosures to the FDA. Clinical trials are conducted under protocols detailing, among other things, the objectives of the trial, the trial procedures, the parameters to be used in monitoring safety and the efficacy criteria to be evaluated and a statistical analysis plan. Information about some clinical trials, including a description of the trial and trial results, must be submitted within specific timeframes to the National Institutes of Health for public dissemination on their ClinicalTrials.gov website.

The manufacture of investigational drugs for the conduct of human clinical trials is subject to cGMP requirements. Investigational drugs and active pharmaceutical ingredients imported into the United States are also subject to regulation by the FDA relating to their labeling and distribution. Further, the export of investigational drug products outside of the United States is subject to regulatory requirements of the receiving country as well as U.S. export requirements under the FFDCA. Progress reports detailing the results of the clinical trials must be submitted at least annually to the FDA and the IRB and more frequently if serious adverse effects occur.

Concurrent with clinical trials, companies usually complete additional animal studies and must also develop additional information about the chemistry and physical characteristics of the product candidate as well as finalize a process for manufacturing the product in commercial quantities in accordance with cGMP requirements. The manufacturing process must be capable of consistently producing quality batches of the product candidate and, among other things, must develop methods for testing the identity, strength, quality and purity of the final product. Additionally, appropriate packaging must be selected and tested, and stability studies must be conducted to demonstrate that the product candidate does not undergo unacceptable deterioration over its shelf life.

Orange Book Listing

In seeking approval for a drug through an NDA, including a 505(b)(2) NDA, applicants are required to list with the FDA patents whose claims cover the applicant's product. Upon approval of an NDA, each of the patents listed in the application for the drug is then published in Approved Drug Products with Therapeutic Equivalence Evaluations, also known as the Orange Book.

Any applicant who files a 505(b)(2) NDA referencing a drug listed in the Orange Book must certify to the FDA (1) that no patent information on the drug product that is the subject of the application has been submitted to the FDA; (2) that such patent has expired; (3) the date on which such patent expires; or (4) that such patent is invalid or will not be infringed upon by the manufacture, use or sale of the drug product for which the application is submitted. This last certification is known as a Paragraph IV certification. Generally, the 505(b)(2) NDA cannot be approved until all listed patents have expired, except where the 505(b)(2) NDA applicant challenges a listed patent through a Paragraph IV certification.

If the applicant has provided a Paragraph IV certification to the FDA, the applicant must also send notice of the Paragraph IV certification to the holder of the NDA for the reference listed drug and the patent owner once the application has been accepted for filing by the FDA. The applicant may also elect to submit a "section viii" statement certifying that its proposed label does not contain (or carves out) any language regarding the patented method-of-use rather than certify to a listed method-of-use patent. The NDA holder or patent owner may then initiate a patent infringement lawsuit in response to the notice of the Paragraph IV certification. The filing of a patent infringement lawsuit within 45 days of the receipt of a Paragraph IV certification prevents the FDA from approving the application until the earlier of 30 months from the date of the lawsuit, expiration of the patent, settlement of the lawsuit, a decision in the infringement case that is favorable to the applicant or such shorter or longer period as may be ordered by a court. This prohibition is generally referred to as the 30-month stay. In instances where a 505(b)(2) NDA applicant files a Paragraph IV certification, the NDA holder or patent owner regularly take action to trigger the 30-month stay, recognizing that the related patent litigation may take many months or years to resolve. Thus, approval of a 505(b)(2) NDA could be delayed for a significant period of time depending on the patent certification the applicant makes and the reference drug sponsor's decision to initiate patent litigation.

Exclusivity

The FDA provides periods of non-patent regulatory exclusivity, which provides the holder of an approved NDA limited protection from new competition in the marketplace for the innovation represented by its approved drug for a period of three or five years following the FDA's approval of the NDA. Five years of exclusivity are available to new chemical entities, or NCEs. An NCE is a drug that contains no active moiety that has been approved by the FDA in any other NDA. An active moiety is the molecule or ion, excluding those appended portions of the molecule that cause the drug to be an ester, salt, including a salt with hydrogen or coordination bonds, or other noncovalent, or not involving the sharing of electron pairs between atoms, derivatives, such as a complex (*i.e.*, formed by the chemical interaction of two compounds), chelate (*i.e.*, a chemical compound), or clathrate (*i.e.*, a polymer framework that traps molecules), of the molecule, responsible for the therapeutic activity of the drug substance. During the exclusivity period, the FDA may not accept for review or approve an Abbreviated New Drug Application, or ANDA, or a 505(b)(2) NDA submitted by another company that contains the previously approved active moiety. An ANDA or 505(b)(2) application, however, may be submitted one year before NCE exclusivity expires if a Paragraph IV certification is filed.

If a product is not eligible for the NCE exclusivity, it may be eligible for three years of exclusivity. Three-year exclusivity is available to the holder of an NDA, including a 505(b)(2) NDA, if one or more new clinical trials, other than bioavailability or bioequivalence trials, was essential to the approval of the application and was conducted or sponsored by the applicant. This three-year exclusivity period protects against FDA approval of ANDAs and 505(b)(2) NDAs for the particular condition of the new drug's approval or the change to a marketed product, such as a new formulation for a previously approved drug. Five-year and three-year exclusivity will not delay the submission or approval of a 505(b)(1) NDA; however, an applicant submitting a 505(b)(1) NDA would be required to conduct or obtain a right of reference to all of the preclinical studies and adequate and well-controlled clinical trials necessary to demonstrate safety and efficacy.

In addition, under the GAIN Act, which was enacted as part of the Food and Drug Administration Safety and Innovation Act, or FDASIA, which was signed into law in July 2012, the FDA may designate a product as a QIDP. In order to receive this designation, a drug must qualify as an antibiotic or antifungal drug for human use intended to treat serious or life-threatening infections, including those caused by either (1) an antibiotic or antifungal resistant pathogen, including novel or emerging infectious pathogens, or (2) a so-called "qualifying pathogen" found on a list of potentially dangerous, drug-resistant organisms to established and maintained by the FDA. A sponsor must request such designation before submitting a marketing application. We obtained QIDP designations for D-PLEX$_{100}$ for the prevention of post-abdominal surgery incisional infection, for the prevention of post-cardiac surgery sternal infection and for prevention of post-colorectal SSIs. Upon approving a marketing application for a QIDP-designated product, the FDA will extend by an additional five years any non-patent marketing exclusivity period awarded, such as a three-year exclusivity period awarded for new clinical investigations of previously approved products. This extension is in addition to any pediatric exclusivity extension awarded, and the extension will be awarded only to a drug first approved on or after the date of enactment of the GAIN Act. The GAIN Act prohibits the grant of an exclusivity extension where the application is a supplement to an application for which an extension is in effect or has expired, is a subsequent application for a specified change to an approved product, or is an application for a product that does not meet the definition of QIDP based on the uses for which it is ultimately approved.

Hatch Waxman Amendments and the 505(b)(2) Regulatory Approval Process

Section 505 of the FFDCA describes three types of marketing applications that may be submitted to the FDA to request marketing authorization for a new drug. A Section 505(b)(1) NDA is an application that contains full reports of investigations of safety and efficacy. A Section 505(b)(2) NDA is an application that contains full reports of investigations of safety and efficacy, but where at least some of the information required for approval comes from investigations that were not conducted by or for the applicant and for which the applicant has not obtained a right of reference or use from the person by or for whom the investigations were conducted. This regulatory pathway enables the applicant to rely, in part, on the FDA's prior findings of safety and efficacy for an existing product, or published literature, in support of its application. Specifically, the applicant may rely upon the FDA's prior findings of safety and efficacy for an approved product that acts as the reference listed drug for purposes of a 505(b)(2) NDA. The FDA may also require 505(b)(2) applicants to perform additional studies or measurements to support any changes from the reference listed drug. The FDA may then approve the new product candidate for all or some of the labeled indications for which the referenced product has been approved, as well as for any new indication sought by the 505(b)(2) applicant. Lastly, the FDA permits marketing applications through Section 505(j), which establishes an abbreviated approval process for a generic version of approved drug products through the submission of an ANDA.

An ANDA provides for marketing of a generic drug product that has the same active ingredients, dosage form, strength, route of administration, labeling, performance characteristics and intended use, among other things, to a previously approved product. ANDAs are termed "abbreviated" because they are generally not required to include preclinical (animal) and clinical (human) data to establish safety and efficacy. Instead, generic applicants must scientifically demonstrate that their product is bioequivalent to, or performs in the same manner as, the innovator drug through in vitro, in vivo, or other testing. The generic version must deliver the same amount of active ingredients into a subject's bloodstream in the same amount of time as the innovator drug and can often be substituted by pharmacists under prescriptions written for the reference listed drug.

Special FDA Expedited Review and Approval Programs

The FDA has various programs, including Fast Track Designation, breakthrough therapy designation, accelerated approval, and priority review, which are intended to expedite or simplify the process for the development and FDA review of drugs that are intended for the treatment of serious or life threatening diseases or conditions and demonstrate the potential to address unmet medical needs. The purpose of these programs is to provide important new drugs to patients earlier than under standard FDA review procedures.

Under the fast track program, the sponsor of a new drug candidate may request that FDA designate the drug candidate for a specific indication as a fast track drug concurrent with, or after, the filing of the IND for the drug candidate. To be eligible for a Fast Track Designation, the FDA must determine, based on the request of a sponsor, that a product is intended to treat a serious or life threatening disease or condition and demonstrates the potential to address an unmet medical need, or that the drug qualifies as a QIDP under the GAIN Act. The FDA will determine that a product will fill an unmet medical need if it will provide a therapy where none exists or provide a therapy that may be potentially superior to existing therapy based on efficacy or safety factors. We obtained a Fast Track Designation in November 2018 for D-PLEX$_{100}$ for the prevention of post-cardiac surgery sternal infection, in July 2020 for the prevention of post abdominal surgery incisional infection and in September 2021 for prevention of post-colorectal SSIs. Fast Track Designation provides additional opportunities for interaction with the FDA's review team and may allow for rolling review of NDA components before the completed application is submitted, if the sponsor provides a schedule for the submission of the sections of the NDA, the FDA agrees to accept sections of the NDA and determines that the schedule is acceptable, and the sponsor pays any required user fees upon submission of the first section of the NDA. However, the FDA's time period goal for reviewing an application does not begin until the last section of the NDA is submitted. The FDA may decide to rescind the Fast Track Designation if it determines that the qualifying criteria no longer apply.

In addition, a sponsor can request breakthrough therapy designation for a drug if it is intended, alone or in combination with one or more other drugs, to treat a serious or life-threatening disease or condition, and preliminary clinical evidence indicates that the drug may demonstrate substantial improvement over existing therapies on one or more clinically significant endpoints, such as substantial treatment effects observed early in clinical development. We obtained breakthrough therapy designation in November 2020 for D-PLEX$_{100}$ for the prevention of SSIs in patients undergoing elective colorectal surgery. Drugs designated as breakthrough therapies are eligible for intensive guidance from the FDA on an efficient drug development program, organizational commitment to the development and review of the product including involvement of senior managers, and, like fast track products, are also eligible for rolling review of the NDA. Both fast track and breakthrough therapy products are also eligible for accelerated approval and/or priority review, if relevant criteria are met.

Under the FDA's accelerated approval regulations, the FDA may approve a drug for a serious or life threatening illness that provides meaningful therapeutic benefit to patients over existing treatments based upon a surrogate endpoint that is reasonably likely to predict clinical benefit, or on a clinical endpoint that can be measured earlier than irreversible morbidity or mortality, that is reasonably likely to predict an effect on irreversible morbidity or mortality or other clinical benefit, taking into account the severity, rarity, or prevalence of the condition and the availability or lack of alternative treatments. A drug candidate approved on this basis is subject to rigorous post marketing compliance requirements, including the completion of Phase 4 or post approval clinical trials to confirm the effect on the clinical endpoint. Failure to conduct required post approval studies, or confirm a clinical benefit during post marketing studies, will allow the FDA to withdraw the drug from the market on an expedited basis. All promotional materials for drug candidates approved under accelerated approval regulations are subject to prior review by the FDA.

Once an NDA is submitted for a product intended to treat a serious condition, the FDA may assign a priority review designation if FDA determines that the product, if approved, would provide a significant improvement in safety or effectiveness. A priority review means that the goal for the FDA to review an application is six months, rather than the standard review of ten months under current The Prescription Drug User Fee Act, or PDUFA, guidelines. Under the current PDUFA agreement, these six and ten months review periods are measured from the 60-day filing date rather than the receipt date for NDAs for new molecular entities, which typically adds approximately two months to the timeline for review from the date of submission. Most products that are eligible for fast track breakthrough therapy designation are also likely to be considered appropriate to receive a priority review.

Even if a product qualifies for one or more of these programs, the FDA may later decide that the product no longer meets the conditions for qualification or decide that the time period for FDA review or approval will not be shortened. In addition, the manufacturer of an investigational drug for a serious or life threatening disease is required to make available, such as by posting on its website, its policy on responding to requests for expanded access. Furthermore, fast track designation, breakthrough therapy designation, accelerated approval and priority review do not change the standards for approval and may not ultimately expedite the development or approval process.

NDA Submission and Review by the FDA

Assuming successful completion of the required clinical and preclinical testing, among other items, the results of product development, including chemistry, manufacture and controls, nonclinical studies and clinical trials are submitted to the FDA, along with proposed labeling, as part of an NDA. The submission of an NDA requires payment of a substantial user fee to the FDA. These user fees must be filed at the time of the first submission of the application, even if the application is being submitted on a rolling basis. Fee waivers or reductions are available in some circumstances. One basis for a waiver of the application user fee is if the applicant employs fewer than 500 employees, including employees of affiliates, the applicant does not have an approved marketing application for a product that has been introduced or delivered for introduction into interstate commerce, and the applicant, including its affiliates, is submitting its first marketing application.

In addition, under the Pediatric Research Equity Act, an NDA or supplement to an NDA for a new active ingredient, indication, dosage form, dosage regimen or route of administration must contain data that are adequate to assess the safety and efficacy of the drug for the claimed indications in all relevant pediatric subpopulations, and to support dosing and administration for each pediatric subpopulation for which the product is safe and effective.

The FDA may, on its own initiative or at the request of the applicant, grant deferrals for submission of some or all pediatric data until after approval of the product for use in adults or full or partial waivers from the pediatric data requirements.

The FDA must refer applications for drugs that contain active ingredients, including any ester or salt of the active ingredients, that have not previously been approved by the FDA to an advisory committee or provide in an action letter a summary of the reasons for not referring it to an advisory committee. The FDA may also refer drugs which present difficult questions of safety, purity or potency to an advisory committee. An advisory committee is typically a panel that includes clinicians and other experts who review, evaluate and make a recommendation as to whether the application should be approved and under what conditions. The FDA is not bound by the recommendations of an advisory committee, but it considers such recommendations carefully when making decisions.

The FDA reviews applications to determine, among other things, whether a product is safe and effective for its intended use and whether the manufacturing controls are adequate to assure and preserve the product's identity, strength, quality and purity. Before approving an NDA, the FDA will inspect the facility or facilities where the product is manufactured. The FDA will not approve an application unless it determines that the manufacturing processes and facilities, including contract manufacturers and subcontracts, are in compliance with cGMP requirements and adequate to assure consistent production of the product within required specifications. Additionally, before approving an NDA, the FDA will typically inspect one or more clinical trial sites to assure compliance with GCPs.

Once the FDA receives an application, it has 60 days to review the NDA to determine if it is substantially complete to permit a substantive review, before it accepts the application for filing. Once the submission is accepted for filing, the FDA begins an in-depth review of the NDA. The FDA's NDA review times may differ based on whether the application is a standard review or priority review application. The FDA may give a priority review designation to drugs that are intended to treat serious conditions and provide significant improvements in the safety or effectiveness of the treatment, diagnosis, or prevention of serious conditions. Under the goals and policies agreed to by the FDA under PDUFA, the FDA has set the review goal of 10 months from the 60-day filing date to complete its initial review of a standard NDA for a new molecular entity, or NME, and make a decision on the application. For non-NME standard applications, the FDA has set the review goal of 10 months from the date that the FDA receives the application to complete its initial review and to make a decision on the application. For priority review applications, the FDA has set the review goal of reviewing NME NDAs within six months of the 60-day filing date and non-NME applications within six months of the date that the FDA receives the application. Such deadlines are referred to as the PDUFA date. The PDUFA date is only a goal and the FDA does not always meet its PDUFA dates. The review process and the PDUFA date may also be extended if the FDA requests or the NDA sponsor otherwise provides additional information or clarification regarding the submission.

Once the FDA's review of the application is complete, the FDA will issue either a Complete Response Letter, or CRL, or approval letter. A CRL indicates that the review cycle of the application is complete and the application is not ready for approval. A CRL generally contains a statement of specific conditions that must be met in order to secure final approval of the NDA and may require additional clinical or preclinical testing, or other information or analyses in order for the FDA to reconsider the application. The FDA has the goal of reviewing 90% of application resubmissions in either two or six months of the date that the FDA receives the application, depending on the kind of resubmission. Even with the submission of additional information, the FDA ultimately may decide that the application does not satisfy the regulatory criteria for approval. If and when those conditions have been met to the FDA's satisfaction, the FDA may issue an approval letter. An approval letter authorizes commercial marketing of the drug with specific prescribing information for specific indications.

The FDA may delay or refuse approval of an NDA if applicable regulatory criteria are not satisfied, require additional testing or information and/or require post-marketing testing and surveillance to monitor safety or efficacy of a product, or impose other conditions, including distribution restrictions or other risk management mechanisms. For example, the FDA may require a REMS as a condition of approval or following approval to mitigate any identified or suspected serious risks and ensure safe use of the drug. The FDA may prevent or limit further marketing of a product, or impose additional post-marketing requirements, based on the results of post-marketing studies or surveillance programs. After approval, some types of changes to the approved product, such as adding new indications, manufacturing changes and additional labeling claims, are subject to further testing requirements, FDA notification and FDA review and approval. Further, should new safety information arise, additional testing, product labeling or FDA notification may be required.

If regulatory approval of a product is granted, such approval may entail limitations on the indicated uses for which such product may be marketed or may include contraindications, warnings or precautions in the product labeling, which has resulted in a Black Box warning. A Black Box warning is the strictest warning put in the labeling of prescription drugs or drug products by the FDA when there is reasonable evidence of an association of a serious hazard with the drug. The FDA also may not approve the inclusion of labeling claims necessary for successful marketing. Once approved, the FDA may withdraw the product approval if compliance with pre- and post-marketing regulatory standards is not maintained or if problems occur after the product reaches the marketplace. In addition, the FDA may require Phase 4 post-marketing studies to monitor the effect of approved products, and may limit further marketing of the product based on the results of these post-marketing studies.

Post-approval Requirements

Any products manufactured or distributed by us pursuant to FDA approvals are subject to continuing regulation by the FDA, including manufacturing, periodic reporting, product sampling and distribution, advertising, promotion, drug shortage reporting, compliance with any post-approval requirements imposed as a conditional of approval such as Phase 4 clinical trials, REMS and surveillance, recordkeeping and reporting requirements, including adverse experiences.

After approval, most changes to the approved product, such as adding new indications or other labeling claims are subject to prior FDA review and approval. There also are continuing, annual user fee requirements for any approved products and the establishments at which such products are manufactured, as well as new application fees for supplemental applications with clinical data. Drug manufacturers and their subcontractors are required to register their establishments with the FDA and certain state agencies and to list their drug products, and are subject to periodic announced and unannounced inspections by the FDA and these state agencies for compliance with cGMPs and other requirements, which impose procedural and documentation requirements upon us and our third-party manufacturers.

Changes to the manufacturing process are strictly regulated and often require prior FDA approval before being implemented, or FDA notification. FDA regulations also require investigation and correction of any deviations from cGMPs and specifications, and impose reporting and documentation requirements upon the sponsor and any third-party manufacturers that the sponsor may decide to use. Accordingly, manufacturers must continue to expend time, money and effort in the area of production and quality control to maintain cGMP compliance.

Later discovery of previously unknown problems with a product, including AEs of unanticipated severity or frequency, or with manufacturing processes, or failure to comply with regulatory requirements, may result in withdrawal of marketing approval, mandatory revisions to the approved labeling to add new safety information or other limitations, imposition of post-market studies or clinical trials to assess new safety risks, or imposition of distribution or other restrictions under a REMS program, among other consequences.

The FDA closely regulates the marketing and promotion of drugs. A company can make only those claims relating to safety and efficacy, purity and potency that are approved by the FDA. Physicians, in their independent professional medical judgement, may prescribe legally available products for uses that are not described in the product's labeling and that differ from those tested by us and approved by the FDA. We, however, are prohibited from marketing or promoting drugs for uses outside of the approved labeling.

In addition, the distribution of prescription pharmaceutical products, including samples, is subject to the Prescription Drug Marketing Act, or PDMA, which regulates the distribution of drugs and drug samples at the federal level, and sets minimum standards for the registration and regulation of drug distributors by the states. Both the PDMA and state laws limit the distribution of prescription pharmaceutical product samples and impose requirements to ensure accountability in distribution. The Drug Supply Chain Security Act also imposes obligations on manufacturers of pharmaceutical products related to product and tracking and tracing.

Failure to comply with any of the FDA's requirements could result in significant adverse enforcement actions. These include a variety of administrative or judicial sanctions, such as refusal to approve pending applications, license suspension or revocation, withdrawal of an approval, imposition of a clinical hold or termination of clinical trials, warning letters, untitled letters, cyber letters, modification of promotional materials or labeling, product recalls, product seizures or detentions, refusal to allow imports or exports, total or partial suspension of production or distribution, debarment, injunctions, fines, consent decrees, corporate integrity agreements, refusals of government contracts and new orders under existing contracts, exclusion from participation in federal and state healthcare programs, restitution, disgorgement or civil or criminal penalties, including fines and imprisonment. It is also possible that failure to comply with the FDA's requirements relating to the promotion of prescription drugs may lead to investigations alleging violations of federal and state healthcare fraud and abuse and other laws, as well as state consumer protection laws. Any of these sanctions could result in adverse publicity, among other adverse consequences.

Other Healthcare Regulations

Our business activities, including but not limited to, research, sales, promotion, distribution, medical education and other activities are subject to regulation by numerous regulatory and law enforcement authorities in the United States in addition to the FDA, including the Department of Justice, the HHS and its various divisions, including CMS and the Health Resources and Services Administration, the Department of Veterans Affairs, the Department of Defense and state and local governments. Our business activities must comply with numerous healthcare laws and regulations, including those described below.

The federal Anti-Kickback Statute prohibits, among other things, any person or entity, from knowingly and willfully offering, paying, soliciting or receiving any remuneration, directly or indirectly, overtly or covertly, in cash or in kind, to induce or reward, or in return for, the referral of an individual for, or purchasing, leasing, ordering, or arranging for the purchase, lease or order of, any good, facility, item or service reimbursable under Medicare, Medicaid or other federal healthcare programs. The Anti-Kickback Statute has been interpreted to apply to arrangements between pharmaceutical manufacturers on the one hand and prescribers, purchasers, and formulary managers on the other hand. The term remuneration has been interpreted broadly to include anything of value. There are a number of statutory exceptions and regulatory safe harbors protecting some common activities from prosecution. The exceptions and safe harbors are drawn narrowly and require strict compliance in order to offer protection. Practices that involve remuneration that may be alleged to be intended to induce prescribing, purchasing or recommending may be subject to scrutiny if they do not qualify for an exception or safe harbor. Failure to meet all of the requirements of a particular applicable statutory exception or regulatory safe harbor does not make the conduct per se illegal under the federal Anti-Kickback Statute. Instead, the legality of the arrangement will be evaluated on a case-by-case basis based on a cumulative review of all of its facts and circumstances. Additionally, the Patient Protection and Affordable Care Act of 2010, as amended by the Health Care and Education Reconciliation Act of 2010, or collectively the ACA, amended the intent requirement of the federal Anti-Kickback Statute, and other healthcare criminal fraud statutes, so that a person or entity no longer needs to have actual knowledge of the federal Anti-Kickback Statute, or the specific intent to violate it, to have violated the statute. The ACA also provided that a violation of the federal Anti-Kickback Statute is grounds for the government or a whistleblower to assert that a claim for payment of items or services resulting from such violation constitutes a false or fraudulent claim for purposes of the federal civil False Claims Act, or FCA.

The federal civil and criminal false claims laws, including the FCA, prohibit, among other things, any person or entity from knowingly presenting, or causing to be presented, a false claim for payment to, or approval by, the U.S. federal government, including the Medicare and Medicaid programs, or knowingly making, using, or causing to be made or used a false record or statement material to a false or fraudulent claim or to avoid, decrease or conceal an obligation to pay money to the federal government. As a result of a modification made by the Fraud Enforcement and Recovery Act of 2009, a claim includes "any request or demand" for money or property presented to the U.S. government. In addition, manufacturers can be held liable under the FCA even when they do not submit claims directly to government payors if they are deemed to "cause" the submission of false or fraudulent claims. The FCA also permits a private individual acting as a "whistleblower" to bring actions on behalf of the federal government alleging violations of the FCA and to share in any monetary recovery. FCA liability is potentially significant in the healthcare industry because the statute provides for treble damages and mandatory penalties. Government enforcement agencies and private whistleblowers have investigated pharmaceutical companies for or asserted liability under the FCA for a variety of alleged promotional and marketing activities, such as providing free products to customers with the expectation that the customers would bill federal programs for the products; providing consulting fees and other benefits to physicians to induce them to prescribe products; engaging in promotion for "off-label" uses; and submitting inflated best price information to the Medicaid Rebate Program.

As a condition of receiving Medicaid coverage for prescription drugs, the Medicaid Drug Rebate Program requires manufacturers to calculate and report to CMS their Average Manufacturer Price, or AMP, which is used to determine rebate payments shared between the states and the federal government and, for some multiple source drugs, Medicaid payment rates for the drug, and for drugs paid under Medicare Part B, to also calculate and report their average sales price, which is used to determine the Medicare Part B payment rate for the drug. In January 2016, CMS issued a final rule regarding the Medicaid Drug Rebate Program, or MDRP, effective April 1, 2016, that, among other things, revised the manner in which the AMP is calculated by manufacturers participating in the program and implemented certain amendments to the Medicaid rebate statute created under the ACA. In addition, the MDRP requires pharmaceutical manufacturers to enter into and have in effect a National Drug Rebate Agreement, or NDRA, with the Secretary of HHS as a condition for states to receive federal matching funds for the manufacturer's outpatient drugs furnished to Medicaid patients. On March 23, 2018, CMS finalized updates to the NDRA, or the Updated NDRA, to incorporate a number legislative and regulatory changes, including changes to align with certain provisions of the ACA.

Drugs that are approved under a biologics license application, or BLA, or an NDA, including a 505(b)(2) NDA, are subject to an additional requirement to calculate and report the manufacturer's best price for the drug and inflation penalties which can substantially increase rebate payments. For BLA and NDA drugs, the Veterans Health Care Act requires manufacturers to calculate and report to the Department of Veterans Affairs a different price called the Non-Federal AMP, offer the drugs for sale on the Federal Supply Schedule, and charge the government no more than a statutory price referred to as the Federal Ceiling Price, which includes an inflation penalty. A separate law requires manufacturers to pay rebates on these drugs when paid by the Department of Defense under its TRICARE Retail Pharmacy Program. Knowingly submitting false pricing information to the government creates potential federal False Claims Act liability.

HIPAA created additional federal criminal statutes that prohibits, among other things, knowingly and willfully executing, or attempting to execute, a scheme to defraud any healthcare benefit program or obtain, by means of false or fraudulent pretenses, representations or promises, any of the money or property owned by, or under the custody or control of, any healthcare benefit program, regardless of whether the third-party payor is public or private, knowingly and willfully embezzling or stealing from a health care benefit program, willfully obstructing a criminal investigation of a health care offense and knowingly and willfully falsifying, concealing or covering up by any trick, scheme or device a material fact or making any materially false, fictitious or fraudulent statements in connection with the delivery of, or payment for, healthcare benefits, items or services relating to healthcare matters. Additionally, the ACA amended the intent requirement of some of these criminal statutes under HIPAA so that a person or entity no longer needs to have actual knowledge of the statute, or the specific intent to violate it, to have committed a violation.

Additionally, the federal Open Payments program pursuant to the Physician Payments Sunshine Act, created under Section 6002 of the ACA and its implementing regulations, requires some manufacturers of drugs, devices, biologicals and medical supplies for which payment is available under Medicare, Medicaid or the Children's Health Insurance Program (with specified exceptions) to report annually information related to specified payments or other transfers of value provided to physicians (defined to include doctors, dentists, optometrists, podiatrists and chiropractors), certain other healthcare professionals (such as physician assistants and nurse practitioners) and teaching hospitals, or to entities or individuals at the request of, or designated on behalf of, the physicians and teaching hospitals and to report annually specified ownership and investment interests held by physicians and their immediate family members.. Failure to submit timely, accurately and completely the required information for all payments, transfers of value and ownership or investment interests may result in civil monetary penalties.

In addition, we may be subject to data privacy and security regulation by both the federal government and the states in which we conduct our business. HIPAA, as amended by the Health Information Technology for Economic and Clinical Health Act, or HITECH, and their implementing regulations, impose requirements relating to the privacy, security and transmission of individually identifiable health information held by covered entities, their business associates and covered subcontractors. Among other things, HITECH makes HIPAA's security standards directly applicable to business associates, defined as independent contractors or agents of covered entities that create, receive, maintain or transmit protected health information in connection with providing a service for or on behalf of a covered entity. HITECH also created new tiers of civil monetary penalties, amended HIPAA to make civil and criminal penalties directly applicable to business associates, and gave state attorneys general new authority to file civil actions for damages or injunctions in federal courts to enforce the federal HIPAA laws and seek attorneys' fees and costs associated with pursuing federal civil actions.

Many states have also adopted laws similar to each of the above federal laws, which may be broader in scope and apply to items or services reimbursed by any third-party payor, including commercial insurers. We may also be subject to state laws that require pharmaceutical companies to comply with the pharmaceutical industry's voluntary compliance guidelines and the relevant compliance guidance promulgated by the federal government, and/or state 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 pricing information, state and local laws that require the registration of pharmaceutical sales representatives, and state 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.

Ensuring that our internal operations and business arrangements with third parties comply with applicable healthcare laws and regulations will likely be costly. It is possible that governmental authorities will conclude that our business practices do 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 were 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 civil, criminal and administrative penalties, damages, fines, disgorgement, individual imprisonment, possible exclusion from government funded healthcare programs, contractual damages, reputational harm, diminished profits and future earnings, additional reporting obligations and oversight if we become subject to a corporate integrity agreement or other agreement to resolve allegations of non-compliance with these laws, and curtailment of our operations, any of which could substantially disrupt our operations. If the physicians or other providers or entities with whom we expect to do business are found not to be in compliance with applicable laws, they may be subject to significant criminal, civil or administrative sanctions, including exclusions from government funded healthcare programs.

Coverage and Reimbursement

Our ability to commercialize any products successfully will also depend in part on the extent to which coverage and adequate reimbursement for the procedures utilizing our product candidates, performed by health care providers, once approved, will be available from government health administration authorities, private health insurers and other organizations. Government authorities and other third-party payors, such as private health insurers and health maintenance organizations, determine which procedures, and the products utilized in such procedures, they will cover and establish reimbursement levels. Assuming coverage is obtained for procedures utilizing a given product, by a third-party payor, the resulting reimbursement payment rates may not be adequate or may require co-payments that patients find unacceptably high. Patients who undergo procedures for the treatment of their conditions, and their treating physicians, generally rely on third-party payors to reimburse all or part of the costs associated with the procedures which utilize our products. When used in connection with surgical and certain other procedures, our product candidates may not be reimbursed separately but their cost may instead be bundled as part of the payment received by the provider for the procedure only. Treating physicians are unlikely to use and order our products unless coverage is provided and the reimbursement is adequate to cover all or a significant portion of the cost of the procedures which utilize our products. A decision by a third-party payor not to cover or adequately reimburse for our product candidates or procedures using our product candidates, could reduce physician utilization of our products once approved. Therefore, coverage and adequate reimbursement for procedures which utilize new products is critical to the acceptance of such new products. Coverage decisions may depend upon clinical and economic standards that disfavor new products when more established or lower cost therapeutic alternatives are already available or subsequently become available.

Government authorities and other third-party payors are developing increasingly sophisticated methods of cost containment, such as including price controls, restrictions on coverage and reimbursement and requirements for substitution of less expensive products and procedures. Government and other third-party payors are increasingly challenging the prices charged for health care products and procedures, examining the cost effectiveness of procedures, and the products used in such procedures, in addition to their safety and efficacy, and limiting or attempting to limit both coverage and the level of reimbursement. Further, no uniform policy requirement for coverage and reimbursement exists among third-party payors in the United States, which causes significant uncertainty related to the insurance coverage and reimbursement of newly approved products, and the procedures which may utilize such newly approved products. Therefore, coverage and reimbursement can differ significantly from payor to payor and health care provider to health care provider.

We cannot be sure that coverage and reimbursement will be available for any product that we commercialize, or the procedures which utilize such product, and, if reimbursement is available, what the level of reimbursement will be. Coverage and reimbursement may impact the demand for, or the price of, any product candidate for which we obtain marketing approval. If coverage and reimbursement are not available or reimbursement is available only to limited levels, we may not successfully commercialize any product candidate for which we obtain marketing approval.

Healthcare Reform Measures

The United States and some non-U.S. jurisdictions are considering or have enacted a number of legislative and regulatory proposals designed to change the healthcare system. Among policy makers and payors in the United States and elsewhere, there is significant interest in promoting changes in healthcare systems with the stated goals of containing healthcare costs, improving quality and/or expanding access. In the United States, the pharmaceutical industry has been a particular focus of these efforts and has been significantly affected by major legislative initiatives.

For example, the pharmaceutical industry in the United States has been affected by the passage of ACA, which, among other things: imposed new fees on entities that manufacture or import certain branded prescription drugs; expanded pharmaceutical manufacturer obligations to provide discounts and rebates to certain government programs; implemented a licensure framework for follow-on biologic products; expanded health care fraud and abuse laws; revised the methodology by which rebates owed by manufacturers to the state and federal government under the Medicaid Drug Rebate Program are calculated for certain drugs and biologics, including products that are inhaled, infused, instilled, implanted or injected; imposed an additional rebate similar to an inflation penalty on new formulations of drugs; extended the Medicaid Drug Rebate Program to utilization of prescriptions of individuals enrolled in Medicaid managed care organizations; expanded the 340B program which caps the price at which manufacturers can sell covered outpatient pharmaceuticals to specified hospitals, clinics and community health centers; and provided incentives to programs that increase the federal government’s comparative effectiveness research.

There have been executive, judicial and Congressional challenges to certain aspects of the ACA. For example, on June 17, 2021, the U.S. Supreme Court dismissed a challenge on procedural grounds that argued the ACA is unconstitutional in its entirety because the "individual mandate" was repealed by Congress. Further, on August 16, 2022, President Biden signed the IRA into law, which among other things, extends enhanced subsidies for individuals purchasing health insurance coverage in ACA marketplaces through plan year 2025. The IRA also eliminates the "donut hole" under the Medicare Part D program beginning in 2025 by significantly lowering the beneficiary maximum out-of-pocket cost and creating a new manufacturer discount program. It is possible that the ACA will be subject to judicial or Congressional challenges in the future. It is unclear how any such challenges and the healthcare reform measures of the Biden administration will impact the ACA and our business.

Other legislative changes have been proposed and adopted in the United States since the ACA was enacted. In August 2011, the Budget Control Act of 2011, among other things, included aggregate reductions of Medicare payments to providers of 2.0% per fiscal year, which went into effect in April 2013, and due to subsequent legislative amendments, including the BBA, will remain in effect until 2032, unless additional U.S. Congressional action is taken. In addition, in January 2013, President Obama signed into law the American Taxpayer Relief Act of 2012, which, among other things, reduced Medicare payments to several categories of healthcare providers and increased the statute of limitations period for the government to recover overpayments to providers from three to five years. Additionally, the Medicare Access and CHIP Reauthorization Act of 2015, or MACRA, ended the use of the statutory formula for clinician payment and established a quality payment incentive program, also referred to as the Quality Payment Program. This program provides clinicians with two ways to participate, including through the Advanced Alternative Payment Models, or APMs, and the Merit-based Incentive Payment System, or MIPS. Under both APMs and MIPS, performance data collected each performance year will affect Medicare payments in later years, including potentially reducing payments. At this time, the full impact to overall physician reimbursement as a result of the introduction of the Quality Payment Program remains unclear. Any reduction in reimbursement from Medicare or other government programs may result in a similar reduction in payments from private payors. Congress is considering additional health reform measures.

In addition, there has been particular and increasing legislative and enforcement interest in the United States with respect to drug pricing practices in recent years, particularly with respect to drugs that have been subject to relatively large price increases over relatively short time periods. Specifically, there have been several recent U.S. Presidential executive orders, Congressional inquiries and proposed and enacted federal and state legislation designed to, among other things, bring more transparency to product pricing, review the relationship between pricing and manufacturer patient programs, reduce the cost of prescription drugs under Medicare and reform government program reimbursement methodologies for pharmaceutical products. For example, in July 2021, the Biden administration released an executive order, "Promoting Competition in the American Economy," with multiple provisions aimed at prescription drugs. In response to President Biden's executive order, on September 9, 2021, HHS released a Comprehensive Plan for Addressing High Drug Prices that outlines principles for drug pricing reform and sets out a variety of potential legislative policies that Congress could pursue as well as potential administrative actions HHS can take to advance these principles. Further, the IRA, among other things (i) directs HHS to negotiate the price of certain high-expenditure, single-source drugs and biologics covered under Medicare and (ii) imposes rebates under Medicare Part B and Medicare Part D to penalize price increases that outpace inflation. These provisions took effect progressively starting in fiscal year 2023. On August 29, 2023, HHS announced the list of the first ten drugs that will be subject to price negotiations, although the Medicare drug price negotiation program is currently subject to legal challenges. Further in response to the Biden administration's October 2022 executive order, on February 14, 2023, HHS released a report outlining three new models for testing by the CMS Innovation Center which will be evaluated on their ability to lower the cost of drugs, promote accessibility, and improve quality of care. It is unclear whether the models will be utilized in any health reform measures in the future. Further, on December 7, 2023, the Biden administration announced an initiative to control the price of prescription drugs through the use of march-in rights under the Bayh-Dole Act. On December 8, 2023, the National Institute of Standards and Technology published for comment a Draft Interagency Guidance Framework for Considering the Exercise of March-In Rights which for the first time includes the price of a product as one factor an agency can use when deciding to exercise march-in rights. While march-in rights have not previously been exercised, it is uncertain if that will continue under the new framework. In addition, individual states in the United States have become increasingly active in passing legislation and implementing regulations designed to control pharmaceutical product pricing, including price or patient reimbursement constraints, discounts, restrictions on certain product access and marketing cost disclosure and transparency measures, and, in some cases, designed to encourage importation from other countries and bulk purchasing. For example, on January 5, 2024, the FDA approved Florida's Section 804 Importation Program (SIP) proposal to import certain drugs from Canada for specific state healthcare programs. It is unclear how this program will be implemented, including which drugs will be chosen, and whether it will be subject to legal challenges in the United States or Canada. Other states have also submitted SIP proposals that are pending review by the FDA. Any such approved importation plans, when implemented, may result in lower drug prices for products covered by those programs. In the future, there will likely continue to be proposals relating to the reform of the U.S. healthcare system, some of which could further limit coverage and reimbursement of products.

The Foreign Corrupt Practices Act

The Foreign Corrupt Practices Act, or FCPA, prohibits any U.S. individual or business from paying, offering or authorizing payment or offering of anything of value, directly or indirectly, to any foreign official, political party or candidate for the purpose of influencing any act or decision of the foreign entity in order to assist the individual or business in obtaining or retaining business. The FCPA also obligates companies whose securities are listed in the United States to comply with accounting provisions requiring the companies to maintain books and records that accurately and fairly reflect all transactions of the companies, including international subsidiaries, and to devise and maintain an adequate system of internal accounting controls for international operations.

Non-U.S. Government Regulation

To the extent that any of our product candidates, once approved, are sold in a country outside of the United States, we will be subject to similar foreign laws and regulations, which may include, for instance, applicable post-marketing requirements, including safety surveillance, anti-fraud and abuse laws and implementation of corporate compliance programs and reporting of payments or other transfers of value to healthcare professionals.

In order to market our future products in the EEA (which is comprised of the 27 Member States of the EU plus Norway, Iceland and Liechtenstein) and many other foreign jurisdictions, we must obtain separate regulatory approvals. More concretely, in the EEA, medicinal products can only be commercialized after obtaining a Marketing Authorization, or MA. There are two types of marketing authorizations:

- the Community MA, which is issued by the European Commission through the Centralized Procedure, based on the opinion of the Committee for Medicinal Products for Human Use of the EMA, and which is valid throughout the entire territory of the EEA. The Centralized Procedure is mandatory for certain types of products, such as biotechnology medicinal products, orphan medicinal products and medicinal products indicated for the treatment of AIDS, cancer, neurodegenerative disorders, diabetes, auto-immune and viral diseases. The Centralized Procedure is optional for products containing a new active substance not yet authorized in the EEA, or for products that constitute a significant therapeutic, scientific or technical innovation or which are in the interest of public health in the EU; and

- National MAs, which are issued by the competent authorities of the Member States of the EEA and only cover their respective territory, are available for products not falling within the mandatory scope of the Centralized Procedure. Where a product has already been authorized for marketing in a Member State of the EEA, this National MA can be recognized in another Member State through the Mutual Recognition Procedure. If the product has not received a National MA in any Member State at the time of application, it can be approved simultaneously in various Member States through the Decentralized Procedure.

Under the above described procedures, before granting the MA, the EMA or the competent authorities of the Member States of the EEA make an assessment of the risk-benefit balance of the product on the basis of scientific criteria concerning its quality, safety and efficacy.

Data and Marketing Exclusivity

In the EEA, new products authorized for marketing, or reference products, qualify for eight years of data exclusivity and an additional two years of market exclusivity upon marketing authorization. The data exclusivity period prevents generic or biosimilar applicants from relying on the pre-clinical and clinical trial data contained in the dossier of the reference product when applying for a generic or biosimilar marketing authorization in the EU during a period of eight years from the date on which the reference product was first authorized in the EU. The market exclusivity period prevents a successful generic or biosimilar applicant from commercializing its product in the EU until 10 years have elapsed from the initial authorization of the reference product in the EU. The 10-year market exclusivity period can be extended to a maximum of eleven years if, during the first eight years of those 10 years, the marketing authorization holder obtains an authorization for one or more new therapeutic indications which, during the scientific evaluation prior to their authorization, are held to bring a significant clinical benefit in comparison with existing therapies.

Pediatric Investigation Plan

In the EEA, marketing authorization applications for new medicinal products not authorized have to include the results of studies conducted in the pediatric population, in compliance with a pediatric investigation plan, or PIP, agreed with the EMA's Pediatric Committee, or PDCO. The PIP sets out the timing and measures proposed to generate data to support a pediatric indication of the drug for which marketing authorization is being sought. The PDCO can grant a deferral of the obligation to implement some or all of the measures of the PIP until there are sufficient data to demonstrate the efficacy and safety of the product in adults. Further, the obligation to provide pediatric clinical trial data can be waived by the PDCO when these data are not needed or appropriate because the product is likely to be ineffective or unsafe in children, the disease or condition for which the product is intended occurs only in adult populations, or when the product does not represent a significant therapeutic benefit over existing treatments for pediatric patients. Once the marketing authorization is obtained in all Member States of the EU and study results are included in the product information, even when negative, the product is eligible for six months' supplementary protection certificate extension.

Environmental, Health and Safety Matters

We are subject to extensive environmental, health and safety laws and regulations in a number of jurisdictions, primarily Israel, governing, among other things: the use, storage, registration, handling, emission and disposal of chemicals, waste materials and sewage; chemicals, air, water and ground contamination; air emissions and the cleanup of contaminated sites, including any contamination that results from spills due to our failure to properly dispose of chemicals, waste materials and sewage. Our operations use chemicals and produce waste materials and sewage and require permits from various governmental authorities including, local municipal authorities, the Ministry of Environmental Protection and the Ministry of Health. The Ministry of Environmental Protection and the MOH, local authorities and the municipal water and sewage company conduct periodic inspections in order to review and ensure our compliance with the various regulations. These laws, regulations and permits could potentially require the expenditure by us of significant amounts for compliance or remediation. If we fail to comply with such laws, regulations or permits, we may be subject to fines and other civil, administrative or criminal sanctions, including the revocation of permits and licenses necessary to continue our business activities. In addition, we may be required to pay damages or civil judgments in respect of third-party claims, including those relating to personal injury (including exposure to hazardous substances we use, store, handle, transport, manufacture or dispose of), property damage or contribution claims. Some environmental, health and safety laws allow for strict, joint and several liability for remediation costs, regardless of comparative fault. We may be identified as a responsible party under such laws. Such developments could have a material adverse effect on our business, financial condition and results of operations. In addition, laws and regulations relating to environmental, health and safety matters are often subject to change. In the event of any changes or new laws or regulations, we could be subject to new compliance measures or to penalties for activities that were previously permitted.

C. Organizational Structure.

We currently have two wholly owned subsidiaries: PolyPid Inc., a Delaware corporation with operations in New Jersey, and PolyPid Pharma SRL, a company organized under the laws of Romania.

D. Property, Plant and Equipment.

Our principal executive offices are located at 18 Hasivim Street, Petach Tikva 4959376, Israel, where we lease an approximately 53,000 square foot facility under a lease that expires July 22, 2027. This Israeli facility houses our administrative headquarters, research and development laboratories and state-of-the-art manufacturing facility. Our monthly rent payment is NIS 259,000 (approximately $71,000).

We consider that our current office space is sufficient to meet our anticipated needs for the foreseeable future and is suitable for the conduct of our business.

ITEM 4A. UNRESOLVED STAFF COMMENTS

Not applicable.

ITEM 5. OPERATING AND FINANCIAL REVIEW AND PROSPECTS

A. Operating Results.

The following discussion and analysis of our financial condition and results of operations should be read in conjunction with our consolidated financial statements and the related notes included elsewhere in this annual report on Form 20-F. The discussion below contains forward-looking statements that are based upon our current expectations and are subject to uncertainty and changes in circumstances. Actual results may differ materially from these expectations due to inaccurate assumptions and known or unknown risks and uncertainties, including those identified in "Cautionary Note Regarding Forward-Looking Statements" and under "Risk Factors" elsewhere in this annual report on Form 20-F. Our discussion and analysis for the year ended December 31, 2021 and December 31, 2022 can be found in our Annual Report on Form 20-F for the fiscal year ended December 31, 2022, filed with the SEC on March 31, 2023.

Overview

Since our inception in 2008, we have incurred significant operating losses. Our operating loss for the years ended December 31, 2022 and 2023 were $38.9 million and $22.9 million, respectively. As of December 31, 2023, we had an accumulated deficit of $238.3 million. We expect to continue to incur significant expenses and operating losses for the foreseeable future, and our losses may fluctuate significantly from year to year. We anticipate we will continue to incur expenses in connection with our ongoing activities, as we:

- continue clinical development of D-PLEX$_{100}$, including our SHIELD II Phase 3 clinical trial for the prevention of SSIs in patients undergoing abdominal colorectal surgery with large incisions;
- file NDAs seeking regulatory approval for D-PLEX$_{100}$ pursuant to the FDA's Section 505(b)(2) regulatory pathway in the United States and the hybrid application pathway in the EU;
- continue to invest in the preclinical research and development of OncoPLEX and any other future product candidates;
- continue to invest in our manufacturing facility and complete commercial process validation for the facility;
- establish commercial infrastructure to support the marketing, sale and distribution of D-PLEX$_{100}$ if it receives regulatory approval;
- hire field and office-based employees to prepare for and launch any approved product;
- hire additional research and development and general and administrative personnel to support our operations;
- maintain, expand and protect our intellectual property portfolio; and
- incur costs associated with operating as a public company.

We do not have any product candidates approved for sale and have not generated any revenue from product sales.

Operating Expenses

Our current operating expenses consist of three components — research and development expenses, marketing and business and development expenses and general and administrative expenses.

Revenue

To date, we have not generated any revenue from product sales and do not expect to generate any revenue from product sales for at least the next few years.

Research and Development, Net

Research and development, net consists primarily of costs incurred in connection with our research and development activities. This includes conducting clinical trials and preclinical studies, manufacturing development efforts and activities related to regulatory filings for product candidates, as well as overhead costs. Our research and development expenses primarily consist of:

- salaries and personnel-related costs, including benefits and share-based compensation expense, for our scientific personnel for executing clinical trials, preclinical studies, regulatory activities and for performing research and development activities;
- costs related to executing clinical trials and preclinical studies;
- costs related to acquiring, developing and manufacturing materials for such clinical trials and preclinical studies, including costs related to CMC activities;
- costs related to our manufacturing facility, including the production of development batches;
- costs of third-party suppliers;
- fees paid to consultants and other third parties who support the development of our product candidates;
- expenses related to regulatory activities, including consulting fees, filing fees paid to regulatory agencies and other costs incurred in seeking regulatory approval of our product candidates; and
- allocated facility-related costs and other related overhead costs.

Research and development expenses are expensed as incurred. We record accrued expenses for research and development activities conducted, on our behalf, by third-party service providers, which include the performance of clinical trials and the conduct of preclinical studies and contract manufacturing activities. We record these accrued expenses based upon research and development activities performed by such third-party service providers and reported to us, and we include these costs in accrued liabilities in the consolidated balance sheets and within research and development expense in the consolidated statements of operations.

We typically use our employee, consultant and infrastructure resources across our development programs. We track outsourced development costs by product candidate but we do not allocate personnel costs, other internal costs or external consultant costs to specific product candidates or preclinical programs.

From inception through December 31, 2023, we incurred $151.6 million in research and development expenses, net to advance the development of our clinical-stage product candidates, as well as other preclinical research and development programs. As of December 31, 2023, we received royalty-bearing grants of $4.9 million in the aggregate from the IIA. Pursuant to the terms of the grants, we are required to pay royalties of 3.0% to the IIA on revenues from sales of products for which the research and development was funded, in whole or in part, by the IIA, up to a limit of 100% of the amount of the grant received, linked to the U.S. dollar bearing interest. Until October 25, 2023, the interest was calculated at a rate based on 12-month LIBOR applicable to U.S. Dollar deposits. However, on October 25, 2023, the IIA published a directive concerning changes in royalties to address the expiration of the LIBOR. Under such directive, regarding IIA grants approved by the IIA prior to January 1, 2024 but which are outstanding thereafter, as of January 1, 2024 the annual interest is calculated at a rate based on 12-month SOFR, or at an alternative rate published by the Bank of Israel plus 0.71513%; and, for grants approved on or following January 1, 2024 the annual interest shall be the higher of (i) the 12 months SOFR interest rate, plus 1%, or (ii) a fixed annual interest rate of 4%. In addition, we must abide by other restrictions associated with the receipt of such grants under the R&D Law that continues to apply following repayment to IIA. These restrictions may impair our ability to outsource manufacturing, engage in change of control transactions or otherwise transfer our knowledge outside of Israel and may require us to obtain IIA approval for certain actions and transactions and pay additional amounts to the IIA. In addition, any change of control and any change of ownership of our Ordinary Shares that would make a non-Israel citizen or resident an "interested party" as defined in the R&D Law requires prior written notice to the IIA. As of December 31, 2023, we also received non-royalty bearing grants of $1.7 million in the aggregate from the IIA and $0.7 million in the aggregate from the FP7.

Substantially all of our research and development expenses for the years ended December 31, 2022 and 2023 were related to the development of D-PLEX$_{100}$.

We expect to continue to incur research and development expenses for the foreseeable future as we seek to advance D-PLEX$_{100}$ through Phase 3 clinical trials, including the cost of manufacturing drug supply for these clinical trials, further our preclinical studies and other research and development programs. At this time, we cannot reasonably estimate or know the nature, timing and estimated costs of the efforts that will be necessary to complete the development of our product candidates. We are also unable to predict when, if ever, material net cash inflows will commence from sales of our product candidates. This is due to the numerous risks and uncertainties associated with developing such product candidates, including the uncertainty of:

- successful enrolment in and completion of clinical trials;
- establishing an appropriate safety profile;
- receipt of marketing approvals from applicable regulatory authorities;
- establishing commercial manufacturing capabilities or making arrangements with third-party manufacturers;
- commercializing the product candidates, if and when approved, whether alone or in collaboration with others;
- obtaining and maintaining patent and trade secret protection and regulatory exclusivity for our product candidates;
- continued acceptable safety profiles of products following approval; and
- retention of key research and development personnel.

A change in the outcome of any of these variables with respect to the development of any of our product candidates would significantly change the costs, timing and viability associated with the development of that product candidate.

General and Administrative

General and administrative expenses consist primarily of salaries and personnel-related expenses, including benefits and share-based compensation expense, for employees performing functions other than research and development. This includes personnel in executive, finance and administrative support functions. Other general and administrative expenses include directors and officer's insurance, professional fees for auditing, tax and legal services and other consulting fees, as well as facility-related costs not otherwise allocated to research and development.

We expect that our general and administrative expenses will increase if any of our product candidates receives regulatory approval and we determine to build a commercial infrastructure to support commercial sales and marketing of our products.

Marketing and Business and Development

Marketing and business and development expenses consist primarily of salaries and personnel-related expenses, including benefits and share-based compensation expense. Other marketing and business and development expenses include professional fees and pre-commercialization.

We expect our marketing and business development expenses will increase if any of our product candidates receives regulatory approval and we determine to build a commercial infrastructure to support commercial sales and marketing of our products.

Financial Expense (Income), Net

Financial expense (income), net consists of financial expense of the loan provided by Kreos, as well as interest income on our short-term and long-term deposits, remeasurement of warrants and our foreign exchange gains and losses.

Results of Operations

Comparison of the Year Ended December 31, 2022 and 2023

The following table summarizes our results of operations for the year ended December 31, 2022 and 2023:

	Year Ended December 31,	
	2022	2023
	(in thousands)	
Research and development, net	$ 27,990	$ 16,148
Marketing and business development	2,888	1,196
General and administrative	8,010	5,523
Operating loss	38,888	22,867
Financial expense, net	540	929
Loss before income tax	$ 39,428	$ 23,796
Income tax expense	129	69
Net loss	$ 39,557	$ 23,865

Research and Development, Net

Research and development, net decreased by $11.8 million for the year ended December 31, 2023, compared to the year ended December 31, 2022. This decrease was primarily related to a decrease of $7.5 million in costs related to the completion of the SHIELD I trial, a decrease of $1.8 million in personnel costs, a decrease of $1.6 million in our manufacturing facility expenses, a decrease of $1.3 million in research and development costs related to D-PLEX$_{100}$ and OncoPLEX, and a decrease of $0.3 million in non-cash share-based compensation. These decreases were offset by a decrease of $0.7 million in IIA grants recognized in 2023.

Marketing and business development

Marketing and business development decreased by $1.7 million for the year ended December 31, 2023, compared to the year ended December 31, 2022. This decrease was primarily related to a decrease of $1.3 million in pre-commercialization activities for the product candidate D-PLEX$_{100}$ and a decrease of $0.4 million in personnel costs and non-cash share-based compensation.

General and Administrative

General and administrative decreased by $2.5 million for the year ended December 31, 2023, compared to the year ended December 31, 2022. This decrease was primarily related to decreases of $1.1 million in directors' and officers' insurance expenses, a decrease of $0.6 million in non-cash share-based compensation, a decrease of $0.4 million in in personnel costs and a decrease of $0.4 million in legal, professional and other cost associated with the Company's status as a publicly traded company.

Financial Expense, Net

Financial expense, net increased by $0.4 million for the year ended December 31, 2023, compared to the year ended December 31, 2022. This increase was mainly driven by the loan provided by Kreos during 2022.

Income tax expense

Income taxes decreased by $0.1 million for the year ended December 31, 2023, compared to the year ended December 31, 2022.

Net loss

Net loss decreased by $15.7 million for the year ended December 31, 2023, compared to the year ended December 31, 2022. This decrease was primarily related to the decrease in research and development, net of $11.8 million, a decrease in general and administrative of $2.5 million, a decrease of marketing and business development costs of $1.7 million and a decrease in income tax expense of $0.1 million. These decreases were offset by an increase in financial expense, net of $0.4 million.

Qualitative and Quantitative Disclosures about Market Risk

Foreign Currency Exchange Risk

We operate primarily in Israel, and approximately 56% of our expenses are denominated in NIS. We are therefore exposed to market risk, which represents the risk of loss that may impact our financial position due to adverse changes in financial market prices and rates. We are subject to fluctuations in foreign currency rates in connection with these arrangements. Changes of 5% and 10% in the U.S. dollar/NIS exchange rate would have increased/decreased operating expenses by approximately 1.2% and 2.4%, respectively, during the year ended December 31, 2023.

We currently partially hedge our foreign currency exchange rate risk to decrease the risk of financial exposure from fluctuations in the exchange rates of our principal operating currencies. These measures, however, may not adequately protect us from the material adverse effects of such fluctuations.

Interest Rate Risk

At present, our investments consist primarily of cash and cash equivalents and short-term deposits. We may invest in investment-grade marketable securities with maturities of up to three years, including commercial paper, money market funds, and government/non-government debt securities. The primary objective of our investment activities is to preserve principal while maximizing the income that we receive from our investments without significantly increasing risk and loss. Our investments may be exposed to market risk due to fluctuation in interest rates, which may affect our interest income and the fair market value of our investments, if any.

Inflation-Related Risks

Inflation generally affects us by increasing our NIS-denominated expenses, including salaries and benefits, as well as facility rental costs and payment to local suppliers. We do not believe that inflation had a material effect on our business, financial condition or results of operations during the years ended December 31, 2023, 2022 and 2021.

JOBS Act Transition Period

Section 107 of the JOBS Act provides that an "emerging growth company" can take advantage of the extended transition period provided in Section 7(a)(2)(B) of the Securities Act for complying with new or revised accounting standards. Thus, an emerging growth company can delay the adoption of certain accounting standards until those standards would otherwise apply to private companies. We have elected to take advantage of the extended transition period to comply with new or revised accounting standards and to adopt certain of the reduced disclosure requirements available to emerging growth companies. As a result of the accounting standards election, we will not be subject to the same implementation timing for new or revised accounting standards as other public companies that are not emerging growth companies which may make comparison of our financials to those of other public companies more difficult.

B. Liquidity and Capital Resources

Sources of Liquidity

Since our inception, we have not generated any revenue and have incurred operating losses and negative cash flows from our operations.

On April 5, 2022, we entered into the Loan Agreement for up to $15 million with Kreos. The Loan Agreement is comprised of three tranches in the amount of $10.0 million, $2.5 million, and $2.5 million, respectively. Drawdown of the first tranche was available upon the execution of the agreement. The second tranche of $2.5 million was available after we met the second tranche milestone in May 2022. The third and final tranche of $2.5 million will not be drawn since the third tranche milestone has not been met.

The first tranche in the amount of $10 million was drawn on April 26, 2022. The issuance costs due to the Loan Agreement amounted to $0.2 million and the second tranche in the amount of $2.5 million was drawn on July 19, 2022.

The Loan Agreement provides for interest-only repayments of the first tranche until December 31, 2022, followed by 36 equal monthly repayments of principal and interest. For the second tranche, which was drawn in July 2022, and the third tranche, if drawn, we will make repayments of interest only until August 31, 2023, followed by 33 equal monthly repayments of principal and interest. The senior secured loan initially bears interest at a rate of 9.25%. The loan is prepayable in full, at any time at our option. The loan is secured by our owned equipment, intellectual property and all shares we hold in PolyPid Inc. and PolyPid Pharma SRL, and we paid a customary fee to Kreos for the establishment of the loan. Additionally, PolyPid Inc. entered into a guaranty agreement with Kreos, all as security for monies borrowed by us under the Loan Agreement. On March 29, 2023, we entered into an amendment to the Loan Agreement. Pursuant to this amendment, 70% of the remaining principal and interest repayments will be delayed and repaid on a monthly equal basis from August 2024 to May 2026. The amended secured loan now bears interest at a rate of 10.00%, and we will pay a restructuring fee to Kreos consisting of 1.00% on close of the amendment and an incremental 3.00% at maturity. In return for this additional deferral of repayment, Kreos has the right to receive a potential claw back payment on account of the then outstanding principal amount. This claw back mechanism will be triggered by additional incoming funds from future partnership agreement or additional financing. If triggered, the minimum claw back to be paid is $1.5 million but will not exceed $3 million. Further, the outstanding warrants Kreos received were repriced to have an exercise price of $12.60 per share.

As part of the line of credit, we issued to Kreos a 7-year warrant to purchase 6,491 of our ordinary shares with an exercise price of $154.05 per share. Pursuant to the March 2023 amendment, the outstanding warrants Kreos received were repriced to have an exercise price of $12.60 per share. The Loan Agreement contains customary affirmative and restrictive covenants and representations and warranties. The expiration date for each warrant issued will be seven years from the issuance date.

In July 2021, we entered into a Controlled Equity Offering Sales Agreement, or the Sales Agreement, with Cantor Fitzgerald & Co., or the Agent, pursuant to which we may offer and sell, from time to time, our Ordinary Shares, through the Agent in an at the market offering, or the ATM, as defined in Rule 415(a)(4) under the Securities Act, for an aggregate offering price of up to $45 million. During the year ended December 31, 2023, we sold 75,693 Ordinary Shares under the ATM for a total amount of $2.4 million, with issuance costs in the amount of $0.1 million.

As of December 31, 2023, we had $5.3 million in cash, cash equivalents.

Cash Flows

The following table provides information regarding our cash flows for the periods indicated:

	Year Ended December 31,	
	2022	**2023**
	(in thousands)	
Net cash used in operating activities	$ (34,317)	$ (17,236)
Net cash provided by investing activities	16,575	3,804
Net cash provided by financing activities	16,428	9,976
Net increase (decrease) in cash, cash equivalents and restricted cash	$ (1,314)	$ (3,456)

Operating Activities

Net cash used in operating activities related primarily to our net losses adjusted for non-cash charges and measurements and changes in components of working capital. Adjustments to net loss for non-cash items mainly included depreciation, remeasurement of warrants and share-based compensation.

Net cash used in operating activities was $17.2 million for the year ended December 31, 2023, as compared to $34.3 million for the year ended December 31, 2022. This decrease was primarily related to the completion of the SHIELD I Phase 3 clinical trial in abdominal (soft tissue) surgery.

Investing Activities

Net cash provided by investing activities related primarily to the purchase and sale of short-term and long-term deposits and the acquisition of laboratory equipment, office equipment and furniture and leasehold improvements.

Net cash provided by investing activities was $3.8 million for the year ended December 31, 2023, as compared to net cash provided by investing activities of $16.6 million for the year ended December 31, 2022. This increase in net cash provided by investing activities primarily related to a decrease in release of short-term deposits, partially offset by purchases of laboratory equipment and leasehold improvements to our manufacturing facility.

Financing Activities

Net cash provided by financing activities was $10.0 million for the year ended December 31, 2023, as compared to $16.4 million for the year ended December 31, 2022. The decrease in net cash provided by financing activities is primarily related to the net proceeds from the loan provided by Kreos in 2022 and from the sales of Ordinary Shares under the ATM, offset by the March 2023 Offering (as defined below) proceeds.

In July 2021, we entered into the Sales Agreement with the Agent, pursuant to which we may offer and sell, from time to time, our Ordinary Shares, through the Agent in an at the market offering, or the ATM Offering, as defined in Rule 415(a)(4) under the Securities Act, for an aggregate offering price of up to $45.0 million. In that regard, we registered up to $200,000,000 of our Ordinary Shares on a Registration Statement on Form F-3 (File No. 333-257651), or the F-3. The $45,000,000 of our Ordinary Shares that may be offered, issued and sold under the Sales Agreement prospectus is included in the $200,000,000 of securities that may be offered, issued and sold by us under the F-3. Upon termination of the Sales Agreement, any portion of the $45,000,000 included in the Sales Agreement prospectus of the F-3 that is not sold pursuant to the Sales Agreement will be available for sale in other offerings pursuant to the F-3, and if no shares are sold under the Sales Agreement, the full $45,000,000 of securities may be sold in other offerings pursuant to the F-3. During the year ended December 31, 2023, we sold 75,693 Ordinary Shares under the ATM for a total amount of $2.4 million, with issuance costs in the amount of $0.1 million.

On April 5, 2022, we entered into the Loan Agreement for up to $15 million with Kreos. The Loan Agreement is comprised of three tranches in the amount of $10 million, $2.5 million and $2.5 million, respectively, in which the first tranche in the amount of $10 million and the second tranche in the amount of $2.5 million were drawn on April 26, 2022 and July 19, 2022, respectively. In addition, in accordance with the Loan Agreement, we will issue to Kreos warrants to purchase our Ordinary Shares equal to 8% of the amount of each tranche, when and if borrowed, with an exercise price of $154.05 per share. The expiration date for each warrant issued will be seven years from the agreement date. Accordingly, as a result of the first tranche and second tranche withdrawal, the Company issued to Kreos 6,491 warrants with an exercise price of $154.05 per share. The loan is secured by our owned equipment, intellectual property and all shares we hold in PolyPid Inc. and PolyPid Pharma SRL, and we paid a customary fee to Kreos for the establishment of the loan. Additionally, PolyPid Inc. entered into a guaranty agreement with Kreos, all as security for monies borrowed by us under the Loan Agreement. On March 29, 2023, we entered into an amendment to the Loan Agreement. Pursuant to this amendment, 70% of the remaining principal and interest repayments will be delayed and repaid on a monthly equal basis from August 2024 to May 2026. The amended secured loan now bears interest at a rate of 10.00%, and we will pay a restructuring fee to Kreos consisting of 1.00% on close of the amendment and an incremental 3.00% at maturity. In return for this additional deferral of repayment, Kreos has the right to receive a potential claw back payment on account of the then outstanding principal amount. This claw back mechanism will be triggered by additional incoming funds from future partnership agreement or additional financing. If triggered, the minimum claw back to be paid is $1.5 million but will not exceed $3 million. As of March 6, 2024, we have paid claw back payments of $1.5 million. The remaining potential claw back payment is up to $1.5 million. Further, the outstanding 6,491 warrants Kreos received were repriced to have an exercise price of $12.60 per share.

The third and final tranche of $2.5 million will not be drawn since the third tranche milestone has not been met.

In March 2023, we completed an offering, or the March 2023 Offering, pursuant to which we sold 488,667 Ordinary Shares at a public offering price of $12.60 per share, for total gross proceeds of $6.2 million. In addition, we granted to the underwriter a 30-day option to purchase up to an additional 15% of the Ordinary Shares offered in the Offering at the public offering price, less underwriting discounts and commissions. The underwriter exercised its option in full at the closing of the Offering. The securities were offered by us pursuant to a "shelf" under the F-3. Concurrently with the Offering, we entered into a private placement with some of our existing shareholders, pursuant to which we issued pre-funded warrants, or the Pre-Funded Warrants, to acquire an aggregate of up to 345,238 Ordinary Shares for total gross proceeds of $4.4 million. The exercise price per Pre-Funded Warrant is $0.003 per Ordinary Share. Exercise of the Pre-Funded Warrants was subject to an increase in our authorized share capital. We held an annual and extraordinary general meeting of shareholders on May 5, 2023 under which we obtained shareholders' approval to increase the number of our authorized share capital. On May 11, 2023, all of the Pre-Funded Warrants were exercised into 345,151 Ordinary shares on a cashless basis.

On January 4, 2024, we entered into a definitive securities purchase agreement, or the Securities Purchase Agreement, for a private placement financing, or the January 2024 Private Placement. Pursuant to the Securities Purchase Agreement, on January 9, 2024, certain investors purchased 3,143,693 of our Ordinary Shares at a purchase price of $4.81 per share, pre-funded warrants to purchase up to 227,619 Ordinary Shares at an exercise price of $0.0001 and warrants to purchase up to 3,371,312 Ordinary Shares at an exercise price of $5.50 per share. The pre-funded warrants do not expire and the warrants expire upon the earlier of two years from the date of issuance and 10 trading days following the Company's announcement of the positive recommendation by Data Safety Monitoring Board regarding the Company's unblinded interim analysis in the SHIELD II Phase 3 trial of D-PLEX$_{100}$ resulting in the stopping of the trial due to positive efficacy. The offering resulted in net proceeds of approximately $15.0 million. Exercise of the warrants in full would result in an additional $18.5 million in gross proceeds. We intend to use the net proceeds from the sale of the securities for our ongoing SHIELD II phase 3 clinical trial for the prevention of SSIs in patients undergoing abdominal colorectal surgery with large incisions, working capital and general corporate purposes.

Current Outlook

To date, we have not generated any revenues from the commercial sale of our product candidates, and we do not expect to generate revenue for at least the next few years. We expect to continue to incur expenses in connection with our ongoing activities, particularly as we continue to conduct clinical trials and seek marketing approval for our product candidates, and as we continue the research and development of our other existing and future product candidates. In addition, if we obtain marketing approval for any product candidates, we expect to incur significant commercialization expenses related to product sales, marketing, manufacturing and distribution to the extent that such sales, marketing, manufacturing and distribution are not the responsibility of potential collaborators. Accordingly, we will need to obtain substantial additional funding in connection with our continuing operations.

We expect that our existing cash and cash equivalents and short-term deposits will enable us to fund our operating expenses and capital expenditure requirements well into the third quarter of 2024. We anticipate that we will need to raise additional capital in order to complete our clinical and regulatory program for D-PLEX$_{100}$ towards potential NDA submission, including the SHIELD II clinical trial, as well as continue to invest in the research and development of OncoPLEX and any other future product candidates. If we are unable to raise additional capital when desired, our business, operating results, and financial condition would be adversely affected, and there is substantial doubt about our ability to continue as a going concern. We have a shareholders' deficit of $2.1 million as of December 31, 2023 (however, as noted below, our shareholders' equity was $13 million following the January 2024 Private Placement), and negative operating cash flows in recent years. We expect to continue incurring losses and negative cash flows from operations until our products reach commercial profitability. Our plans to reduce the going concern risk include the continued commercialization of our products, maintaining cost efficiency and raising capital through the sale of additional equity securities, debt or capital inflows from strategic partnerships.

Our future capital requirements will depend on many factors, including:

- the scope, progress, results and costs of our ongoing clinical trials;
- the costs, timing and outcome of regulatory review of D-PLEX$_{100}$ and any future product candidates;
- the costs and timing of establishing and validating manufacturing processes and facilities for development and commercialization of D-PLEX$_{100}$ and any future product candidates, if approved, including our manufacturing facility;

- the number and development requirements of any future product candidates that we may pursue;
- the costs and timing of future commercialization activities, including product manufacturing, marketing, sales and distribution, for any of our product candidates for which we receive marketing approval;
- the revenue, if any, received from commercial sales of our product candidates for which we receive marketing approval, which may be affected by market conditions, including obtaining coverage and adequate reimbursement of our product candidates from third-party payors, including government programs and managed care organizations, and competition;
- our ability to establish and maintain collaborations with biopharmaceutical companies on favorable terms, if at all;
- 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 or in-license other product candidates and technologies.

Identifying potential product candidates and conducting clinical trials and preclinical studies is a time-consuming, expensive and uncertain process that takes many 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 commercial revenues, if any, will be derived from sales of product candidates that we do not expect to be commercially available for few 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, or at all.

Until such time, if ever, as we can generate substantial product revenues, we expect to finance our cash needs through a combination of equity offerings, including pursuant to the ATM Offering, debt financings, grants, collaborations, strategic alliances and licensing arrangements. If we are unable to raise additional funds through equity or debt 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 product candidates that we would otherwise prefer to develop and market ourselves.

Nasdaq Listing Rule 5450(b)(1) requires listed companies to maintain stockholders' equity of at least $2.5 million. Although as of December 31, 2023, we had a deficit, our shareholders' equity was $13 million following the January 2024 Private Placement. Accordingly, we believe we demonstrate compliance with the stockholders' equity requirement.

On December 6, 2022, we received a letter from Nasdaq indicating that the Company was not in compliance with Nasdaq Listing Rule 5550(a)(1), as the closing bid price of its Ordinary Shares had been below US$1.00 per Ordinary Share for the previous 30 consecutive business days. The Company was given a period of 180 calendar days, or until June 5, 2023, to regain compliance with the minimum bid price requirement. In order to be provided with a second 180-day compliance period, the Company submitted an application to transfer the listing of its Ordinary Shares from the Nasdaq Global Market to the Nasdaq Capital Market. On June 5, 2023, we announced we had received an extension of the period to regain compliance with minimum bid price requirement and approval from Nasdaq to transfer the listing our Ordinary Shares from The Nasdaq Global Market to The Nasdaq Capital Market. The transfer took effect at the opening of business on June 6, 2023.

On September 20, 2023, we announced the Reverse Share Split, and on October 11, 2023, we announced that we received a written notice from Nasdaq that we regained compliance with the minimum bid price requirement for continued listing set forth in Nasdaq Listing Rule 5550(a)(2), which requires listed securities, including our Ordinary Shares, to maintain a minimum bid price of $1.00 per share.

5.C Research and development, patents and licenses, etc.

During the past three years, we have focused our preclinical and clinical development efforts on our lead product candidate D-PLEX$_{100}$ for the prevention of abdominal (soft tissue) SSIs after abdominal surgery and the prevention of sternal (bone) SSIs after cardiac surgery. We also continue to evaluate the development of D-PLEX$_{100}$ for other types of surgeries. Our pipeline also includes an early-stage oncology program focused on the preclinical development of OncoPLEX, an intra-tumoral cancer therapy. We continuously evaluate additional product candidates for our clinical pipeline program that have been developed by us or that may be the subject of in-licenses from third parties or out- licenses to third parties. Our R&D team is comprised of 46 scientists, doctors and clinicians, who are based out of our corporate headquarters in Petach Tikva, Israel. For a description of the amounts that we have incurred over the last two years pursuant to our research and development programs, please see "Item 5. Operating and Financial Review and Prospects— A. Operating Results— Operating Expenses— Research and Development Expenses, net" and "Item 5. Operating and Financial Review and Prospects— A. Results of Operations — Comparison of the year ended December 31, 2022 and 2023 — Research and Development Expenses, net."

Our patent estate includes patents and patent applications with claims directed to our PLEX technology platform, D-PLEX$_{100}$ product candidate and claims for potential future product candidates. As of March 6, 2024, our patent estate included 153 issued patents, including utility and composition of matter patents, 2 allowed and 19 pending patent applications for our product candidates and methods of treatment. For a description of our intellectual property, please see "Item 4. Information on the Company— B. Business Overview."

5.D Trend Information

To date, we have not generated any revenue from product sales and do not expect to generate any revenue from product sales for at least the next few years. From inception through December 31, 2023, we incurred $151.6 million in research and development expenses, net to advance the development of our clinical-stage product candidates, as well as other preclinical research and development programs. We expect to continue to incur expenses in connection with our ongoing activities, particularly as we continue to conduct clinical trials and seek marketing approval for our product candidates, and as we continue the research and development of our other existing and future product candidates. In addition, if we obtain marketing approval for any product candidates, we expect to incur significant commercialization expenses related to product sales, marketing, manufacturing and distribution to the extent that such sales, marketing, manufacturing and distribution are not the responsibility of potential collaborators. For a description of additional factors that may affect our future performance, please see "Item 5. Operating and Financial Review and Prospects— B. Liquidity and Capital Resources— Current Outlook."

5.E Critical Accounting Estimates

Our consolidated financial statements are prepared in accordance with accepted accounting principles generally accepted in the United States. The preparation of our consolidated financial statements requires us to make estimates, assumptions and judgments that affect the reported amounts of assets, liabilities, costs and expenses. We base our estimates and assumptions on historical experience and other factors that we believe to be reasonable under the circumstances. We evaluate our estimates and assumptions on an ongoing basis. Our actual results may differ from these estimates. Our most critical accounting policies are summarized below.

Share-Based Compensation

We account for share-based compensation in accordance with ASC No. 718, "Compensation—Stock Compensation," which requires companies to estimate the fair value of equity-based payment awards on the date of grant using the option-pricing model..

We recognize compensation expenses only for those shares expected to vest using the straight-line method over the requisite service period of the award, which is generally the option vesting term of three to four years. We recognize forfeitures of awards as they occur.

Option Valuations

We selected the Black-Scholes-Merton model as the most appropriate fair value method for our option awards. The Black-Scholes-Merton model requires a number of assumptions, of which the most significant are the share price, volatility and the expected option term.

Key Assumptions

The Black-Scholes-Merton option-pricing model requires the input of highly subjective assumptions, including the fair value of the underlying ordinary shares, the expected volatility of the price of our ordinary shares, the expected term of the option, risk-free interest rates and the expected dividend yield of our ordinary shares. These estimates involve inherent uncertainties and the application of the management's judgment. If such inputs change and different assumptions are used, our share-based compensation expenses could be materially different in the future. These assumptions are estimated as follows:

- Fair Value of Ordinary Shares - The fair value of each ordinary share was based on the closing price of the Company's publicly traded ordinary shares as reported on the date of the grant.

- Risk-Free Interest Rate - The risk-free rate for the expected term of the options is based on the Black-Scholes option-pricing model on the yields of U.S. Treasury securities with maturities appropriate for the expected term of employee share option awards.

- Expected Term - The expected term represents the period that options are expected to be outstanding. For option grants that are considered to be "plain vanilla," the Company determines the expected term using the simplified method. The simplified method deems the term to be the average of the time-to-vesting and the contractual life of the options.

- Expected Volatility - As the Company has a short trading history for its ordinary shares, the expected volatility is derived from the average historical share volatilities of several unrelated public companies within the Company's industry that the Company considers to be comparable to its own business over a period equivalent to the option's expected term.

- Expected Dividend Yield - The Company has never declared or paid any cash dividends and does not presently plan to pay cash dividends in the foreseeable future. As a result, an expected dividend yield of zero percent was used.

  If any of the assumptions used in the Black-Scholes-Merton model change significantly, the share-based compensation expenses in future awards may differ materially as compared with the current awards granted.

We incurred non-cash share-based compensation expense of $3.4 million, $4.3 million and $4.8 million during the years ended December 31, 2023, 2022 and 2021, respectively. We expect to continue to grant share option awards in the future, and to the extent that we do, our actual share-based compensation expenses recognized are likely to increase.

Accrued Research and Development Expenses

As part of the process of preparing our consolidated financial statements, we are required to estimate our accrued research and development expenses. This process involves reviewing purchase orders and open contracts, communicating with our personnel to identify services that have been performed on our behalf and estimating the level of service performed and the associated cost incurred for the services when we have not yet been invoiced or otherwise notified of the actual cost. The majority of our service providers invoice us monthly in arrears for services performed, on a pre-determined schedule or when contractual milestones are met; however, some require advance payments. We make estimates of our accrued expenses as of each balance sheet date in our consolidated financial statements based on facts and circumstances known to us at that time. We periodically confirm the accuracy of our estimates with the service providers and make adjustments if necessary. The significant estimates in our accrued research and development expenses include the following costs incurred for services in connection with research and development activities for which we have not yet been invoiced:

- vendors in connection with clinical development activities;

- CROs in connection with clinical trials; and

- investigative sites in connection with clinical trials.

Although we do not expect our estimates to be materially different from amounts actually incurred, our understanding of the status and timing of services performed relative to the actual status and timing of services performed may vary and may result in reporting amounts that are too high or too low in any particular period. To date, there have not been any material adjustments to our prior estimates of accrued research and development expenses.

Grants and Participation

Royalty-bearing grants from the IIA for funding approved research and development projects are recognized at the time we are entitled to such grants, on the basis of the costs incurred, and are presented as a deduction from research and development expenses. Since the payment of royalties is not probable when the grants are received, we do not record a liability for amounts received from the IIA until the related revenues are recognized. Non-royalty-bearing grants from the IIA MAGNET program and from FP7 for funding approved research and development projects are recognized at the time we are entitled to such grants, on the basis of the costs incurred, and are presented as a deduction from research and development expenses. In the event of failure of a project that was partly financed by the IIA, we would not be obligated to pay any royalties or repay the amounts received.

As of December 31, 2023, we have received royalty-bearing grants totaling $4.9 million. Pursuant to the terms of the grants, we are required to pay royalties to the IIA of 3.0% on revenues from sales of products developed financed in whole or in part by IIA, up to a limit of 100% of the grants received, linked to the U.S. doller and bearing interest. Until October 25, 2023, the interest was calculated at a rate based on 12-month LIBOR applicable to U.S. Dollar deposits. However, on October 25, 2023, the IIA published a directive concerning changes in royalties to address the expiration of the LIBOR. Under such directive, regarding IIA grants approved by the IIA prior to January 1, 2024 but which are outstanding thereafter, as of January 1, 2024 the annual interest is calculated at a rate based on 12-month SOFR, or at an alternative rate published by the Bank of Israel plus 0.71513%; and, for grants approved on or following January 1, 2024 the annual interest shall be the higher of (i) the 12 months SOFR interest rate, plus 1%, or (ii) a fixed annual interest rate of 4%. Through December 31, 2023, no royalties have been paid or accrued.

In addition, we must abide by other restrictions associated with the receipt of such grants under the R&D Law that continue to apply following repayment to the IIA. These restrictions may impair our ability to outsource manufacturing or otherwise transfer our knowledge outside of Israel, or engage in change of control transactions, and may require us to obtain IIA approval for certain actions and transactions and pay additional amounts to the IIA. In addition, any change of control and any change of ownership of our Ordinary Shares that would make a non-Israel citizen or resident an "interested party" as defined in the R&D Law requires prior written notice to the IIA.

Leases

The Company adopted ASC No. 842, "leases", which requires the recognition of lease assets and lease liabilities by lessees for leases classified as operating leases. The Company determines if an arrangement is a lease at inception. The Company's assessment is based on: (1) whether the contract includes an identified asset, (2) whether the Company obtains substantially all of the economic benefits from the use of the asset throughout the period of use, and (3) whether the Company has the right to direct how and for what purpose the identified asset is used throughout the period of use.

Leases are classified as either finance leases or operating leases. A lease is classified as a finance lease if any one of the following criteria are met: the lease transfers ownership of the asset by the end of the lease term, the lease contains an option to purchase the asset that is reasonably certain to be exercised, the lease term is for a major part of the remaining useful life of the asset, the present value of the lease payments equals or exceeds substantially all of the fair value of the asset, or the underlying asset is of such a specialized nature that it is expected to have no alternative use to the lessor at the end of lease term. A lease is classified as an operating lease if it does not meet any one of these criteria. Since all of the Company's lease contracts do not meet any of the criteria above, the Company concluded that all of its lease contracts should be classified as operating leases.

Right-of-use ("ROU") assets and liabilities are recognized on the commencement date based on the present value of remaining lease payments over the lease term. For this purpose, the Company considers only payments that are fixed and determinable at the time of commencement. As most of the Company's leases do not provide an implicit rate, the Company uses its incremental borrowing rate based on information available on the commencement date in determining the present value of lease payments. All ROU assets are reviewed for impairment. The lease terms may include options to extend or terminate the lease when it is reasonably certain that the Company will exercise such options.

The Company also elected the practical expedient to not separate lease and non-lease components for its leases. The Company elected to not recognize a lease liability and a ROU asset for lease with a term of twelve months or less.

ITEM 6. DIRECTORS, SENIOR MANAGEMENT AND EMPLOYEES

A. Directors and Senior Management.

The following table sets forth information regarding our executive officers, key employees and directors as of the date of this annual report:

Name	Age	Position
Dikla Czaczkes Akselbrad	50	Chief Executive Officer and Director
Dalit Hazan	53	Executive Vice President, Research and Development, Clinical and Regulatory Affairs
Ori Warshavsky	46	Chief Operating Officer - US
Jonny Missulawin	37	Chief Financial Officer
Non-Employee Directors		
Jacob Harel [(1) (2)]	68	Chairman
Yechezkel Barenholz, Ph.D. [(1)(3)]	82	Director
Joseph BenAmram[(1) (2)]	60	Director
Nir Dror [(1)(3)]	47	Director
Itzhak Krinsky, Ph.D. [(1)(2)(3)]	71	Director
Robert B. Stein, M.D., Ph.D. [(1)]	73	Director
Nurit Tweezer-Zaks[(1)]	58	Director

(1) Indicates independent director under Nasdaq Stock Market rules.
(2) Member of our Audit Committee.
(3) Member of our Compensation, Nominating and Corporate Governance Committee.

Dikla Czaczkes Akselbrad, Chief Executive Officer, Director

Ms. Dikla Czaczkes Akselbrad has served as our Chief Executive Officer since July 2022 and a director since August 2022. From December 2016 to July 2022, Ms. Czaczkes Akselbrad served as our Executive Vice President and Chief Financial Officer. Prior to that time, Ms. Czaczkes Akselbrad served as our Chief Strategy Officer from July 2014 to December 2016. Ms. Czaczkes Akselbrad has over 20 years of experience in capital markets, finance and business development. Ms. Czaczkes Akselbrad served as a chief financial officer of Compugen Ltd. (Nasdaq: CGEN) from February 2008 to May 2014. She holds a B.A. in accounting and economics and an M.B.A. in finance, both from Tel Aviv University, and is a certified public accountant in Israel.

Dalit Hazan, Executive Vice President, Research and Development, Clinical and Regulatory Affairs

Ms. Dalit Hazan has served as our Executive Vice President, Research and Development, Clinical and Regulatory Affairs since March 2022, Senior Vice President, Research and Development and Regulatory Affairs since June 2021, Vice President, Research and Development and Regulatory Affairs since April 2019, Vice President, Regulatory Affairs since March 2018 and Regulatory Affairs Director since April 2016. Prior to that time, Ms. Hazan was the head of Global Regulatory Affairs at Teva Pharmaceuticals Industries Ltd. From 2013 to April 2016 as well as Head of Regulatory Affairs department since 2007. She holds a B.S. in biology and a M.S. in physiology and pharmacology from the Sackler Faculty of Medicine at Tel Aviv University and an Executive MBA from Bar Ilan University.

Ori Warshavsky, Chief Operating Officer - US

Mr. Ori Warshavsky has served as our Chief Operating Officer - US since January 2022 and as Vice President of Marketing since October 2020. Prior to joining the Company, Mr. Warshavsky spent over 10 years at Teva Pharmaceuticals Industries Ltd. most recently as Senior Director of Oncology Marketing for the U.S. market from December 2017 to September 2020. Prior to that, he served as Head of Market Access for Teva Canada from June 2016 to December 2017 and as Chief of Staff to the Chief Executive Officer of Teva's global generics business from June 2014 to June 2016. He holds a B.Sc. in Biotechnology Engineering from The Ben-Gurion University and an M.B.A from Duke University.

Jonny Missulawin, Chief Financial Officer

Mr. Jonny Missulawin has served as our Chief Financial Officer since May 2023. From August 2022 to May 2023. Mr. Missulawin served as our Senior Vice President of Finance. From December 2017 to August 2022, Mr. Missulawin served as our Director of Finance. From May 2014 to December 2017, Mr. Missulawin served as our Financial Controller. Prior to joining the Company, Mr. Missulawin served as a Senior Auditor at Ernst & Young from 2010 to 2013. Mr. Missulawin holds an MBA from Tel Aviv University in Financial Management and a BA in Accounting and Economics from Bar-Ilan University.

Jacob Harel, Director

Mr. Jacob Harel has served as a director since November 2017 and the chairman of our board of directors since December 2017. Mr. Harel has more than 35 years of experience in the pharmaceutical industry, of which 27 years were at Merck & Co., Inc., or Merck, in different leadership roles in sales and marketing across several continents. In his last position at Merck, Mr. Harel was the head of the corporate business development group. In this capacity he led a corporate team that was in charge of negotiating and executing key enterprise transactions. Following his retirement from Merck in 2014, Mr. Harel founded "The Harel Group", a business development advisory firm, specialized in facilitating partnership transactions within the global pharmaceutical and medical device industries. He holds a B.S. in economics from Haifa University and an M.B.A. from Tel Aviv University.

Yechezkel Barenholz, Ph.D., Director

Prof. Yechezkel Barenholz, Ph.D. has served as a director since April 2008. Prof. Barenholz currently serves as head of the Laboratory of Membrane and Liposome Research at the Department of Biochemistry of the Hadassah Medical School at the Hebrew University of Jerusalem, a position he has held since 1975. He has served as Chief Executive Officer and Chief Scientific Officer of Ayana Pharma Ltd. since 2018 and 2014, respectively. He served as a director of Aulos Bioscience from 2019 to 2023. He is the major inventor and co-developer of Doxil®, the first nano-delivery system approved by the FDA, now approved globally and used to treat more than one million cancer patients. He led the development of generic Doxil at Ayana Pharma Ltd. that was approved by the FDA on October 2021, and which is now sold in the United States and Israel. Prof. Barenholz has been awarded many national and international prizes including the prestigious Israel Prime Minister 2020 EMET prize in Nanotechnology. He holds a B.S., M.S. and Ph.D. in biochemistry from the Hebrew University of Jerusalem.

Joseph BenAmram, Director

Mr. Joseph BenAmram has served as a director since May 2023. Mr. Joseph BenAmram held various leadership roles at Merck in sales, marketing and business development for over 22 years. In his last position he was Senior Vice President & President of EURAM Region from October 2017 to February 2019. From June 2016 to September 2017, he served as Senior Vice President & President of MER Region and from October 2013 to May 2016 as Senior Vice President & President, Diversified Brands Division. From August 2010 to October 2013, Mr. BenAmram served as Merck's Vice President & General Manager Emerging Markets. Mr. BenAmram currently serves as the President of Quris-AI (since June 2023), the Chief Strategy Officer of Golden Age Health PTE. LTD. (since March 2023) and the chairman of the board of directors of MediCane Health Inc. (since March 2019). He holds an MBA from Tel Aviv University, Recanati Graduate School of Business Administration, and a Bachelor's degree in Economics and Management from Tel Aviv University, Recanati Graduate School of Business Administration.

Nir Dror, Director

Mr. Nir Dror has served as a director since May 2020. Mr. Dror currently serves as the Chief Financial Officer of Aurum Ventures M.K.I. Ltd., a position he has held since 2013. He holds a B.A. and L.L.M. from Tel Aviv University and an M.B.A. from the University of Michigan.

Itzhak Krinsky, Ph.D., Director

Dr. Itzhak Krinsky, Ph.D. has served as a director since January 2019. Dr. Krinsky currently serves as a director and member of the audit committee of Globrands Ltd., Noramco Inc., Woodstock Sterile Solutions and Apotex Inc., positions he has held since July 2018, September 2018, April 2021 and April 2023, respectively. Dr. Krinsky previously worked at Teva Pharmaceuticals Industries Ltd. as the Chairman of Teva Japan, Chairman of Teva South Korea and Head of Business Development, Asia Pacific from October 2012 to April 2016. Dr. Krinsky served as a director of Kamada Ltd. from November 2017 to November 2019 and as a member of the nominating and corporate governance committee of Advanz Pharma Corp. (formerly known as Concordia Healthcare Corp) from May 2017 to September 2018. He holds a B.A. and M.A. in economics from Tel Aviv University and a Ph.D. in economics from McMaster University.

Robert B. Stein, M.D., Ph.D., Director

Dr. *Robert B. Stein, M.D., Ph.D.*, has served as a director since June 2020. Dr. Stein currently serves as a Venture Partner at Samsara BioCapital, a position he has held since January 2018, and he is the Principal at RBS Biotech Consulting, LLC, which he founded in August 2008. He previously served as the Chief Scientific Officer and Head of Research and Development of Agenus Inc. from January 2014 to January 2016 and as the President of Research and Development from January 2016 to April 2017. He served as President, Regenerative Medicine at Mimedx, from 2019 to 2022. He serves on the boards of directors of Protagenic Therapeutics, Inc. since February 2016 and Taro Pharmaceutical Industries Ltd. since February 2020. He holds a B.S. in biology and chemistry from Indiana University and an M.D. and a Ph.D. in physiology and pharmacology from Duke University. Dr. Stein is board certified in Anatomic and Clinical Pharmacology. He has 45 years of experience in the pharma and biotech industries, including leadership roles at Merck, Ligand, DuPont, Incyte, Roche, and Kinemed in addition to the roles mentioned above. He has played a key role in the discovery and/or development of eight registered medicines, including Sustiva®, Promacta®, and Eliquis®.

Nurit Tweezer-Zaks, M.D., Director

Dr. Nurit Tweezer-Zaks, M.D., has served as a director since November 2023. Dr. Tweezer-Zaks currently serves as Chief Executive Officer of MediCane R&D, a position she has held since July 2022. She previously served as Chief Medical Officer and Business Development of MediCane Health Inc. from April 2021 to July 2022. Dr. Tweezer-Zaks served as Chief Medical Officer of aMOON Venture Capital Fund from May 2020 to April 2021, and as Operating Partner and Head of Sourcing from June 2018 to April 2020. Prior to this, Dr. Tweezer-Zaks held increasingly senior positions at Sanofi. In her most recent role at Sanofi from June 2017 to June 2018, she served as Global Established Products Medical Lead – Strategic Decision for Portfolio Enhancement. Dr. Tweezer-Zaks holds M.D. and B.S. degrees from Ben Gurion University School of Medicine in Beer Sheva, Israel, and earned an M.B.A. from the Kellogg-Recanati International Executive MBA Program, a global partnership program between Northwestern University's Kellogg School of Management in Evanston, IL, and Tel Aviv University's Recanati Graduate School of Business Administration in Israel.

Family Relationships

There are no family relationships between any members of our executive management and our directors.

Arrangements for Election of Directors and Members of Management

Our board of directors consists of eight directors, each of whom will continue to serve pursuant to their appointment until the next annual general meeting of shareholders. We are not a party to, and are not aware of, any voting agreements among our shareholders.

B. Compensation.

The following table presents in the aggregate all compensation we paid to all of our directors and senior management from January 1, 2023 through December 31, 2023. The table does not include any amounts we paid to reimburse any of such persons for costs incurred in providing us with services during this period.

All amounts reported in the tables below reflect our cost, in thousands of U.S. dollars. Amounts paid in NIS are translated into U.S. dollars at the rate of NIS 3.69 = U.S. $1.00, based on the average representative rate of exchange between the NIS and the U.S. dollar as reported by the Bank of Israel during such period of time.

	Salary and Related Benefits [1]	Bonus Payments, Benefits and Perquisites	Share-Based Compensation [2]
All directors and senior management as a group, consisting of 14 [3] persons as of December 31, 2023	$ 1,553,397	$ 60,565	$ 1,267,880

(1) Represents the directors and senior management's gross salary plus payment of mandatory social benefits made by the company on behalf of such officer. Such benefits may include, to the extent applicable to the executive, payments, contributions and/or allocations for savings funds, education funds (referred to in Hebrew as "Keren Hishtalmut"), pension, severance, risk insurances (e.g., life or work disability insurance) and payments for social security.
(2) Computed based on Black-Scholes-Merton model.
(3) Includes Mr. Chaim Hurvitz and Ms. Anan Tsur Segal, former directors, who left May 2023 and August 2023, respectively, and Dr. Noam Emanuel former Chief Scientific Officer, who left May 2023.

In accordance with the Israeli Companies Law, we are required to disclose the compensation granted to our five most highly compensated officers. The table below reflects the compensation granted during or with respect to the year ended December 31, 2023.

Executive Officer	Salary and Related Benefits	Bonus Payments, Benefits and Perquisites	Share-Based Compensation	Total
Dikla Czaczkes Akselbrad	$ 347,883	$ -	$ 209,558	$ 557,441
Dalit Hazan	$ 272,381	$ -	$ 325,795	$ 598,176
Jonny Missulawin	$ 186,960	$ -	$ 192,605	$ 379,565
Ori Warshavsky	$ 340,889	$ -	$ 172,027	$ 512,916
Noam Emanuel	$ 242,207	$ 60,565	$ 168,695	$ 471,467

Employment Agreements

We have entered into written employment or services agreements with each of our executive officers. All of these agreements contain customary provisions regarding noncompetition, confidentiality of information and most of them contain also customary provisions regarding assignment of inventions. However, the enforceability of the noncompetition provisions may be limited under applicable law. In addition, we have entered into agreements with each executive officer and director pursuant to which we have agreed to indemnify each of them up to a certain amount and to the extent that these liabilities are not covered by directors and officers insurance. Members of our senior management may be eligible for bonuses in accordance with our compensation policy and as set forth by our board of directors.

For a description of the terms of our options and option plans, see "Item 6. E. Share Ownership" below.

Directors' Service Contracts

Other than with respect to our directors that are also executive officers, we do not have written agreements with any director providing for benefits upon the termination of his or her engagement with our company.

C. Board Practices.

Board of Directors

Under our amended and restated articles of association, our board of directors must consist of at least five directors and not more than eleven directors. Our board of directors presently consists of eight members. We believe that Prof. Barenholz, Messrs. BenAmram, Dror and Harel, Drs. Krinsky, Stein, and Tweezer-Zaks are "independent" for purposes of the Nasdaq Stock Market rules. Under the Israeli Companies Law, our board of directors is responsible for setting our general policies and supervising the performance of management. Our board of directors may exercise all powers and may take all actions that are not specifically granted to our shareholders or to management. Our executive officers are responsible for our day-to-day management and have individual responsibilities established by our board of directors. Our Chief Executive Officer is appointed by, and serves at the discretion of, our board of directors, subject to the terms of the employment agreement that we have entered into with her.

Other than vacancies to be filled through selection by the remaining members of our board, the Israeli Companies Law and our amended and restated articles of association provide that directors are elected at the annual general meeting of our shareholders by a vote of the majority of the total voting power of our company voting in person, by proxy or by other voting instrument at that meeting. We have only one class of directors.

Under the Israeli Companies Law, our board of directors is required to employ independent judgment and discretion when voting, and is prohibited from entering into any voting arrangements with respect to actions taken at meetings of the board. Further, the Israeli Companies Law provides that in the event a director learns about an alleged breach of law or improper conduct of business relating to a company matter, said director must promptly take action to summon a meeting of the board of directors to address any such breach.

Notwithstanding the exemptions available to foreign private issuers under Nasdaq Rules, we follow the requirements of the Nasdaq Rules with regard to the process of nominating directors by means of our compensation, nominating and corporate governance committee, which is comprised of directors who our board has deemed to be independent under Nasdaq Rules.

In addition, our amended and restated articles of association allows our board of directors to appoint directors to fill vacancies on our board of directors, including filling empty board seats up to the maximum number of directors permitted under our articles of association, for a term of office equal to the remaining period of the term of office of each director whose office has been vacated. Vacancies on our board of directors may be filled by a vote of a simple majority of the directors then in office. A director so appointed will hold office until the next annual general meeting of our shareholders in which the other directors then in office are proposed to be replaced or reappointed.

Directors may be removed from office by a resolution at a general meeting of shareholders adopted by a vote of 65% of the total voting power of our company in accordance with the Israeli Companies Law and our amended and restated articles of association.

Under the Israeli Companies Law, and except as described below, we would be required to include on our board of directors at least two members, each of whom qualifies as an external director, and as to whom special qualifications and other provisions would be applicable. We would also be required to include one such external director on each of our board committees.

Under regulations promulgated under the Israeli Companies Law, Israeli companies whose shares are traded on stock exchanges such as The Nasdaq Capital Market that do not have a controlling shareholder (as defined therein) and which comply with the requirements of the jurisdiction where the company's shares are traded with respect to the appointment of independent directors and the composition of an audit committee and compensation committee, may elect not to follow the Israeli Companies Law requirements with respect to the composition of its audit committee and compensation committee and the appointment of external directors. As we do not have a controlling shareholder, and we comply with the requirements of the Nasdaq Stock Market with respect to the composition of our board and such committees, we therefore choose to follow such exemptions from the Israeli Companies Law requirements with respect thereto, including the appointment of external directors.

Leadership Structure of the Board

In accordance with the Israeli Companies Law and our amended and restated articles of association, our board of directors is required to appoint one of its members to serve as chairman of the board of directors and may also release that director from his or her position as chairman. Our board of directors has appointed Jacob Harel to serve as chairman of the board of directors.

Our board of directors is required to elect one director to serve as the chairman of the board of directors to preside at the meetings of the board of directors, and may also release that director from his or her position as chairman. Pursuant to the Israeli Companies Law, neither the chief executive officer nor any of his or her relatives is permitted to serve as the chairman of the board of directors, and a company may not (subject to a certain time-limited exemption, as described below) vest the chairman or any of his or her relatives with the chief executive officer's authorities. In addition, a person who reports, directly or indirectly, to the chief executive officer may not serve as the chairman of the board of directors; the chairman may not be vested with authorities of a person who reports, directly or indirectly, to the chief executive officer; and the chairman may not serve in any other position in the company or a controlled company, but he or she may serve as a director or chairman of a controlled company. However, and notwithstanding the foregoing, the Israeli Companies Law permits the shareholders of a company to determine, for periods not exceeding three years from each such determination, that the Chairman or his or her relative may serve as chief executive officer or be vested with the chief executive officer's authorities, and that the chief executive officer or his or her relative may serve as Chairman or be vested with the Chairman's authorities. Such determination of a company's shareholders requires either: (1) the approval of at least the majority of the shares of those shareholders present and voting on the matter (other than controlling shareholders and those having a personal interest in the determination); or (2) that the total number of shares opposing such determination does not exceed 2% of the total voting power in the company.

Director Independence

Although not required of foreign private issuers under Nasdaq Rules, we comply with the requirements thereunder applicable to domestic listed companies that a majority of the board of directors be deemed to be independent under such rules, as well as the independence requirements that are applicable to our audit committee and compensation, nominating and corporate governance committee if we were a domestic listed company, as described below. In light of this obligation, our board of directors has undertaken a review of the independence of our directors under current rules and regulations of the SEC and Nasdaq Rules and considered whether any of our directors has a material relationship with us that could compromise his or her ability to exercise independent judgment in carrying out his or her responsibilities. Based upon information requested from and provided by each director concerning such director's background, employment and affiliations, including family relationships, our board of directors determined that Prof. Barenholz, Messrs. BenAmram, Dror and Harel, Drs. Krinsky, Stein, and Tweezer-Zaks, representing seven of our eight directors, are "independent directors" as defined under current rules and regulations of the SEC and Nasdaq Rules. In making these determinations, our board of directors considered the current and prior relationships that each non-employee director has with our company and all other facts and circumstances that our board of directors deemed relevant in determining their independence, including the beneficial ownership of our share capital by each non-employee director and the transactions involving them described in "Item 7. B. — Related Party Transactions."

Alternate Directors

Our articles of association provide, consistent with the Israeli Companies Law, that any director, and with respect to external directors – only subject to certain preconditions, may appoint another person to serve as his or her alternate director, provided such person has the qualifications prescribed under the Israeli Companies Law to be appointed and to serve as a director and is not already serving as a director or an alternate director of the company. The term of an alternate director may be terminated at any time by the appointing director and automatically terminates upon the termination of the term of the appointing director. An alternate director has the same rights and responsibilities as a director. To date, there are no alternate director appointments in effect.

Board Committees

Under the Israeli Companies Law and our amended and restated articles of association, our board of directors is permitted to form committees, and to delegate to any such committee powers allotted to the board of directors, subject to certain exceptions. In general, the board of directors may overturn a resolution adopted by a committee it has formed; provided, however, that the board's decision shall not affect the ability of third parties, who were not aware of such decision, to rely on the committee's resolution prior to the time it is overturned. Only members of the board of directors can be members of a board committee, unless the committee is solely advisory. Our board of directors has established two standing committees – the audit committee and the compensation committee, both of which are mandatory under the Israeli Companies Law.

Audit Committee

Israeli Companies Law Requirements

Under the Israeli Companies Law, we are required to appoint an audit committee.

Nasdaq Listing Requirements

Under the Nasdaq Rules, we are required to maintain an audit committee consisting of at least three independent directors, each of whom is financially literate and one of whom has accounting or related financial management expertise.

The members of our audit committee include Mr. BenAmram, Mr. Harel and Dr. Krinsky. Dr. Krinsky serves as the chairman of our audit committee. All members of our audit committee meet the requirements for financial literacy under the applicable rules and regulations of the SEC and The Nasdaq Capital Market. Our board of directors has determined that each of Dr. Krinsky and Mr. BenAmram is an audit committee financial expert as such term is defined by the SEC rules and has the requisite financial experience as defined by the Nasdaq Rules. Each of the members of our audit committee is "independent" as such term is defined in Rule 10A-3(b)(1) under the Exchange Act and satisfies the independent director requirements under the Nasdaq Rules.

Audit Committee Role

Our audit committee charter sets forth the responsibilities of the audit committee consistent with the rules and regulations of the SEC and the Nasdaq Rules, as well as the requirements for such committee under the Israeli Companies Law, including the following:

- oversight of our independent registered public accounting firm and recommending the engagement, compensation or termination of engagement of our independent registered public accounting firm to the board of directors in accordance with Israeli law;
- recommending the engagement or termination of the person filling the office of our internal auditor, reviewing the services provided by our internal auditor and reviewing effectiveness of our system of internal control over financial reporting;
- recommending the terms of audit and non-audit services provided by the independent registered public accounting firm for pre-approval by our board of directors; and
- reviewing and monitoring, if applicable, legal matters with significant impact, receiving reports regarding irregularities and legal compliance, acting according to the Company's "whistleblower policy" and recommending actions to our board of directors if so required.

Our audit committee provides assistance to our board of directors in fulfilling its legal and fiduciary obligations in matters involving our accounting, auditing, financial reporting, internal control and legal compliance functions by pre-approving the services performed by our independent accountants and reviewing their reports regarding our accounting practices and systems of internal control over financial reporting. Our audit committee also oversees the audit efforts of our independent accountants and takes those actions that it deems necessary to satisfy itself that the auditors are independent of management.

Under the Israeli Companies Law, our audit committee is responsible, among other things, for:

- determining whether there are deficiencies in the business management practices of our company, including in consultation with our internal auditor or the independent auditor, and making recommendations to the board of directors to improve such practices;
- determining whether to approve certain related party transactions (including transactions in which an office holder has a personal interest and whether such transaction is extraordinary or material under the Israeli Companies Law);
- establishing the approval process for certain related party transactions (including transactions in which an office holder has a personal interest and whether such transaction is extraordinary or material under the Israeli Companies Law) and establishing the approval process for certain transactions with a controlling shareholder or in which a controlling shareholder has a personal interest;
- where the board of directors approves the working plan of the internal auditor, examining such working plan before its submission to the board of directors and proposing amendments thereto;
- examining our internal audit controls and internal auditor's performance, including whether the internal auditor has sufficient resources and tools to fulfill his responsibilities;
- examining the scope of our auditor's work and compensation and submitting a recommendation with respect thereto to our board of directors, depending on which of them is considering the appointment of our auditor; and
- establishing procedures for the handling of employees' complaints as to the financial management of our business and the protection to be provided to such employees.

Compensation, Nominating and Corporate Governance Committee and Compensation Policy

The composition of our compensation, nominating and corporate governance committee meets the requirements for and guidance under the Nasdaq Rules and current SEC rules and regulations applicable to domestic issuers. The members of this committee are Prof. Barenholz, Mr. Dror, and Dr. Krinsky, each of whom is independent in accordance with the Nasdaq rules. Mr. Dror serves as the chair of the committee.

Israeli Companies Law Requirements

Under the Israeli Companies Law, the board of directors of a public company must appoint a compensation committee.

The duties of the compensation committee under the Israeli Companies Law, include the recommendation to the company's board of directors of a policy regarding the terms of engagement of office holders, to which we refer as a compensation policy. That policy must be adopted by the company's board of directors, after considering the recommendations of the compensation, nominating and corporate governance committee, and will need to be approved by the company's shareholders, which approval requires what we refer to as a Special Majority Approval for Compensation. A Special Majority Approval for Compensation requires shareholder approval by a majority vote of the shares present and voting at a meeting of shareholders called for such purpose, provided that either: (i) such majority includes at least a majority of the shares held by all shareholders who are not controlling shareholders and do not have a personal interest in such compensation arrangement, excluding abstentions; or (ii) the total number of shares of non-controlling shareholders and shareholders who do not have a personal interest in the compensation arrangement and who vote against the arrangement does not exceed 2% of the company's aggregate voting rights. Our board of directors and our shareholders have approved a compensation policy, which will be in effect until the fifth anniversary of our IPO, which took place in June 2020.

The compensation policy must (subject to certain exemptions) set the framework and limitation for decisions concerning the financial terms of employment or engagement of office holders, including exculpation, insurance, indemnification or any monetary payment or obligation of payment in respect of employment or engagement. The compensation policy must relate to certain factors, including advancement of the company's long-term objectives, business plan and policies, and creation of appropriate incentives for office holders. It must also consider, among other things, the company's risk management, size and the nature of its operations. The compensation policy must furthermore consider the following additional factors:

- the education, skills, expertise and accomplishments of the relevant office holder;
- the office holder's roles and responsibilities and prior compensation agreements with him or her;
- the relationship between the terms offered and the average compensation of the company's personnel;
- the impact of disparities in salary upon work relationships in the company;

- the possibility of reducing variable compensation at the discretion of the board of directors;
- the possibility of setting a limit on the exercise value of non-cash variable equity-based compensation; and
- as to financial payment upon termination of service, the period of service of the office holder, the terms of his or her compensation during such service period, the company's performance during that period of service, the person's contribution towards the company's achievement of its goals and the maximization of its profits, and the circumstances under which the person is leaving the company.

The compensation policy must also include the following principles:

- the link between variable compensation and long-term performance and measurable criteria;
- the relationship between variable and fixed compensation, and the ceiling for the value of variable compensation;
- the conditions under which an office holder would be required to repay compensation paid to him or her if it was later shown that the data upon which such compensation was based was inaccurate and was restated in the company's financial statements;
- the minimum holding or vesting period for variable, equity-based compensation; and
- maximum limits for financial payment upon termination of service.

Compensation, Nominating and Corporate Governance Committee Roles

The compensation, nominating and corporate governance committee is responsible for (i) recommending the compensation policy to our board of directors for its approval (and subsequent approval by our shareholders) and (ii) duties related to the compensation policy and to the compensation of our office holders, including:

- recommending whether a compensation policy should continue in effect, if the then-current policy has a term of greater than five years from a company's initial public offering, or otherwise three years (approval of either a new compensation policy or the continuation of an existing compensation policy must in any case occur five years from a company's initial public offering, or otherwise every three years);
- recommending to the board of directors periodic updates to the compensation policy;
- assessing implementation of the compensation policy;
- determining whether to approve the terms of compensation of certain office holders which, according to the Israeli Companies Law, require the committee's approval; and
- determining whether the limited conditions exist which would allow for the compensation terms of a candidate for the position of the chief executive officer not to be brought for approval by the shareholders.

Our compensation, nominating and corporate governance charter sets forth the responsibilities of the compensation, nominating and corporate committee, which include:

- the responsibilities set forth in the compensation policy;
- reviewing and approving the granting of options and other incentive awards to the extent such authority is delegated by our board of directors;
- the administration of our clawback policy; and
- reviewing, evaluating and making recommendations regarding the compensation and benefits for our non-employee directors.

In addition, our compensation, nominating and corporate governance committee is responsible for:

- overseeing our corporate governance functions on behalf of the board;
- making recommendations to the board regarding corporate governance issues;

- identifying and evaluating candidates to serve as our directors consistent with the criteria approved by the board;
- reviewing and evaluating the performance of the board;
- serving as a focal point for communication between director candidates, non-committee directors and our management;
- selecting or recommending to the board for selection candidates to the board; and
- making other recommendations to the board regarding affairs relating to our directors.

Disclosure of Compensation of Executive Officers

For so long as we qualify as a foreign private issuer, we are not required to comply with the proxy rules applicable to U.S. domestic companies, including the requirement applicable to emerging growth companies to disclose the compensation of our Chief Executive Officer, Chief Financial Officer and other three most highly compensated executive officers on an individual, rather than on an aggregate, basis. Nevertheless, under regulations promulgated under the Israeli Companies Law, we are required to disclose the annual compensation of our five most highly compensated office holders (as defined under the Israeli Companies Law) on an individual basis. This disclosure is not as extensive as that required of a U.S. domestic issuer.

Internal Auditor

Under the Israeli Companies Law, the board of directors of an Israeli public company must appoint an internal auditor recommended by the audit committee. An internal auditor may not, among other things, be:

- a person (or a relative of a person) who holds 5% or more of the company's outstanding shares or voting rights;
- a person (or a relative of a person) who has the power to appoint a director or the general manager of the company;
- an office holder (including a director) of the company (or a relative thereof); or
- a member of the company's independent accounting firm, or anyone on its behalf.

The role of the internal auditor is to examine, among other things, our compliance with applicable law and orderly business procedures, and to report to the chief executive officer, the chairman of the board and the chairman of the audit committee. The internal auditor is entitled to receive notice of audit committee meetings and to participate in them. In addition, the internal auditor may request that the chairman of the audit committee convene a meeting within a reasonable time to discuss an issue raised by the internal auditor. The internal auditor is responsible for preparing a proposal for an annual or periodical audit plan and submit such plan to the board of directors or the audit committee for their approval.

Our internal auditor is not an interested party in the Company and not our employee.

Exculpation, Insurance and Indemnification of Directors and Officers

Under the Israeli Companies Law, a company may not exculpate an office holder from liability for a breach of the duty of loyalty. An Israeli company may exculpate an office holder in advance from liability to the company, in whole or in part, for damages caused to the company as a result of a breach of duty of care but only if a provision authorizing such exculpation is included in its articles of association. Our amended and restated articles of association include such a provision. A company may not exculpate in advance a director from liability arising out of a breach of the duty of care with respect to a distribution.

Under the Israeli Companies Law, a company may indemnify an office holder in respect of the following liabilities and expenses incurred for acts performed by him or her as an office holder, either pursuant to an undertaking made in advance of an event or following an event, provided its articles of association include a provision authorizing such indemnification:

- financial liability imposed on him or her in favor of another person pursuant to a judgment, including a settlement or arbitrator's award approved by a court. However, if an undertaking to indemnify an office holder with respect to such liability is provided in advance, then such an undertaking must be limited to events which, in the opinion of the board of directors, can be foreseen based on the company's activities when the undertaking to indemnify is given, and to an amount or according to criteria determined by the board of directors as reasonable under the circumstances, and such undertaking shall detail the abovementioned foreseen events and amount or criteria;

- reasonable litigation expenses, including attorneys' fees, incurred by the office holder (1) as a result of an investigation or proceeding instituted against him or her by an authority authorized to conduct such investigation or proceeding, provided that (i) no indictment was filed against such office holder as a result of such investigation or proceeding, and (ii) no financial liability was imposed upon him or her as a substitute for the criminal proceeding as a result of such investigation or proceeding or, if such financial liability was imposed, it was imposed with respect to an offense that does not require proof of criminal intent; and (2) in connection with a monetary sanction;

- reasonable litigation expenses, including attorneys' fees, incurred by the office holder or imposed by a court in proceedings instituted against him or her by the company, on its behalf, or by a third party, or in connection with criminal proceedings in which the office holder was acquitted, or as a result of a conviction for an offense that does not require proof of criminal intent; and

- expenses incurred by an office holder in connection with an administrative procedure instituted against such office holder, or certain compensation payments made to an injured party imposed on an office holder by an administrative proceeding, pursuant to the Securities Law.

Under the Israeli Companies Law, a company may insure an office holder against the following liabilities incurred for acts performed by him or her as an office holder, if and to the extent provided in the company's articles of association:

- a breach of the duty of loyalty to the company, provided that the office holder acted in good faith and had a reasonable basis to believe that the act would not harm the company;

- a breach of the duty of care to the company or to a third party, to the extent such a breach arises out of the negligent conduct of the office holder; and

- a financial liability imposed on the office holder in favor of a third party.

Under the Israeli Companies Law, a company may not indemnify or insure an office holder against any of the following:

- a breach of a duty of loyalty, except for indemnification and insurance for a breach of the duty of loyalty to the company to the extent that the office holder acted in good faith and had a reasonable basis to believe that the act would not harm the company;

- a breach of the duty of care committed intentionally or recklessly, excluding a breach arising out of the negligent conduct of the office holder;

- an act or omission committed with intent to derive illegal personal benefit; or

- a fine, civil fine, monetary sanction or forfeit levied against the office holder.

Under the Israeli Companies Law, exculpation, indemnification and insurance of office holders in a public company must be approved by the compensation committee and the board of directors and, with respect to certain office holders or under certain circumstances, also by the shareholders.

Our amended and restated articles of association permit us to exculpate, indemnify and insure our office holders to the fullest extent permitted or to be permitted by the Israeli Companies Law.

We obtained directors and officers liability insurance for the benefit of our office holders in an amount standard for a company of our size. We intend to maintain such increased coverage and pay all premiums thereunder to the fullest extent permitted by the Israeli Companies Law. We entered into agreements with each of our directors and executive officers exculpating them from liability to us for damages caused to us as a result of a breach of duty of care and undertaking to indemnify them, in each case, to the fullest extent permitted by our amended and restated articles of association and Israeli law, including with respect to liabilities resulting from our IPO to the extent that these liabilities are not covered by insurance. In the opinion of the SEC, however, indemnification of directors and office holders for liabilities arising under the Securities Act is against public policy and therefore unenforceable.

Duties of Shareholders

Under the Companies Law, a shareholder has a duty to refrain from abusing his power in the company and to act in good faith and in an acceptable manner in exercising his rights and performing his obligations toward the company and other shareholders, including, among other things, in voting at general meetings of shareholders (and at shareholder class meetings) on the following matters:

- amendment of the articles of association;
- increase in the company's authorized share capital;
- merger; and
- the approval of related party transactions and acts of office holders that require shareholder approval.

D. Employees.

On December 31, 2021, we had 75 full-time employees and 4 part-time employees. On December 31, 2022, we had 57 full-time employees and three part-time employees. On December 31, 2023, we had 59 full-time employees and three part-time employees.

As of March 6, 2024, we had four full-time senior management employees, including our Chief Executive Officer, Chief Financial Officer, Executive Vice President, Research and Development, Clinical and Regulatory Affairs and Chief Operating Officer – US. In addition, we currently have 56 full-time employees, four part-time employees and 1 full-time service provider. 59 of our employees are located in Israel and 1 employee located in New Jersey, the United States. None of our employees are represented by labor unions or covered by collective bargaining agreements. We believe that we maintain good relations with all of our employees. However, in Israel, we are subject to certain Israeli labor laws, regulations and national labor court precedent rulings, as well as certain provisions of collective bargaining agreements applicable to us by virtue of extension orders issued in accordance with relevant labor laws by the Israeli Ministry of Economy and which apply such agreement provisions to our employees even though they are not part of a union that has signed a collective bargaining agreement.

All of our employment and consulting agreements include employees' and consultants' undertakings with respect to non-competition, assignment to us of intellectual property rights developed in the course of employment, and confidentiality. The enforceability of such provisions is limited by Israeli law.

E. Share Ownership.

See "Item 7.A. Major Shareholders" below.

F. Action to Recover Erroneously Awarded Compensation

Not applicable.

Amended and Restated 2012 Share Option Plan

Our Amended and Restated 2012 Share Option Plan, or the 2012 Plan, was adopted by our board of directors on August 29, 2012, amended on January 30, 2018, and extended on August 8, 2022. The 2012 Plan provides for the grant of options to our directors, employees, office holders, service providers and consultants. A total of 53,641 shares are reserved but unissued under our 2012 Plan as of the date of March 6, 2024. As of March 6, 2024, options to purchase 253,186 Ordinary Shares were issued and outstanding with an average exercise price of $22.44 per share, out of which options to purchase 74,718 Ordinary Shares were vested as of that date, with an average exercise price of $45.60 per share.

On December 15, 2022, our board of directors approved to reduce the exercise price of the outstanding options previously issued to Israeli employees and directors and U.S. employee, consultant and directors, bearing an exercise price higher than $135 to $23.07, provided however, that the repricing mechanism does not apply with respect to employees or directors: (i) who did not provide their written consent to such repricing; or (ii) with respect to whom any process of termination of employment or service, as the case may be, was initiated, whether by the Company or by the employee/director, before February 1, 2023.The Board of Directors and the Chief Executive Officer's repriced options were approved by our shareholders on May 5, 2023.

The 2012 Plan is administered by our board of directors, which, on its own or upon the recommendation of a remuneration committee or any other similar committee of the board of directors, shall determine, subject to applicable law, the identity of grantees of awards and various terms of the grant. With respect to those grantees subject to Israeli taxation, the 2012 Plan provides for granting options in compliance with Section 102 of the Israeli Income Tax Ordinance, 1961, or the Ordinance, under the capital gains track, and for grants to non-employee Israeli service providers, consultants and shareholders who hold 10% or more of our total share capital or are otherwise controlling shareholders pursuant to section 3(i) of the Ordinance, as further detailed below.

Section 102 of the Ordinance allows employees, directors and officers who are not controlling shareholders and are considered Israeli residents to receive favorable tax treatment for compensation in the form of shares or options. Our non-employee service providers and controlling shareholders may only be granted options under section 3(i) of the Ordinance, which does not provide for similar tax benefits. Section 102 includes two alternatives for tax treatment involving the issuance of options or shares to a trustee for the benefit of the grantees and also includes an additional alternative for the issuance of options or shares directly to the grantee. Section 102(b)(2) of the Ordinance, the most favorable tax treatment for the grantee, permits the issuance to a trustee under the "capital gain track." However, under this track we are not allowed to deduct an expense with respect to the issuance of the options or shares.

Generally, options granted to our employees will vest over three or four years, as may be determined by the board of directors at the time of the grant, and not be exercisable before the first anniversary of the date of grant of options. With respect to the remainder of the options, they will become exercisable in equal amounts of options at the end of each three-month period till the end of the third or fourth year from the date of grant, as the case may be. Generally, options that are not exercised within ten years from the grant date shall expire.

Other than by will or laws of descent, neither the options nor any right in connection with such options are assignable or transferable. If we terminate a grantee's employment or service for any reason whatsoever, other than for cause, any options granted to such grantee that are not vested shall immediately expire. All of the grantee's vested options shall be deemed expired on the earlier of: (a) the expiration date of such vested options as was in effect immediately prior to such termination; or (b) three months following the date of such termination, or if such termination is the result of death or disability of the grantee, 12 months from the date of such termination. However, for certain executives and other senior management, our board of directors (and shareholders where applicable) has resolved that the expiration date of their vested options shall be between one to four years following the date of such termination. If we terminate a grantee's employment or service for cause, all of the grantee's vested and unvested options will expire on the date of termination. Also, and subject to applicable law, if the grantee's employment or services is terminated for cause, then we will have a right of repurchase against any shares issued pursuant to the exercise of options. In the event that we exercise such right of repurchase, we will pay such grantee for each such share being repurchased an amount equal to the price originally paid by the grantee for such share. Alternatively, we may assign such rights of repurchase to our shareholders pro rata to their respective holdings of our issued and outstanding shares.

If we are party to a merger or consolidation, outstanding options and shares acquired under the 2012 Plan will be subject to the agreement of merger or consolidation, which will provide for one or more of the following: (i) the assumption of such options by the surviving corporation or its parent, (ii) the substitution by the surviving corporation or its parent of new options, or (iii) in the event that the successor entity neither assumes nor substitutes all outstanding options, then each respective grantee shall have a period of 15 days to exercise his or her vested options, after which all remaining options, whether vested or not shall expire. For certain individuals, if their position is terminated within a certain period after the transaction, their options shall accelerate.

In the event of any variation in our share capital, including a share dividend, share split, combination or exchange of shares, recapitalization, or any other like event, the number, class and kind of shares subject to the 2012 Plan and outstanding options, and the exercise prices of the options, will be appropriately and equitably adjusted so as to maintain the proportionate number of shares without changing the aggregate exercise price of the options.

On January 30, 2018, our board of directors adopted an appendix to the 2012 Plan for U.S. residents, which was approved by our shareholders on February 8, 2018. Under this appendix, the 2012 Plan provides for the granting of options to U.S. residents in compliance with the U.S. Internal Revenue Code of 1986, as amended.

ITEM 7. MAJOR SHAREHOLDERS AND RELATED PARTY TRANSACTIONS

A. Major Shareholders.

The following table sets forth information regarding beneficial ownership of our Ordinary Shares as of March 6, 2024 by:

- each person, or group of affiliated persons, known to us to be the beneficial owner of more than 5% of our voting securities.
- each of our directors and executive officers; and
- all of our directors and executive officers as a group.

Except as indicated in footnotes to this table, we believe that the shareholder named in this table has sole voting and investment power with respect to all shares shown to be beneficially owned by it, based on information provided to us by such shareholder. The shareholders listed below do not have any different voting rights from any of our other shareholders.

	No. of Shares Beneficially Owned [1]	Percentage Owned [2]
Holders of more than 5% of our voting securities:		
Aurum Ventures M.K.I. Ltd. [3]	1,300,903	24.47%
AIGH Investment Partners [4]	1,413,730	9.99%
Yehuda Nir [5]	914,901	17.55%
Xenia Venture Capital Ltd. [6]	681,096	9.99%
Dafna Lifescience [7]	415,800	8.31%
Investor Company ITF Rosalind Master Fund L.P. [8]	831,600	9.99%
The Hewlett Fund LP [9]	498,960	9.89%
Aharon Lukach [10]	471,538	9.42%
Directors and executive officers:		
Dikla Czaczkes Akselbrad [11]	9,950	*
Dalit Hazan [12]	3,719	*
Ori Warshavsky [13]	2,683	*
Jonny Missulawin [14]	2,157	*
Yechezkel Barenholz [15]	3,683	*
Nir Dror [16]	1,520	*
Jacob Harel [17]	3,182	*
Nurit Tweezer-Zaks	-	*
Itzhak Krinsky [18]	2,353	*
Joseph BenAmram [19]	157	*
Robert B. Stein [20]	1,720	*
All directors and executive officers as a group (11 persons)	31,124	*

* Under 1%

(1) Beneficial ownership is determined in accordance with the rules of the SEC. Under these rules, a person is deemed to be a beneficial owner of a security if that person, even if not the record owner, has or shares the underlying benefits of ownership. These benefits include the power to direct the voting or the disposition of the securities or to receive the economic benefit of ownership of the securities. A person also is considered to be the "beneficial owner" of securities that the person has the right to acquire within 60 days by option or other agreement. Beneficial owners include persons who hold their securities through one or more trustees, brokers, agents, legal representatives or other intermediaries, or through companies in which they have a "controlling interest," which means the direct or indirect power to direct the management and policies of the entity.

(2) The percentages shown are based on 4,797,252 Ordinary Shares issued and outstanding as of March 6, 2024.

(3) The beneficial ownership is based on the information provided to us in connection with the filing of our registration statement on Form F-3 on February 1, 2024 and consists of (i) 781,152 Ordinary Shares issued and outstanding; and (ii) 519,751 Ordinary Shares issuable upon the exercise of warrants. Mr. Morris Kahn is the ultimate sole beneficial shareholder of Aurum Ventures M.K.I. Ltd., as the outstanding shares of Aurum Ventures M.K.I. Ltd are held indirectly by a trust for which Mr. Kahn is the settlor and the sole ultimate beneficiary. Consequently, Mr. Kahn may be deemed to share beneficial ownership of the Ordinary Shares held by Aurum Ventures M.K.I. Ltd. Mr. Kahn does not make day-to-day voting or investment decisions with respect to the Ordinary Shares held by Aurum Ventures M.K.I. Ltd. and therefore disclaims beneficial ownership of them except to the extent of his pecuniary interest therein. Aurum Ventures M.K.I Ltd.'s address is 16 Aba Hillel St, Ramat Gan, Israel, 5250608. Based on information provided to us by Aurum Ventures M.K.I Ltd. on January 18, 2024.

(4) The beneficial ownership is based on the information provided to us in connection with the filing of our registration statement on Form F-3 on February 1, 2024 of the following entities: AIGH Investment Partners LP, WVP Emerging Manager Onshore Fund, LLC - AIGH Series, and WVP Emerging Manager Onshore Fund, LLC - Optimized Equity Series (together referred to as AIGH Investment Partners), and includes (i) 479,246 Ordinary Shares issued and outstanding; (ii) 227,619 pre-funded warrants; and (iii) 706,865 Ordinary Shares issuable upon the exercise of warrants. The percentage in the table above gives effect to the 9.99% beneficial ownership limitation set forth under the terms of the pre-funded warrants and warrants. Orin Hirschman has the voting and dispositive power over the shares held by AIGH Investment Partners. AIGH Investment Partners' address is 6006 Berkeley Ave., Baltimore, MD, 21209. Based on information provided to us by AIGH Investment Partners on January 23, 2024.

(5) The beneficial ownership is based on the information provided to us in connection with the filing of our registration statement on Form F-3 on February 1, 2024 and includes (i) 499,101 Ordinary Shares issued and outstanding; and (ii) 415,800 Ordinary Shares issuable upon the exercise of warrants. Yehuda Nir's address is 14 Moshe Lerer St., Ness Ziona, Israel, 7404981. Based on information provided to us by Yehuda Nir on January 14, 2024.

(6) The beneficial ownership is based on the information provided to us in connection with the filing of our registration statement on Form F-3 on February 1, 2024 and includes (i) 374,263 Ordinary Shares issued and outstanding; (ii) 36,563 Ordinary Shares issued and outstanding held by affiliated entities; (iii) 270,270 Ordinary Shares issuable upon the exercise of warrants. The percentage in the table above gives effect to the 9.99% beneficial ownership limitation set forth under the terms of the warrants. Xenia Venture Capital Limited, or Xenia, is an investment holding company. The entire share capital of Centaurus Investments Limited, the parent holding company of Xenia, is held by Geneva Trust Company (GTC) SA (as trustee of the VT Two Trust). Geneva Trust Company (GTC) SA (a subsidiary of Geneva Holding Company (GHC) SA), as trustee of VT Two Trust, has the authority to dispose of and exercise control over the disposal of the assets of the VT Two Trust. POD Sàrl, of which Mr. Rodney Hodges holds 100% of the share capital, wholly owns Geneva Holding Company (GHC) SA. Mr. Hodges does not make day-to-day voting or investment decisions with respect to the Ordinary Shares held by Xenia and therefore disclaims beneficial ownership of them except to the extent of his pecuniary interest therein. Xenia's address is Yigal Alon 76, Tel Aviv, Israel, 6706701. Based on information provided by Xenia on January 21, 2024.

(7) The beneficial ownership is based on the information provided to us in connection with the filing of our registration statement on Form F-3 on February 1, 2024 and by DAFNA Lifescience Select LP and DAFNA Lifescience LP (together referred to as "DAFNA Lifescience") and includes (i) 207,900 Ordinary Shares issued and outstanding; and (ii) 207,900 Ordinary Shares issuable upon the exercise of warrants. Fariba Ghodsian has the voting and dispositive power over the shares held by DAFNA Lifescience. DAFNA Lifesciences address is 10990 Wilshire Blvd., Suite 1400, Los Angeles, CA, 90024. Based on information provided to us by DAFNA Lifescience on January 24, 2024.

(8) The beneficial ownership is based the information provided to us in connection with the filing of our registration statement on Form F-3 on February 1, 2024 and includes (i) 415,800 Ordinary Shares issued and outstanding and (ii) 415,800 Ordinary Shares issuable upon the exercise of warrants. The percentage in the table above gives effect to the 9.99% beneficial ownership limitation set forth under the terms of the warrants. Steven Salamon has the voting and dispositive power over the shares held by Investor Company ITF Rosalind Master Fund L.P. Investor Company ITF Rosalind Master Fund L.P.'s address is TD Waterhouse, 77 Bloor St. W, Toronto, ON, Canada, M5S 1M2. The information is based solely on information provided to us in the documentation for the January 2024 Private Placement.

(9) The beneficial ownership is based on the information provided to us in connection with the filing of our registration statement on Form F-3 on February 1, 2024 and includes (i) 249,480 Ordinary Shares issued and outstanding and (ii) 249,480 Ordinary Shares issuable upon the exercise of warrants. Martin Chopp has the voting and dispositive power over the shares held by the Hewlett Fund LP. The Hewlett Fund LP's address is 100 Merrick Road, Suite 400W, Rockville Center, NY 11570. Based on information provided to us by the Hewlett Fund LP. on January 24, 2024.

(10) The beneficial ownership is based on the information provided to us in connection with the filing of our registration statement on Form F-3 on February 1, 2024 and includes (i) 263,638 Ordinary Shares issued and outstanding; and (iii) 207,900 Ordinary Shares issuable upon the exercise of warrants. Mr. Aharon Lukach's address is c/o Eli Cohen 9, Tel Aviv, Israel, 6963005. Based on information provided to us by Mr. Lukach as of January 23, 2024.

(11) Consists of (i) 467 Ordinary Shares and (ii) 9,483 Ordinary Shares issuable upon exercise of outstanding options that are exercisable within 60 days. In addition, Ms. Czaczkes Akselbrad holds options to purchase 34,812 Ordinary Shares that are not exercisable within 60 days. Ms. Czaczkes Akselbrad's options have expiration dates ranging from July 10, 2024 to October 9, 2033, and a weighted average exercise price of $19.24.

(12) Consists of 3,719 Ordinary Shares issuable upon exercise of outstanding options that are exercisable within 60 days. In addition, Ms. Hazan holds options to purchase 16,344 Ordinary Shares that are not exercisable within 60 days. Ms. Hazan's options have expiration dates ranging from April 5, 2026 to August 7, 2033, and a weighted average exercise price of $14.67.

(13) Consists of (i) 267 Ordinary Shares and (ii) 2,416 Ordinary Shares issuable upon exercise of outstanding options that are exercisable within 60 days. In addition, Mr. Warshavsky holds options to purchase 8,711 Ordinary Shares that are not exercisable within 60 days. Mr. Warshavsky's options have expiration dates ranging from November 9, 2030 to August 7, 2033, and a weighted average exercise price of $14.76

(14) Consists of 2,157 Ordinary Shares issuable upon exercise of outstanding options that are exercisable within 60 days. In addition, Mr. Missulawin holds options to purchase 11,015 Ordinary Shares that are not exercisable within 60 days. Mr. Missulawin's options have expiration dates ranging from June 22, 2024 to August 7, 2033, and a weighted average exercise price of $14.07.

(15) Consists of (i) 2,760 Ordinary Shares and (ii) 923 Ordinary Shares issuable upon exercise of outstanding options that are exercisable within 60 days. Prof. Barenholz's options have an expiration date of April 13, 2031 to May 5, 2033, and a weighted average exercise price of $19.13.

(16) Consists of 1,520 Ordinary Shares issuable upon exercise of outstanding options that are exercisable within 60 days. Mr. Dror's options have an expiration date of June 18, 2030 to May 5, 2033, and a weighted average exercise price of $20.67.

(17) Consists of (i) 467 Ordinary Shares and (ii) 2,715 Ordinary Shares issuable upon exercise of outstanding options that are exercisable within 60 days. Mr. Jacob's options have an expiration date of August 7, 2029 to May 5, 2033, and a weighted average exercise price of $21.73.

(18) Consists of (i) 833 Ordinary Shares and (ii) 1,520 Ordinary Shares issuable upon exercise of outstanding options that are exercisable within 60 days. Mr. Krinsky's options have an expiration date of August 7, 2029 to May 5, 2033, and a weighted average exercise price of $20.67.

(19) Consists of 157 Ordinary Shares issuable upon exercise of outstanding options that are exercisable within 60 days. Mr. BenAmram holds options to purchase 468 Ordinary Shares that are not exercisable within 60 days. Mr. BenAmram's options have expiration date of May 8, 2033, and a weighted average exercise price of $11.40.

(20) Consists of 1,720 Ordinary Shares issuable upon exercise of outstanding options that are exercisable within 60 days. Mr. Stein's options have an expiration date of June 18, 2030 to May 5, 2033, and a weighted average exercise price of $20.95.

Changes in Ownership of Major Shareholders

Over the course of 2023, there were no material increases in the percentage ownership of our major shareholders', however, all of the holders above 5% have increased their holdings due to the January 2024 Private Placement.

Over the course of 2022, there were no material increases in the percentage ownership of our major shareholders. On the other hand, there were decreases in the percentage ownership of entities affiliated with Shavit Capital Funds (from 6.1% to 2.1%).

Over the course of 2021, we are not aware of any material increases or decrease in the percentage ownership of our major shareholders.

Record Holders

As of March 6, 2024, there were a total of 50 holders of record of our shares, of which 16 record holders had registered addresses in the United States. This number is not representative of the number of beneficial holders of our shares nor is it representative of where such beneficial holders reside, since many of these shares were held of record by brokers or other nominees.

We are not controlled by another corporation, by any foreign government or by any natural or legal persons except as set forth herein, and there are no arrangements known to us which would result in a change in control of us at a subsequent date.

B. Related Party Transactions.

See "Item 6.B. Compensation" for compensation to our directors and officers.

Agreements and Arrangements With, and Compensation of, Directors and Executive Officers

Certain of our executive officers have employment agreements with us, which contain customary provisions and representations, including confidentiality, non-competition, non-solicitation and inventions assignment undertakings by the executive officers. Under current applicable Israeli employment laws, we may not be able to enforce (either in whole or in part) covenants not to compete and therefore may be unable to prevent our competitors from benefiting from the expertise of some of our former employees.

Indemnification Agreements

Our amended and restated articles of association permit us to exculpate, indemnify and insure each of our directors and office holders to the fullest extent permitted by the Israeli Companies Law. We entered into indemnification agreements with each of our directors and executive officers, undertaking to indemnify them to the fullest extent permitted by Israeli law, including with respect to liabilities resulting from a public offering of our shares, to the extent that these liabilities are not covered by insurance. We have also obtained directors and officers insurance for each of our executive officers and directors.

C. Interests of Experts and Counsel.

None.

ITEM 8. FINANCIAL INFORMATION.

A. Consolidated Statements and Other Financial Information.

See "Item 18. Financial Statements."

Legal Proceedings

We are not currently subject to any material legal proceedings.

Dividends

We have never declared or paid any cash dividends on our Ordinary Shares and do not anticipate paying any cash dividends in the foreseeable future. Payment of cash dividends, if any, in the future will be at the discretion of our board of directors and will depend on then-existing conditions, including our financial condition, operating results, contractual restrictions, capital requirements, business prospects and other factors our board of directors may deem relevant.

The Israeli Companies Law imposes further restrictions on our ability to declare and pay dividends.

Payment of dividends may be subject to Israeli withholding taxes. See "Item 10. E. Taxation" for additional information.

B. Significant Changes.

No significant change, other than as otherwise described in this annual report on Form 20-F, has occurred in our operations since the date of our consolidated financial statements included in this annual report on Form 20-F.

ITEM 9. THE OFFER AND LISTING

A. Offer and Listing Details.

Our Ordinary Shares were traded under the symbol "PYPD" on the Nasdaq Global Market from June 2020 until June 2023 and have been trading under the symbol "PYPD" on the Nasdaq Capital Market since June 2023.

B. Plan of Distribution.

Not applicable.

C. Markets.

Our Ordinary Shares were listed for trading on the Nasdaq Global Market from June 2020 until June 2023 and have been listed for trading on the Nasdaq Capital Market since June 2023.

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 and Articles of Association.

A copy of our articles of association is attached as Exhibit 1.1 to this annual report on Form 20-F. The information called for by this Item is set forth in Exhibit 2(d) to this annual report on Form 20-F and is incorporated by reference into this annual report on Form 20-F.

C. Material Contracts.

The following is a summary of each material contract, other than material contracts entered into in the ordinary course of business, to which we are or have been a party, for the two years immediately preceding the date of this annual report on Form 20-F:

- Form of Officer Indemnity and Exculpation Agreement, filed as Exhibit 10.1 to Form F-1 (File No. 333-238978) filed on June 22, 2020. See Item 6. C. "Board Practices — Exculpation, Insurance and Indemnification of Directors and Officers" for more information about this document.

- Compensation Policy, filed as Exhibit 99.1 to Form 6-K (File No. 001-38428) filed on April 13, 2021, and incorporated herein by reference. See Item 6. C. "Board Practices — Compensation, Nominating and Corporate Governance Committee and Compensation Policy" for more information about this document.

- Agreement for the Provision of a Loan Facility of up to US$15 million dated April 5, 2022, by and between Kreos Capital VI (Expert Fund) LP and PolyPid Ltd., filed as Exhibit 10.1 to Form 6-K (File No. 001-38428), filed on April 6, 2022. See Item "Item 5.C- Liquidity and Capital Resources" for more information about this document.

- Amendment to the Agreement for the Provision of a Loan Facility of up to US$15 million dated March 29, 2023, by and between Kreos Capital VI (Expert Fund) LP and PolyPid Ltd., filed as Exhibit 10.2 to Form 6-K (File No. 001-38428), filed on March 31, 2023. See Item "Item 5.C- Liquidity and Capital Resources" for more information about this document.

- License, Distribution and Supply Agreement, dated August 2, 2022, by and between PolyPid Ltd. and Mercury Pharma Group Limited, under the trade name Advanz Pharma Holdings, filed as Exhibit 10.1 to Form 6-K (File No. 001-38428), filed on August 8, 2022. See Item "Item 4.B – Business Overview" for more information about this document.

- Securities Purchase Agreement, dated March 29, 2023, by and among PolyPid Ltd. and the Purchasers, filed as Exhibit 10.1 to Form 6-K (File No. 001-38428), filed on March 31, 2023. See Item 5.B "Liquidity and Capital Resources —Cash Flows — Financing Activities."

- Form of Pre-Funded Warrant, dated March 29, 2023 filed as Exhibit 4.1 to Form 6-K (File No. 001-38428), filed on March 31, 2023. See Item 5.B "Liquidity and Capital Resources —Cash Flows — Financing Activities."

- Form of Securities Purchase Agreement between PolyPid Ltd. and the investors named therein, dated January 4, 2024, filed as Exhibit 99.2 to Form 6-K (File Number 001-38428), filed on January 5, 2024. See Item 5.B "Liquidity and Capital Resources —Cash Flows — Financing Activities."

- Form of Registration Rights Agreement between PolyPid Ltd. and the investors named therein, dated January 4, 2024, filed as Exhibit 99.3 to Form 6-K (File Number 001-38428), filed on January 5, 2024.

- Form of Ordinary Share Purchase Warrant, filed as Exhibit 99.4 to Form 6-K (File Number 001-38428), filed on January 5, 2024. See Item 5.B "Liquidity and Capital Resources —Cash Flows — Financing Activities."

- Form of Pre-Funded Ordinary Share Purchase Warrant. filed as Exhibit 99.5 to Form 6-K (File Number 001-38428), filed on January 5, 2024. See Item 5.B "Liquidity and Capital Resources —Cash Flows — Financing Activities."

D. Exchange Controls.

There are currently no Israeli currency control restrictions on remittances of dividends on our Ordinary Shares, proceeds from the sale of the shares or interest or other payments to non-residents of Israel, except for shareholders who are subjects of countries that are, or have been, in a state of war with Israel.

E. Taxation.

Israeli Tax Considerations and Government Programs

The following is a summary of the material Israeli income tax laws applicable to us. This section also contains a discussion of material Israeli income tax considerations concerning the ownership and disposition of our Ordinary Shares by holders that purchase Ordinary Shares pursuant to the offering and hold such Ordinary Shares as capital assets. This summary does not discuss all the aspects of Israeli income tax law that may be relevant to a particular investor in light of his or her personal investment circumstances or to some types of investors subject to special treatment under Israeli law. Examples of this kind of investor include residents of Israel or traders in securities who are subject to special tax regimes not covered in this discussion. To the extent that the discussion is based on new tax legislation that has not yet been subject to judicial or administrative interpretation, we cannot assure you that the appropriate tax authorities or the courts will accept the views expressed in this discussion. This summary is based on laws and regulations in effect as of the date of this annual report on Form 20-F and does not take into account possible future amendments which may be under consideration.

General Corporate Tax Structure in Israel

In 2024, Israeli resident companies like us are generally subject to corporate tax at the rate of 23.0%.

Capital gains derived by an Israeli resident company are generally subject to tax at the same rate as the corporate tax rate. Under Israeli tax legislation, a corporation will be considered as an "Israeli resident" for tax purposes if it meets one of the following: (a) it was incorporated in Israel; or (b) the management and control of its business are exercised in Israel.

Taxation of our Israeli Individual Shareholders on Receipt of Dividends

Israeli residents who are individuals are generally subject to Israeli income tax for dividends paid on our Ordinary Shares (other than bonus shares or share dividends) at a rate of 25.0%, or 30.0% if the recipient of such dividend is a "substantial shareholder" (as defined below) at the time of distribution or at any time during the preceding 12-month period.

As of January 1, 2017, an additional income tax at a rate of 3.0% is imposed on high earners whose annual taxable income or gain exceeds certain thresholds (NIS 721,560 as of January 1, 2024).

A "substantial Shareholder" is generally a person who alone, or together with his or her relative, as defined under section 88 of the Israeli Income Tax Ordinance [New Version], 1961, or the Israeli Tax Ordinance, or another person who collaborates with him based on an agreement on substantive matters of the company on a regular basis, holds, directly or indirectly, at least 10.0% of any of the "means of control" of the corporation. "Means of control" generally include the right to vote in a general meeting of shareholders or receive profits, nominate a director or an officer, receive assets upon liquidation, or instruct someone who holds any of the aforesaid rights regarding the manner in which he or she is to exercise such right(s), and whether by virtue of shares, rights to shares or other rights, or in any other manner, including by means of voting or trusteeship agreements.

The term "Israeli resident" for individuals is generally defined under the Israeli Tax Ordinance, as an individual whose center of life is in Israel. According to the Israeli Tax Ordinance, in order to determine the center of life of an individual, account will be taken of the individual's family, economic and social connections, including, but not limited to: (a) the place of the individual's permanent home; (b) the place of residence of the individual and the individual's family; (c) the place of the individual's regular or permanent place of business or the place of the individual's permanent employment; (d) place of the individual's active and substantial economic interests; (e) place of the individual's activities in organizations, associations and other institutions. The center of life of an individual will be presumed to be in Israel if: (a) the individual was present in Israel for 183 days or more in the tax year; or (b) the individual was present in Israel for 30 days or more in the tax year, and the total period of the individual's presence in Israel in that tax year and the two previous tax years is 425 days or more. The presumption in this paragraph may be rebutted either by the individual or by the assessing officer.

Taxation of Israeli Resident Corporations on Receipt of Dividends

Israeli resident corporations are generally exempt from Israeli corporate income tax with respect to dividends paid on our Ordinary Shares unless the distribution is from a Preferred Enterprise, as defined below.

Capital Gains Taxes Applicable to Israeli Resident Shareholders

The income tax rate applicable to Real Capital Gain, which is the excess of the total capital gain over inflationary surplus computed generally on the basis of the increase in the Israeli consumer price index between the date of purchase and the date of disposal, derived by an Israeli individual from the sale of shares which had been purchased after January 1, 2012, whether listed on a stock exchange or not, is 25.0%. However, if such shareholder is considered a "Substantial Shareholder" (as defined above) at the time of sale or at any time during the preceding 12-month period, such gain will be taxed at the rate of 30.0%. As of January 1, 2017, an additional income tax at a rate of 3% will be imposed on high earners whose annual taxable income or gain exceeds certain thresholds (NIS 721,560).

Moreover, capital gains derived by a shareholder who is a dealer or trader in securities, or to whom such income is otherwise taxable as ordinary business income, are taxed in Israel at ordinary income rates (currently, up to 47.0% +3% for individuals and as of January 1, 2022, the corporate tax rate is 23.0%).

Taxation of Non-Israeli Shareholders on Receipt of Dividends

Non-Israeli residents (individuals or corporations) are generally subject to Israeli income tax on the receipt of dividends paid on our Ordinary Shares at the rate of 25.0% (or 30.0% if such person or entity is a "substantial shareholder" at the time receiving the dividend or on any date in the 12 months preceding such date), which tax will be withheld at source, unless a tax certificate is obtained from the Israeli Tax Authority, or ITA, authorizing withholding-exempt remittances or a reduced rate of tax pursuant to an applicable tax treaty.

Notwithstanding the foregoing, a dividend paid by the Company arising from the profits of a preferred enterprise and / or a preferred technological enterprise entitled to tax benefits under the Capital Investment Encouragement Law shall generally be taxable at 20% for individuals, unless subject to a lower rate under the relevant double taxation treaties. Corporations will generally be subject to a withholding tax rate of either 20% (Preferred Enterprise) or a reduced rate of 4% (Preferred Technological Enterprise), subject to fulfillment of certain conditions.

A non-Israeli resident who receives dividends from which tax was withheld is generally exempt from the duty to file tax returns in Israel in respect of such income, provided such income was not derived from a business conducted in Israel by such taxpayer, and such taxpayer has no other taxable sources of income in Israel.

For example, under the Convention Between the Government of the United States of America and the Government of Israel with Respect to Taxes on Income, as amended, Israeli withholding tax on dividends paid to a U.S. resident for treaty purposes may not, in general, exceed 25.0%, or 15.0% in the case of dividends paid out of the profits of an Approved Enterprise, subject to certain conditions. Where the recipient is a U.S. corporation owning 10.0% or more of the issued and outstanding voting shares of the paying corporation during the part of the paying corporation's taxable year which precedes the date of payment of the dividend and during the whole of its prior taxable year (if any) and not more than 25.0% of the gross income of the paying corporation for such prior taxable year (if any) consists of certain interest or dividends and the dividend is not paid from the profits of an Approved Enterprise, the Israeli tax withheld may not exceed 12.5%, subject to certain conditions.

Capital Gains Income Taxes Applicable to Non-Israeli Shareholders

Provided certain conditions are met, non-Israeli resident shareholders are generally exempt from Israeli capital gains tax on any gains derived from the sale, exchange or disposition of our Ordinary Shares, provided that such gains were not derived from a permanent establishment or business activity of such shareholders in Israel. However, non-Israeli corporations' shareholders will not be entitled to the foregoing exemptions if Israeli residents (i) have a controlling interest of more than 25.0% in such non-Israeli corporation or (ii) are the beneficiaries of or are entitled to 25.0% or more of the revenues or profits of such non-Israeli corporation, whether directly or indirectly.

Regardless of whether shareholders may be liable for Israeli income tax on the sale of our Ordinary Shares, the payment of the consideration may be subject to withholding of Israeli tax at the source. Accordingly, shareholders may be required to demonstrate that they are exempt from tax on their capital gains in order to avoid withholding at source at the time of sale.

Law for the Encouragement of Capital Investments

The Law for the Encouragement of Capital Investments, 5719-1959, or the Investment Law, provides certain incentives for capital investments in production facilities (or other eligible intangible assets) by "Industrial Enterprises" (as defined under the Investment Law). Generally, an investment program that is implemented in accordance with the provisions of the Investment Law, referred to as an Approved Enterprise, a Beneficiary Enterprise, a Preferred Enterprise, a Preferred Technological Enterprise, or a Special Preferred Technological Enterprise, is entitled to benefits as discussed below. These benefits may include cash grants from the Israeli government and tax benefits based upon, among other things, the geographic location in Israel of the facility in which the investment is made.

On January 1, 2011, new legislation amending the Investment Law came into effect, or the 2011 Amendment. The 2011 Amendment introduced a new status of Preferred Enterprise. Subject to certain conditions, a Preferred Enterprise entitles the company to reduced corporate tax rates, without limitations on dividends and other distributions, instead of full exemption from corporate tax. These preferred corporate tax rates vary from 7.5% for Preferred Enterprises residing in a "development zone," or 16.0% for Preferred Enterprises residing in other zones in Israel. Dividend distributions are subject to 20% tax rate, subject to the provision of the relevant tax treaty.

In order to gain the status of Preferred Enterprise, a company must meet the conditions of competitive industrial company that contributes to the GDP or comparative industrial company in the field of renewable energy.

The Investment Law was significantly amended effective as of January 1, 2017, or the 2017 Amendment. The 2017 Amendment was enacted as part of the Economic Efficiency Law that was published on December 29, 2016 and is effective as of January 1, 2017. The 2017 Amendment provides new tax benefits for two types of "Technological Enterprises," as described below, and is in addition to the other existing tax beneficial programs under the Investment Law.

The 2017 Amendment provides that a preferred company, which is defined as either (i) a company incorporated in Israel which is not wholly owned by a governmental entity, or (ii) a limited partnership that: (a) was registered under the Israeli Partnerships Ordinance; and (b) all of its limited partners are companies incorporated in Israel, but not all of them are governmental entities; which has, among other things, Preferred Enterprise status and is controlled and managed from Israel, or a Preferred Company, satisfying certain conditions will qualify as having a "Preferred Technological Enterprise" and will thereby enjoy a reduced corporate tax rate of 12% on income that qualifies as "Preferred Technological Income," as defined in the Investment Law. The corporate tax rate may be further reduced to 7.5% with respect to a Preferred Technological Enterprise located in development zone "A," as defined under the Investment Law. In addition, a Preferred Technological Company will enjoy a reduced corporate tax rate of 12% on capital gain derived from the sale of certain "Benefitted Intangible Assets" (as defined in the Investment Law) to a related foreign company if the Benefitted Intangible Assets were acquired from a foreign company on or after January 1, 2017 for at least NIS 200 million, and the sale receives prior approval from the Israel Innovation Authority.

Dividends distributed by a Preferred Technological Enterprise, paid out of Preferred Technological Income, are generally subject to tax at the rate of 20% or such lower rate as may be provided in an applicable tax treaty (subject to the receipt in advance of a valid certificate from the ITA allowing for a reduced tax rate).

The withholding tax rate applicable to distribution of dividend from such income to non-Israeli residents is 25% (or 30% if distributed to a "substantial shareholder" at the time of the distribution or at any time during the preceding twelve months period), which may be reduced by applying in advance for a withholding certificate from the ITA. A "substantial shareholder" is generally a person who, alone or together with such person's relative or another person who collaborates with such person on a permanent basis, holds, directly or indirectly, at least 10% of any of the "Means of Control" of the corporation. "Means of control" generally include the right to vote, receive profits, nominate a director or an executive officer, receive assets upon liquidation or order someone who holds any of the aforesaid rights how to act, regardless of the source of such right.

In addition, if such dividends are distributed to a foreign company that holds solely or together with other foreign companies 90% or more in the Israeli company and other conditions are met (including that less than 25% of the shareholder of the foreign company are Israeli residents), the withholding tax rate will be 4% (subject to the receipt in advance of a valid certificate from the ITA allowing for a reduced tax rate). However, if such dividends are paid to an Israeli company, no tax is required to be withheld.

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

The following discussion describes the material U.S. federal income tax considerations relating to the ownership and disposition of our Ordinary Shares by U.S. Holders (as defined below). This discussion applies to U.S. Holders that hold such Ordinary Shares as capital assets within the meaning of Section 1221 of the U.S. Internal Revenue Code of 1986, as amended, or the Code. This discussion is based on the Code, U.S. Treasury regulations promulgated thereunder and administrative and judicial interpretations thereof, 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, broker-dealers and traders in securities or other persons that generally mark their securities to market for U.S. federal income tax purposes, tax-exempt entities, retirement plans, regulated investment companies, real estate investment trusts, certain former citizens or residents of the United States, persons who hold Ordinary Shares as part of a "straddle", "hedge", "conversion transaction", "synthetic security" or integrated investment, persons who received their Ordinary Shares as compensatory payments, persons that have a "functional currency" other than the U.S. dollar, persons that own directly, indirectly or through attribution 10% or more of our shares by vote or value, persons subject to special tax accounting rules as a result of any item of gross income with respect to the shares being taken into account in an applicable financial statement, 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 or Medicare tax consequences.

As used in this discussion, the term "U.S. Holder" means a beneficial owner of Ordinary 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 or arrangement treated as a partnership for U.S. federal income tax purposes holds Ordinary Shares, the U.S. federal income tax consequences relating to an investment in the ordinary shares will depend in part upon the status and activities of such entity or arrangement and the particular partner. Any such entity or arrangement should consult its own tax advisor regarding the U.S. federal income tax consequences applicable to it and its partners of the ownership and disposition of Ordinary Shares.

THE FOLLOWING SUMMARY IS INCLUDED HEREIN FOR GENERAL INFORMATION AND IS NOT INTENDED TO BE, AND SHOULD NOT BE CONSIDERED TO BE, LEGAL OR TAX ADVICE. EACH U.S. HOLDER SHOULD CONSULT WITH HIS OR HER OWN TAX ADVISOR AS TO THE PARTICULAR U.S. FEDERAL INCOME TAX CONSEQUENCES OF THE PURCHASE, OWNERSHIP AND SALE OF ORDINARY SHARES AND AMERICAN DEPOSITARY SHARES, INCLUDING THE EFFECTS OF APPLICABLE STATE, LOCAL, FOREIGN OR OTHER TAX LAWS AND POSSIBLE CHANGES IN THE TAX LAWS.

Passive Foreign Investment Company Consequences

In general, a corporation organized outside the United States will be treated as PFIC for any taxable year in which either (1) at least 75% of its gross income is "passive income", 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, 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 gives 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.

Our status as a PFIC will depend on the nature and composition of our income and the nature, composition and value of our assets (which, generally may be determined based on the fair market value of each asset, with the value of goodwill and going concern value being determined in large part by reference to the market value of our Ordinary Shares, which may be volatile). Based upon the estimated value of our assets, including any goodwill, and the nature and estimated composition of our income and assets, we may be classified as a PFIC for the taxable year ended December 31, 2023 and in future taxable years In particular, so long as we do not generate revenue from operations for any taxable year and do not receive any research and development grants, or even if we receive a research and development grant, if such grant does not constitute gross income for U.S. federal income tax purposes, we likely will be classified as a PFIC for such taxable year. 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. Our status as a PFIC is a fact-intensive determination made on an annual basis after the end of each taxable year. Accordingly, our U.S. counsel expresses no opinion with respect to our PFIC status for our taxable year ended December 31, 2023 and also expresses no opinion with regard to our expectations regarding our PFIC status in the future.

If we are a PFIC in any taxable year during which a U.S. Holder owns Ordinary 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 the Ordinary Shares, and (2) any gain recognized on a sale, exchange or other disposition, including a pledge, of the Ordinary 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 Ordinary 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 Ordinary Shares, we must generally continue to be treated as a PFIC by that holder for all succeeding years during which the U.S. Holder holds the Ordinary Shares, unless we cease to meet the requirements for PFIC status and the U.S. Holder makes a "deemed sale" election with respect to the Ordinary Shares. If the election is made, the U.S. Holder will be deemed to sell the Ordinary Shares it holds 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 Ordinary 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 Ordinary Shares and one of our non-U.S. corporate 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. Each U.S. Holder is advised to consult its tax advisors regarding the application of the PFIC rules to our non-U.S. subsidiaries.

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 Ordinary Shares if such U.S. Holder makes a valid "mark-to-market" election for our Ordinary Shares. A mark-to-market election is available to a U.S. Holder only for "marketable stock." Our Ordinary Shares will be marketable stock as long as they remain listed on the Nasdaq Capital Market and are regularly traded, other than in de minimis quantities, on at least 15 days during each calendar quarter. If a mark-to-market election is in effect, a U.S. Holder generally would take into account, as ordinary income for each taxable year of the U.S. holder, the excess of the fair market value of Ordinary Shares held at the end of such taxable year over the adjusted tax basis of such Ordinary 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 Ordinary 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 Ordinary Shares would be adjusted 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 Ordinary 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.

A mark-to-market election will not apply to Ordinary 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 non-U.S. subsidiaries that we may organize or acquire in the future. 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 that we may organize or acquire in the future notwithstanding the U.S. Holder's mark-to-market election for the Ordinary 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. At this time, 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.

Each U.S. person that is an investor of a PFIC is generally required to file an annual information return on IRS Form 8621 containing such information as the U.S. Treasury Department may require. The failure to file IRS Form 8621 could result in the imposition of penalties and the extension of the statute of limitations with respect to U.S. federal income tax.

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

Distributions

We do not anticipate declaring or paying dividends to holders of our ordinary stock in the foreseeable future. However, if we make a distribution contrary to the expectation, subject to the discussion above under "*—Passive Foreign Investment Company Consequences*," a U.S. Holder that receives a distribution with respect to Ordinary Shares generally will be required to include the gross amount of such distribution in gross income as a dividend when actually or constructively received 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 Ordinary Shares. To the extent the distribution exceeds the adjusted tax basis of the U.S. Holder's Ordinary 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.

Distributions on Ordinary 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 certain complex conditions and limitations, Israeli taxes withheld on any distributions on Ordinary Shares may be eligible for credit against a U.S. Holder's federal income tax liability. The rules relating to the determination of the U.S. foreign tax credit are complex, and U.S. Holders should consult their tax advisors regarding the availability of a foreign tax credit in their particular circumstances and the possibility of claiming an itemized deduction (in lieu of the foreign tax credit) for any foreign taxes paid or withheld.

Dividends paid by a "qualified foreign corporation" are eligible for taxation to non-corporate U.S. holders at a reduced capital gains rate rather than the marginal tax rates generally applicable to ordinary income provided that certain requirements are met. Each U.S. Holder is advised to consult its tax advisors regarding the availability of the reduced tax rate on dividends with regard to its particular circumstances. Each U.S. Holder is advised to consult its tax advisors regarding the availability of the reduced tax rate on dividends with regard to its particular circumstances. Distributions on Ordinary Shares that are treated as dividends generally will not be eligible for the "dividends received" deduction generally allowed to corporate shareholders with respect to dividends received from U.S. corporations.

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 (a) if it is eligible for the benefits of a comprehensive tax treaty with the United States which the Secretary of Treasury of the United States determines is satisfactory for purposes of this provision and which includes an exchange of information provision, or (b) with respect to any dividend it pays on Ordinary Shares that are readily tradable on an established securities market in the United States. We believe that we qualify as a resident of Israel for purposes of, and are eligible for the benefits of, the U.S.-Israel Treaty, although there can be no assurance in this regard. Further, the IRS has determined that the U.S.-Israel Treaty is satisfactory for purposes of the qualified dividend rules and that it includes an exchange of information provision. Our Ordinary Shares will also generally be considered to be readily tradable on an established securities market in the United States if they are listed on The Nasdaq Capital Market. Therefore, subject to the discussion above under "—Passive Foreign Investment Company Consequences," if the U.S.-Israel Treaty is applicable, or if our Ordinary Shares are readily tradable on an established securities market in the United States, such dividends will generally be "qualified dividend income" in the hands of individual U.S. Holders, provided that certain conditions are met, including holding period and the absence of certain risk reduction transaction requirements. Each U.S. Holder is advised to consult its tax advisors regarding the availability of the reduced tax rate on dividends with regard to its particular circumstances.

Sale, Exchange or Other Disposition of Ordinary Shares

Subject to the discussion above under "—*Passive Foreign Investment Company Consequences*," 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 Ordinary 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 Ordinary 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 Ordinary 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 Ordinary Shares will generally be gain or loss from sources within the United States for U.S. foreign tax credit purposes.

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 Ordinary Shares, including, among others, IRS Form 8938 (Statement of Specified Foreign Financial Assets). As described above under "*Passive Foreign Investment Company Consequences*", 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 US$100,000 for Ordinary 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 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 Ordinary Shares may 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 United States taxpayer identification number or otherwise establish a basis for exemption (usually on IRS Form W-9), 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.

F. Dividends and Paying Agents.

Not applicable.

G. Statement by Experts.

Not applicable.

H. Documents on Display.

We are subject to the information reporting requirements of the Exchange Act, applicable to foreign private issuers and under those requirements will file reports with the SEC. The SEC maintains an Internet website that contains reports and other information regarding issuers that file electronically with the SEC. Our filings with the SEC are also available to the public through the SEC's website at www.sec.gov.

As a foreign private issuer, we are exempt from the rules under the Exchange Act related to the furnishing and content of proxy statements, and our officers, directors and principal shareholders are exempt from the reporting and short-swing profit recovery provisions contained in Section 16 of the Exchange Act. In addition, we are not required under the Exchange Act to file annual, quarterly and current reports and financial statements with the SEC as frequently or as promptly as U.S. domestic companies whose securities are registered under the Exchange Act. However, we file with the SEC, within 120 days after the end of each fiscal year, or such applicable time as required by the SEC, an annual report on Form 20-F containing financial statements audited by an independent registered public accounting firm, and may submit to the SEC, on a Form 6-K, unaudited quarterly financial information.

We maintain a corporate website www.polypid.com. Information contained on, or that can be accessed through, our website and the other websites referenced above do not constitute a part of this annual report on Form 20-F. We have included these website addresses in this annual report on Form 20-F solely as inactive textual references.

I. Subsidiary Information.

Not applicable.

J. Annual Report to Security Holders.

Not applicable.

ITEM 11. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

In the ordinary course of our operations, we are exposed to certain market risks, primarily changes in foreign currency exchange rates and interest rates.

Quantitative and Qualitative Disclosure About Market Risk

We are exposed to market risks in the ordinary course of our business. Market risk represents the risk of loss that may impact our financial position due to adverse changes in financial market prices and rates. Our current investment policy is to invest available cash in bank deposits with banks that have a credit rating of at least A-minus. Accordingly, a substantial majority of our cash and cash equivalents is held in deposits that bear interest. Given the current low rates of interest we receive, we will not be adversely affected if such rates are reduced. Our market risk exposure is primarily a result of NIS/U.S. dollar exchange rates, which is discussed in detail in the following paragraph.

Foreign Currency Exchange Risk

We operate primarily in Israel, and approximately 56% of our expenses are denominated in NIS. We are therefore exposed to market risk, which represents the risk of loss that may impact our financial position due to adverse changes in financial market prices and rates. We are subject to fluctuations in foreign currency rates in connection with these arrangements. Changes of 5% and 10% in the U.S. dollar/NIS exchange rate would have increased/decreased operating expenses by approximately 1.2% and 2.4%, respectively, in 2023.

We currently partially hedge our foreign currency exchange rate risk to decrease the risk of financial exposure from fluctuations in the exchange rates of our principal operating currencies. These measures, however, may not adequately protect us from the material adverse effects of such 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 AND DELINQUENCIES

Not applicable.

ITEM 14. MATERIAL MODIFICATIONS TO THE RIGHTS OF SECURITY HOLDERS AND USE OF PROCEEDS

Not applicable.

ITEM 15. CONTROLS AND PROCEDURES

(a) Disclosure Controls and Procedures

Our disclosure controls and procedures are designed to provide reasonable assurance of achieving the desired control objectives. Our management, including our Chief Executive Officer and Chief Financial Officer , recognizes that any control system, no matter how well designed and operated, is based upon certain judgments and assumptions and cannot provide absolute assurance that its objectives will be met. Similarly, an evaluation of controls cannot provide absolute assurance that misstatements due to error or fraud will not occur or that all control issues and instances of fraud, if any, have been detected.

Our management, with the participation of our Chief Executive Officer and Chief Financial Officer, has evaluated the effectiveness of our disclosure controls and procedures (as such term is defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act) as of December 31, 2023, or the Evaluation Date. Based on such evaluation, those officers have concluded that, as of the Evaluation Date, our disclosure controls and procedures are effective in recording, processing, summarizing and reporting, on a timely basis, information required to be included in periodic filings under the Exchange Act and that such information is accumulated and communicated to management, including our principal executive and financial officers, as appropriate to allow timely decisions regarding required disclosure.

(b) Management's Annual Report on Internal Control over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Rule 13a-15(f) under the Exchange Act. Under the supervision and with the participation of our management, including our Chief Executive Officer and Chief Financial Officer, we conducted an evaluation of the effectiveness of our internal control over financial reporting based principally on the framework and criteria established in Internal Control - Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission as of the end of the period covered by this report. Based on that evaluation, our management has concluded that our internal control over financial reporting was effective as of December 31, 2023 at providing 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) Attestation Report of the Registered Public Accounting Firm

This annual report does not include an attestation report of our independent registered public accounting firm regarding internal control over financial reporting due to an exemption for emerging growth companies provided in the JOBS Act.

(d) Changes in Internal Control over Financial Reporting

During the year ended December 31, 2023, there were no changes in our internal control over financial reporting that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

ITEM 16. [Reserved].

ITEM 16A. AUDIT COMMITTEE FINANCIAL EXPERT

Our board of directors has determined that each of Dr. Krinsky and Mr. BenAmram is an audit committee financial expert as such term is defined by the SEC rules and has the requisite financial experience as defined by the Nasdaq Rules. Each of the members of our audit committee is "independent" as such term is defined in Rule 10A-3(b)(1) under the Exchange Act and satisfies the independent director requirements under the Nasdaq Rules.

ITEM 16B. CODE OF ETHICS

We have adopted a Corporate Code of Ethics and Conduct applicable to all of our directors and employees, including our Chief Executive Officer, Chief Financial Officer, controller or principal accounting officer, or other persons performing similar functions, which is a "code of ethics" as defined in Item 16B of Form 20-F promulgated by the SEC. The full text of the Corporate Code of Ethics and Conduct is posted on our website at www.polypid.com. Information contained on, or that can be accessed through, our website does not constitute a part of this annual report and is not incorporated by reference herein. If we make any amendment to the Corporate Code of Ethics and Conduct or grant any waivers, including any implicit waiver, from a provision of such code, we will disclose the nature of such amendment or waiver on our website to the extent required by the rules and regulations of the SEC.

ITEM 16C. PRINCIPAL ACCOUNTANT FEES AND SERVICES

Kost, Forer, Gabbay & Kasierer, Certified Public Accountants (Israel), an independent registered public accounting firm and a member firm of EY Global, has served as our principal independent registered public accounting firm for each of the two years ended December 31, 2022 and 2023.

The following table provides information regarding fees paid by us to Kost, Forer, Gabbay & Kasierer and/or other member firms of EY Global for all services, including audit services, for the years ended December 31, 2022 and 2023:

	Year Ended December 31,	
	2022	**2023**
Audit fees [(1)]	$ 252,000	$ 257,000
Audit-related fees [(2)]	77,000	70,000
Tax fees [(3)]	44,900	-
All other fees	-	-
Total	$ 373,900	$ 327,000

(1) Includes professional services rendered in connection with the audit of our annual financial statements, review of our interim financial statements and tax returns.
(2) Includes professional services rendered, such as comfort letters for the Sales Agreement and audit of the IIA programs, in connection with the preparation the Company's registration statement on Form F-3.
(3) Includes professional services rendered for tax compliance and tax advice other than in connection with the audit.

Pre-Approval of Auditors' Compensation

Pursuant to the regulations promulgated under the Israeli Companies Law, pre-approval of audit fees is only mandatory for a public company. In addition, under our audit committee charter our audit committee is responsible for, among other things, pre-approving audit and non-audit services provided to us by the independent registered public accounting firm. Subject to the board of directors' and shareholders' approval, if and to the extent required by applicable law, the audit committee shall have the authority to approve all audit engagement fees and terms and all non-audit engagements, as may be permissible, with the independent registered public accounting firm. All the fees set forth above were pre-approved by the audit committee.

ITEM 16D. EXEMPTIONS FROM THE LISTING STANDARDS FOR AUDIT COMMITTEES

Not applicable.

ITEM 16E. PURCHASES OF EQUITY SECURITIES BY THE ISSUER AND AFFILIATED PURCHASERS

Not applicable.

ITEM 16F. CHANGE IN REGISTRANT'S CERTIFYING ACCOUNTANT

Not applicable.

ITEM 16G. CORPORATE GOVERNANCE

The Sarbanes-Oxley Act, as well as related rules subsequently implemented by the SEC, require foreign private issuers, such as us, to comply with various corporate governance practices. In addition, we are required to comply with the Nasdaq Stock Market rules. Under those rules, we may elect to follow certain corporate governance practices permitted under the Israeli Companies Law in lieu of compliance with corresponding corporate governance requirements otherwise imposed by the Nasdaq Stock Market rules for U.S. domestic issuers.

In accordance with Israeli law and practice and subject to the exemption set forth in Rule 5615 of the Nasdaq Stock Market rules, we have elected to follow the provisions of the Israeli Companies Law, rather than the Nasdaq Stock Market rules, with respect to the following requirements:

- *Proxy Statements.* We will not be required to and, in reliance on home country practice, we do not intend to comply with certain Nasdaq Rules regarding the provision of proxy statements for general meetings of shareholders. Israeli corporate law does not have a regulatory regime for the solicitation of proxies. We intend to provide notice convening an annual general meeting, including an agenda and other relevant documents.

- *Quorum*. As permitted under the Israeli Companies Law and pursuant to our amended and restated articles of association, the quorum required for an ordinary meeting of shareholders will consist of at least two shareholders present in person, by proxy or by other voting instrument in accordance with the Israeli Companies Law, who hold at least 25% of the voting power of our shares. A meeting adjourned for lack of a quorum is generally adjourned to the same day in the following week at the same time and place or to a later time or date if so specified in the summons or notice of the meeting. At the adjourned meeting, in general any shareholder present in person or by proxy shall constitute a lawful quorum, instead of 33 1/3% of the issued share capital as required under the Nasdaq Rules.

- *Nomination of our directors*. The nominations for directors, which are presented to our shareholders by our board of directors, are generally made by the board of directors itself, in accordance with the provisions of our articles of association and the Israeli Companies Law. Nominations need not be made by a nominating committee of our board of directors consisting solely of independent directors or by a vote consisting solely of our independent directors in order to determine which persons shall be nominated for election by our shareholders, as required under the Nasdaq Stock Market rules.

- *Independent Directors*. Under the Israeli Companies Law, we would be required to include on our board of directors at least two members, each of whom qualifies as an external director, and as to whom special qualifications and other provisions would be applicable. We would also be required to include one such external director on each of our board committees. However, as we do not have a controlling shareholder, and we comply with the requirements of the Nasdaq Stock Market with respect to the composition of our board and such committees, we therefore are exempt from the Israeli Companies Law requirements with respect thereto, including the appointment of external directors. We are required, however, to ensure that all members of our audit committee are "independent" under the Nasdaq Rules, and we must also ensure that a majority of the members of our audit committee are "independent directors" as defined in the Israeli Companies Law. Furthermore, Israeli law does not require, and our independent directors do not conduct regularly scheduled meetings at which only they are present, as otherwise required by the Nasdaq Stock Market rules.

- *Shareholder Approval.* We will not be required to and, in reliance on home country practice, we do not intend to comply with certain Nasdaq Rules regarding shareholder approval for certain issuances of securities under Nasdaq Rule 5635. In particular, under the Nasdaq Rules, shareholder approval is generally required for: (i) an acquisition of shares or assets of another company that involves the issuance of 20% or more of the acquirer's shares or voting rights or if a director, officer or 5% shareholder has greater than a 5% interest (or such persons collectively have a 10% or greater interest) in the target company or the assets to be acquired or the consideration to be received and the present or potential issuance of Ordinary Shares, or securities convertible into or exercisable for Ordinary Shares, could result in an increase in outstanding Ordinary Shares or voting power of 5% or more; (ii) the issuance of shares leading to a change of control; (iii) adoption or amendment of a stock option or purchase plan or other equity compensation arrangements, pursuant to which stock may be acquired by officers, directors, employees or consultants (with certain limited exception); and (iv) issuances of 20% or more of the shares or voting rights (including securities convertible into, or exercisable for, equity) of a listed company via a private placement (and/or via sales by directors or officers or 5% shareholders) if such equity is issued (or sold) at below a specified minimum price. By contrast, under the Israeli Companies Law, the adoption of, and material changes to, equity-based compensation plans generally require the approval of the board of directors and the compensation committee of the board of directors.

- *Approval of Related Party Transactions*. All related party transactions are approved in accordance with the requirements and procedures for approval of interested party acts and transactions as set forth in the Israeli Companies Law, which requires the approval of the audit committee, or the compensation committee, as the case may be, the board of directors and shareholders, as may be applicable, for specified transactions, rather than approval by the audit committee or other independent body of our board of directors as required under the Nasdaq Stock Market rules.

- *Annual Shareholders Meeting.* We will not be required to and, in reliance on home country practice, we do not intend to comply with Nasdaq Stock Market Rule 5620(a), which requires a listed company to hold its annual shareholders meeting within one year of the company's fiscal year-end. Under the Israeli Companies Law, we are required to hold an annual shareholders meeting each calendar year and within 15 months of the last annual shareholders meeting.

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 the Nasdaq Stock Market corporate governance rules and 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 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

Not applicable.

ITEM 16K. CYBERSECURITY.

Our Board recognizes the critical importance of maintaining the trust and confidence of our business partners and employees. The Board is actively involved in oversight of our risk management program, and cybersecurity represents an important component of our overall approach to risk management. Our cybersecurity policies, standards, processes and practices are fully integrated into our risk management program and are based on recognized frameworks established by HIPAA, GDPR and GMP industry standards. In general, we seek to address cybersecurity risks through a comprehensive, cross-functional approach that is focused on preserving the confidentiality, security and availability of the information that we collect and store by identifying, preventing and mitigating cybersecurity threats and effectively responding to cybersecurity incidents when they occur.

Risk Management and Strategy

As part of the critical elements of our overall risk management approach, our cybersecurity program is focused on the following key areas:

- Governance: As discussed in more detail under the heading "Governance," the Board oversees our risk management process, including the management of risks arising from cybersecurity threats.

- Collaborative Approach: The Company has implemented a comprehensive, cross-functional approach to identifying, preventing and mitigating cybersecurity threats and incidents, while also implementing controls and procedures that provide for the prompt escalation of certain cybersecurity incidents so that decisions regarding the public disclosure and reporting of such incidents can be made by management in a timely manner.

- Technical Safeguards: The Company deploys technical safeguards that are designed to protect the Company's information systems from cybersecurity threats, including firewalls, intrusion prevention and detection systems, anti-malware functionality and access controls, which are evaluated and improved through vulnerability assessments and cybersecurity threat intelligence.

- Incident Response and Recovery Planning: The Company has established and maintains comprehensive incident response and recovery plans that fully address the Company's response to a cybersecurity incident, and such plans are tested and evaluated on a regular basis.

- Education and Awareness: The Company provides regular, mandatory training for personnel regarding cybersecurity threats as a means to equip the Company's personnel with effective tools to address cybersecurity threats, and to communicate the Company's evolving information security policies, standards, processes and practices.

We engage in the periodic assessment and testing of our policies, standards, processes and practices that are designed to address cybersecurity threats and incidents. These efforts include a wide range of activities, including audits, assessments, threat modeling, vulnerability testing, and other exercises focused on evaluating the effectiveness of our cybersecurity measures and planning. We periodically engage third parties to perform assessments on our cybersecurity measures, including information security maturity assessments, audits and independent reviews of our information security control environment and operating effectiveness. The results of such assessments, audits and reviews are reported to the Audit Committee and the Board, and we adjust our cybersecurity policies, standards, processes and practices as necessary based on the information provided by these assessments, audits and reviews.

Governance

The Board oversees our risk management process, including the management of risks arising from cybersecurity threats. The Board receives periodic presentations and reports on cybersecurity risks, which address a wide range of topics including recent developments, evolving standards, vulnerability assessments, third-party and independent reviews, the threat environment, technological trends and information security considerations arising with respect to our third parties. The Board also receives prompt and timely information regarding any cybersecurity incident that meets established reporting thresholds, as well as ongoing updates regarding any such incident until it has been addressed.

The Company's IT Manager works collaboratively across the Company to implement a program designed to protect the Company's information systems from cybersecurity threats and to promptly respond to any cybersecurity incidents in accordance with the Company's incident response and recovery plans. To facilitate the success of the Company's cybersecurity risk management program, external third party vendors are retained to address cybersecurity threats and to respond to cybersecurity incidents. The IT Manager monitors the prevention, detection, mitigation and remediation of cybersecurity threats and incidents in real time, and will report such threats to Company's management and Board.

Our IT Manager is Mr. Tom Kinsbrum, who has over 13 years of experience in the Information Technology (IT) and cybersecurity fields. Mr. Kinsbrum is a graduate of CISO (Chief Information Security Officer) training program and has vast experience in Microsoft based environments as well as in managing risks arising from cybersecurity threats.

Cybersecurity threats, including as a result of any previous cybersecurity incidents, have not materially affected or are reasonably likely to affect the Company, including its business strategy, results of operations or financial condition.

PART III

ITEM 17. FINANCIAL STATEMENTS

We have elected to provide financial statements and related information pursuant to Item 18.

ITEM 18. FINANCIAL STATEMENTS

The consolidated financial statements and the related notes required by this Item are included in this annual report on Form 20-F beginning on page F-1.

ITEM 19. EXHIBITS.

Exhibit	Description
1.1	Amended and Restated Articles of Association of PolyPid Ltd., filed as Exhibit 99.1 to Form 6-K (File No. 001-38428) filed on May 8, 2023, and incorporated herein by reference.
2.1	Form of Pre-Funded Warrant, filed as Exhibit 4.1 to Form 6-K (File No. 001-38428), filed on March 31, 2023, and incorporated herein by reference.
2.2	Form of Ordinary Share Purchase Warrant, filed as Exhibit 99.4 to Form 6-K (File Number 001-38428), filed on January 5, 2024.
2.3	Form of Pre-Funded Ordinary Share Purchase Warrant. filed as Exhibit 99.5 to Form 6-K (File Number 001-38428), filed on January 5, 2024.
2.4	Description of Securities (filed herewith).
4.1	Form of Officer Indemnity and Exculpation Agreement, filed as Exhibit 10.1 to Form F-1 (File No. 333-238978) filed on June 22, 2020, and incorporated herein by reference.
4.2	Compensation Policy, filed as Exhibit 99.1 to Form 6-K (File No. 001-38428) filed on April 13, 2021, and incorporated herein by reference.
4.3	Amended and Restated PolyPid Ltd. 2012 Share Option Plan, filed as Exhibit 99.1 to Form 6-K (File No. 001-38428) filed on October 10, 2023, and incorporated herein by reference.
4.4	Lease Agreement, dated March 27, 2014, by and between PolyPid Ltd. and Ogen Yielding Real Estate Ltd. (unofficial English translation from Hebrew original), filed as Exhibit 10.4 as Exhibit 10.4 to Form F-1 (File No. 333-238978) filed on June 22, 2020, and incorporated herein by reference.
4.5	Addendum to Lease Agreement, dated July 1, 2014, by and between PolyPid Ltd. and Ogen Yielding Real Estate Ltd. (unofficial English translation from Hebrew original), filed as Exhibit 10.4.1 to Form F-1 (File No. 333-238978) filed on June 22, 2020, and incorporated herein by reference.
4.6	Second Addendum to Lease Agreement, dated July 23, 2017, by and between PolyPid Ltd. and Ogen Yielding Real Estate Ltd. (unofficial English translation from Hebrew original), filed as Exhibit 10.4.2 to Form F-1 (File No. 333-238978) filed on June 22, 2020, and incorporated herein by reference.
4.7	Third Addendum to Lease Agreement, dated November 28, 2017, by and between PolyPid Ltd. and Ogen Yielding Real Estate Ltd. (unofficial English translation from Hebrew original), filed as Exhibit 10.4.3 to Form F-1 (File No. 333-238978) filed on June 22, 2020, and incorporated herein by reference.
4.8	Fourth Addendum to Lease Agreement, dated January 22, 2018, by and between PolyPid Ltd. and Ogen Yielding Real Estate Ltd. (unofficial English translation from Hebrew original), filed as Exhibit 10.4.4 to Form F-1 (File No. 333-238978) filed on June 22, 2020, and incorporated herein by reference.
4.9	Fifth Addendum to Lease Agreement, dated November 4, 2018, by and between PolyPid Ltd. and Ogen Yielding Real Estate Ltd. (unofficial English translation from Hebrew original), filed as Exhibit 10.4.5 to Form F-1 (File No. 333-238978) filed on June 22, 2020, and incorporated herein by reference.
4.10	Sixth Addendum to Lease Agreement, dated December 15, 2019, by and between PolyPid Ltd. and Ogen Yielding Real Estate Ltd. (unofficial English translation from Hebrew original), filed as Exhibit 10.4.6 to Form F-1 (File No. 333-238978) filed on June 22, 2020, and incorporated herein by reference.

4.11	Seventh Addendum to Lease Agreement, dated April 11, 2021 by and between PolyPid Ltd. and Ogen Yielding Real Estate Ltd. (unofficial English translation from Hebrew original), filed as Exhibit 4.11 to Form 20-F (File No. 001-38428) filed on February 28, 2022, and incorporated herein by reference.
4.12	Eighth Addendum to Lease Agreement, dated August 9, 2021, by and between PolyPid Ltd. and Ogen Yielding Real Estate Ltd. (unofficial English translation from Hebrew original), filed as Exhibit 4.12 to Form 20-F (File No. 001-38428) filed on February 28, 2022, and incorporated herein by reference.
4.13	Ninth Addendum to Lease Agreement, dated October 26, 2021, by and between PolyPid Ltd. and Ogen Yielding Real Estate Ltd. (unofficial English translation from Hebrew original), filed as Exhibit 4.13 to Form 20-F (File No. 001-38428) filed on February 28, 2022, and incorporated herein by reference.
4.14	Tenth Addendum to Lease Agreement, dated January 25, 2022, by and between PolyPid Ltd. and Ogen Yielding Real Estate Ltd. (unofficial English translation from Hebrew original), filed as Exhibit 4.14 to Form 20-F (File No. 001-38428) filed on February 28, 2022, and incorporated herein by reference.
4.15	Eleventh Addendum to Lease Agreement, dated January 14, 2024, by and between PolyPid Ltd. and Ogen Yielding Real Estate Ltd. (unofficial English translation from Hebrew original).
4.16	Sales Agreement, dated July 2, 2021, by and between PolyPid Ltd. and Cantor Fitzgerald & Co., filed as Exhibit 10.1 to form F-3 (File No. 333-257651) filed on July 2, 2021, and incorporated herein by reference.
4.17	Agreement for the Provision of a Loan Facility of up to US$15,000,000 dated April 5, 2022, by and between Kreos Capital VI (Expert Fund) LP and PolyPid Ltd., filed as Exhibit 10.1 to Form 6-K (File No. 001-38428), filed on April 6, 2022, and incorporated herein by reference.
4.18	First Amendment to the Agreement for the Provision of a Loan Facility of up to US$15,000,000 dated March 29, 2023, by and between Kreos Capital VI (Expert Fund) LP and PolyPid Ltd., filed as Exhibit 10.2 to Form 6-K (File No. 001-38428), filed on March 31, 2023, and incorporated herein by reference.
4.19	License, Distribution and Supply Agreement, dated August 2, 2022, by and between PolyPid Ltd. and Mercury Pharma Group Limited, under the trade name Advanz Pharma Holdings, filed as Exhibit 10.1 to Form 6-K (File No. 001-38428), filed on August 8, 2022, and incorporated herein by reference.
4.20	Form of Securities Purchase Agreement, dated March 29, 2023, by and between the Company and the purchasers named therein, filed as Exhibit 10.1 to Form 6-K (File No. 001-38428), filed on March 31, 2023, and incorporated herein by reference.
4.21	Form of Securities Purchase Agreement between PolyPid Ltd. and the investors named therein, dated January 4, 2024, filed as Exhibit 99.2 to Form 6-K (File Number 001-38428), filed on January 5, 2024.
4.22	Form of Registration Rights Agreement between PolyPid Ltd. and the investors named therein, dated January 4, 2024, filed as Exhibit 99.3 to Form 6-K (File Number 001-38428), filed on January 5, 2024.
8.1	List of Subsidiaries, filed as Exhibit 8.1 to form 20-F (File No. 001-38428) filed on March 5, 2021 and incorporated herein by reference.
12.1	Certification of the Principal Executive Officer pursuant to rule 13a-14(a) of the Securities Exchange Act of 1934.
12.2	Certification of the Principal Financial Officer pursuant to rule 13a-14(a) of the Securities Exchange Act of 1934.
13.1	Certification of the Principal Executive Officer pursuant to 18 U.S.C. 1350, furnished herewith.
13.2	Certification of the Principal Financial Officer pursuant to 18 U.S.C. 1350, furnished herewith.
15.1	Consent of Kost, Forer, Gabbay & Kasierer, Certified Public Accountants (Israel), an independent registered public accounting firm and a member firm of EY.
97.1	Clawback Policy
101	The following financial information from the Registrant's Annual Report on Form 20-F for the year ended December 31, 2023, formatted in XBRL (eXtensible Business Reporting Language): (i) Report of Independent Registered Public Accounting Firm; (ii) Consolidated Balance Sheets; (iii) Consolidated Statements of Operations; (iv) Consolidated Statements of Changes in Convertible Preferred Shares and Shareholders' Equity (Deficit); (v) Consolidated Statements of Cash Flows; and (vi) Notes to the Consolidated Financial Statements, tagged as blocks of text and in detail.
104	Cover Page Interactive Data File (embedded within the Inline XBRL document).

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 annual report on Form 20-F filed on its behalf.

POLYPID LTD.

Date: March 6, 2024

By: /s/ Dikla Czaczkes Akselbrad
Dikla Czaczkes Akselbrad
Chief Executive Officer and Director

POLYPID LTD.
AND ITS SUBSIDIARIES

CONSOLIDATED FINANCIAL STATEMENTS

AS OF DECEMBER 31, 2023

AUDITED

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Report of Independent Registered Public Accounting Firm

To the Shareholders and Board of Directors of
POLYPID LTD.

Opinion on the Consolidated Financial Statements

We have audited the accompanying consolidated balance sheets of PolyPid Ltd. and its subsidiaries (the "Company") as of December 31, 2023 and 2022, the related consolidated statements of operations, changes in shareholders' equity (deficit) and cash flows for each of the three years in the period ended December 31, 2023, and the related notes (collectively referred to as the "consolidated financial statements"). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company at December 31, 2023 and 2022, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2023, in conformity with U.S. generally accepted accounting principles.

The Company's Ability to Continue as a Going Concern

The accompanying consolidated financial statements have been prepared assuming that the Company will continue as a going concern. As discussed in Note 1.c to the financial consolidated statements, the Company has suffered recurring losses from operations and has stated that substantial doubt exists about the Company's ability to continue as a going concern. Management's evaluation of the events and conditions and management's plans regarding these matters are also described in Note 1.c. The consolidated financial statements do not include any adjustments that might result from the outcome of this uncertainty.

Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audits we are required to obtain an understanding of internal control over financial reporting but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion.

Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

/s/ KOST FORER GABBAY & KASIERER
A Member of EY Global

We have served as the Company's auditor since 2010.

Haifa, Israel
March 6, 2024

CONSOLIDATED BALANCE SHEETS

U.S. dollars in thousands

	December 31,	
	2023	**2022**
ASSETS		
CURRENT ASSETS:		
Cash and cash equivalents	$ 5,309	$ 8,552
Restricted deposits	300	511
Short-term deposits	-	4,042
Prepaid expenses and other current assets	458	1,089
Total current assets	6,067	14,194
LONG-TERM ASSETS:		
Property and equipment, net	7,621	9,247
Operating lease right-of-use assets	1,597	2,431
Other long-term assets	87	99
Total long-term assets	9,305	11,777
Total assets	$ 15,372	$ 25,971

The accompanying notes are an integral part of the consolidated financial statements.

CONSOLIDATED BALANCE SHEETS

U.S. dollars in thousands (except share and per share data)

	December 31,	
	2023	**2022**
LIABILITIES AND SHAREHOLDERS' EQUITY (DEFICIT)		
CURRENT LIABILITIES:		
Current maturities of long-term debt	$ 4,003	$ 4,024
Accrued expenses and other current liabilities	1,971	2,429
Trade payables	772	1,141
Current maturities of operating lease liabilities	540	959
Total current liabilities	7,286	8,553
LONG-TERM LIABILITIES:		
Long-term debt	6,379	7,574
Deferred revenues	2,548	2,548
Long-term operating lease liabilities	857	1,173
Other liabilities	398	294
Total long-term liabilities	10,182	11,589
COMMITMENTS AND CONTINGENT LIABILITIES		
SHAREHOLDERS' EQUITY (DEFICIT):		
Ordinary shares, no par value *) - Authorized: 107,800,000 and 47,800,000 shares at December 31, 2023 and 2022, respectively; Issued and outstanding: 1,653,559 and 669,605 shares at December 31, 2023 and 2022, respectively	-	-
Additional paid-in capital	236,213	220,273
Accumulated deficit	(238,309)	(214,444)
Total shareholders' equity (deficit)	(2,096)	5,829
Total liabilities and shareholders' equity (deficit)	$ 15,372	$ 25,971

*) Prior period results have been retroactively adjusted to reflect the 1-for-30 reverse share split affected on September 18, 2023 (see Note 1b).

The accompanying notes are an integral part of the consolidated financial statements.

CONSOLIDATED STATEMENTS OF OPERATIONS

U.S. dollars in thousands (except share and per share data)

	Year Ended December 31,		
	2023	**2022**	**2021**
Operating expenses:			
Research and development, net	$ 16,148	$ 27,990	$ 30,553
Marketing and business development	1,196	2,888	2,983
General and administrative	5,523	8,010	9,609
Operating loss	22,867	38,888	43,145
Financial (income) expense, net	929	540	(544)
Loss before income tax	23,796	39,428	42,601
Income tax expense	69	129	-
Net loss	$ 23,865	$ 39,557	$ 42,601
Loss per share:			
Basic	$ 16.99	$ 61.09	$ 68.27
Diluted	$ 16.93	$ 61.09	$ 68.27
Weighted-average Ordinary shares outstanding:			
Basic	1,404,368	647,556	624,051
Diluted	1,421,308	647,556	624,051

*) Prior period results have been retroactively adjusted to reflect the 1-for-30 reverse share split affected on September 18, 2023 (see Note 1b).

The accompanying notes are an integral part of the consolidated financial statements.

CONSOLIDATED STATEMENTS OF CHANGES IN SHAREHOLDERS' EQUITY (DEFICIT)

U.S. dollars in thousands (except share data)

	Number of Ordinary shares *)	Additional paid-in capital	Accumulated deficit	Total shareholders' equity (deficit)
Balances as of January 1, 2021	624,365	$ 205,063	$ (132,286)	$ 72,777
Share-based compensation	-	4,750	-	4,750
Exercise of warrants	6,149	632	-	632
Exercise of options	2,579	402	-	402
Loss	-	-	(42,601)	(42,601)
Balances as of December 31, 2021	633,093	$ 210,847	$ (174,887)	$ 35,960
Share-based compensation	-	4,307	-	4,307
Issuance of Ordinary shares, net (1)	35,505	4,423	-	4,423
Issuance of warrants	-	588	-	588
Exercise of options	1,007	108	-	108
Net loss	-	-	(39,557)	(39,557)
Balances as of December 31, 2022	669,605	$ 220,273	$ (214,444)	$ 5,829
Share-based compensation	-	3,391	-	3,391
Issuance of Ordinary shares, net (2)	637,660	8,723	-	8,723
Issuance of pre-funded warrants, net (3)	-	3,987	-	3,987
Modification of warrants	-	31	-	31
Reclassification of pre-funded warrants to Liabilities	-	(2,106)	-	(2,106)
Reclassification of pre-funded warrants to Equity	-	1,905	-	1,905
Cashless exercise of pre-funded warrants	345,151	-	-	-
Exercise of options	1,143	9	-	9
Net loss	-	-	(23,865)	(23,865)
Balances as of December 31, 2023	1,653,559	$ 236,213	$ (238,309)	$ (2,096)

(1) Net of issuance costs of $222.
(2) Net of issuance costs of $757.
(3) Net of issuance costs of $362.

*) Prior period results have been retroactively adjusted to reflect the 1-for-30 reverse share split affected on September 18, 2023 (see Note 1b).

The accompanying notes are an integral part of the consolidated financial statements.

CONSOLIDATED STATEMENTS OF CASH FLOWS

U.S. dollars in thousands (except share data)

	Year Ended December 31,		
	2023	**2022**	**2021**
Cash flows from operating activities:			
Net loss	$ (23,865)	$ (39,557)	$ (42,601)
Adjustments to reconcile net loss to net cash used in operating activities:			
Depreciation of property and equipment	1,822	1,721	1,118
Remeasurement of warrants	(201)	-	-
Non-cash financial expenses, net	1,727	289	-
Share-based compensation expenses	3,391	4,307	4,750
Changes in assets and liabilities:			
Prepaid expenses and other assets	641	1,185	83
Operating lease right-of-use assets	593	(2,431)	-
Operating lease liabilities	(494)	2,132	-
Trade payables	(369)	(3,095)	2,221
Deferred revenues	-	2,548	-
Accrued expenses and other liabilities	(481)	(1,416)	2,043
Net cash used in operating activities	(17,236)	(34,317)	(32,386)
Cash flows from investing activities:			
Investment in bank deposits	(18,600)	(7,000)	(8,000)
Proceeds from bank deposits	22,600	25,342	47,893
Pre-payments for equipment	-	-	(340)
Purchase of property and equipment	(196)	(1,767)	(2,653)
Net cash provided by investing activities	3,804	16,575	36,900
Cash flows from financing activities:			
Proceeds from exercise of warrants	-	-	632
Proceeds from exercise of options	9	108	402
Proceeds from issuance of Ordinary shares, net	8,723	4,423	-
Proceeds from long-term debt, net	-	11,711	-
Payment due to long-term debt	(2,618)	(402)	-
Payment of fees due to modification of debt	(125)	-	-
Proceeds from issuance of pre-funded warrants, net	3,987	-	-
Proceeds from issuance of warrants	-	588	-
Net cash provided by financing activities	9,976	16,428	1,034
Increase (decrease) in cash, cash equivalents and restricted deposits	(3,456)	(1,314)	5,548
Cash, cash equivalents and restricted deposits at the beginning of the year	$ 9,142	$ 10,456	$ 4,908
Cash, cash equivalents and restricted deposits at the end of the year	$ 5,686	$ 9,142	$ 10,456

The accompanying notes are an integral part of the consolidated financial statements.

CONSOLIDATED STATEMENTS OF CASH FLOWS

U.S. dollars in thousands (except share data)

	Year Ended December 31,		
	2023	2022	2021
Supplemental disclosures of cash flows:			
Interest paid	$ 1,038	$ 734	$ -
Cash paid during the year for income taxes	$ 18	$ 8	$ -
Supplemental disclosures of cash flow information:			
Cash and cash equivalents	$ 5,309	$ 8,552	$ 9,819
Restricted deposits	300	511	397
Restricted deposits included in other long-term assets	77	79	240
Cash, cash equivalents and restricted deposits at the end of the year	$ 5,686	$ 9,142	$ 10,456
Supplemental disclosures of non-cash investing and financing information:			
Property and equipment acquired by credit	$ -	$ 100	$ 941
Property and equipment paid for in prior periods	$ -	$ 340	$ 395
Right-of-use asset recognized with corresponding lease liability	$ 241	$ 3,528	$ -
Credit line derivative	$ 127	$ -	$ -
Modification of warrants	$ 31	$ -	$ -
Cash paid for amounts included in measurement of lease liability	$ 1,020	$ 1,259	$ -

The accompanying notes are an integral part of the consolidated financial statements.

NOTE 1:- GENERAL

a. PolyPid Ltd. (the "Company") was incorporated under the laws of Israel and commenced operations on February 28, 2008. The Company is a Phase 3 biopharmaceutical company focused on developing targeted, locally administered, and prolonged-release therapeutics using its proprietary PLEX (Polymer-Lipid Encapsulation matriX) technology. The Company's product candidates are designed to address unmet medical needs by delivering active pharmaceutical ingredients, or APIs, locally at predetermined release rates and durations over extended periods ranging from days to several months. The Company is initially focused on the development of its lead product candidate, D-PLEX$_{100}$, which incorporates an antibiotic for the prevention of surgical site infection in bone and soft tissue. Through December 31, 2023, the Company has been primarily engaged in research and development.

The Company's wholly owned subsidiaries include a subsidiary in the United States of America (the "US Subsidiary") and a subsidiary in Romania. The US Subsidiary's operation focuses on marketing and business development of the Company's operation in the United States of America.

On June 30, 2020, the Company closed its initial public offering ("IPO") whereby 143,750 Ordinary shares were sold by the Company to the public (inclusive of 18,750 Ordinary shares pursuant to the full exercise of an overallotment option granted to the underwriters). The aggregate net proceeds received by the Company from the offering were $62,757, net of underwriting discounts and other offering costs.

b. On September 18, 2023, the Company's board of directors approved 1-for-30 reverse share split. No fractional shares were issued, and no cash or other consideration was paid as a result of the reverse share split. Instead, the Company issued one additional whole share of the post-reverse share split Ordinary share to any shareholder who otherwise would have received a fractional share as a result of the reverse share split. The amount of authorized Ordinary shares was not affected. All issued and outstanding share and per share amounts included in the accompanying consolidated financial statements have been adjusted to reflect this reverse share split for all periods presented.

c. The Company's activities since inception have consisted of performing research and development activities. Successful completion of the Company's development programs and, ultimately, the attainment of profitable operations is dependent on future events, including, among other things, its ability to secure financing; obtain marketing approval from regulatory authorities; access potential markets; build a sustainable customer base; attract, retain and motivate qualified personnel; and develop strategic alliances. The Company's operations are funded by its shareholders and research and development grants and the Company intends to seek further private or public financing as well as make applications for further research and development grants for continuing its operations.

Although management believes that the Company will be able to successfully fund its operations, there can be no assurance that the Company will be able to do so or that the Company will ever operate profitably.

In September 2022, the Company announced top-line results from the Surgical site Hospital acquired Infection prEvention with Local D-PLEX$_{100}$ ("SHIELD") I Phase 3 trial. SHIELD I did not achieve its primary endpoint of reduction in Surgical Site Infections ("SSIs"), re-interventions due to SSIs and mortality: in the Intent to Treat ("ITT") population, the local administration of D-PLEX$_{100}$ and standard of care ("SoC"), (n=485) resulted in a decrease in the primary endpoint of 23 percent compared to SoC alone (n=489) (p=0.1520).

NOTE 1:- GENERAL (CONT.)

That said, in a pre-specified subgroup ITT analysis requested by the United States ("U.S.") Food and Drug Administration ("FDA") of a total of 423 subjects with large incisions (>20 centimeters), the local administration of D-PLEX$_{100}$ resulted in a significant reduction of 54 percent in the primary endpoint, compared to SoC alone (p=0.0032). Within the first 30 days post-surgery, SSIs decreased from 9.7% in the SoC treatment arm (n=211), as compared to 4.4% in the D-PLEX$_{100}$ treatment arm (n=212).

In November 2022, the Company provided the FDA with available data from the SHIELD I study as part of a Type D meeting request. Following positive Type D meeting communication with the FDA, which took place in January 2023, on the SHIELD I Phase 3 data, the Company now has a clear regulatory pathway towards a potential new drug application ("NDA") submission. Based on the data, particularly the 54% reduction observed in the primary endpoint in complex surgeries in a pre-specified subgroup analysis of patients with large open incisions (p=0.0032, n=423) compared to SoC, the FDA acknowledged that the SHIELD I results may provide supportive evidence on this population and recommended that the Company conduct an additional study to support a potential NDA submission. The FDA stated that the ongoing SHIELD II study could potentially serve as such a study. The FDA also recognized that D-PLEX$_{100}$'s proposed indication is for the prevention of infection and has the potential for wide use.

The Company resumed recruitment into the SHIELD II trial in June 2023.

The Company expects to continue to incur substantial losses over the next several years during its clinical development phase. To fully execute its business plan, the Company will need to complete phase 3 clinical studies and certain development activities as well as manufacture the required clinical and commercial production batches in the pilot manufacturing plant. Further, the Company's product candidates will require regulatory approval prior to commercialization and the Company will need to establish sales, marketing and logistic infrastructures. These activities may span many years and require substantial expenditures to complete and may ultimately be unsuccessful. Any delays in completing these activities could adversely impact the Company.

As of December 31, 2023, the Company had cash and cash equivalents in the total amount of $5,309. During the year ended December 31, 2023, the Company incurred a net loss of $23,865 and had negative cash flows from operating activities of $17,236. In addition, the Company had an accumulated deficit of $238,309 at December 31, 2023.

The Company's future operations are highly dependent on a combination of factors, including (i) completion of all required clinical studies; (ii) the success of its research and development activities; (iii) manufacture of all required clinical and commercial production batches; (iv) marketing approval by the relevant regulatory authorities; and (v) market acceptance of the Company's product candidates. There can be no assurance that the Company will succeed in achieving the clinical, scientific and commercial milestones as detailed above.

Based on the abovementioned, as of the approval date of these consolidated financial statements, the Company has not raised the necessary funding in order to continue its activity for a period of at least one year after the date of the filing of this annual report on Form 20-F. Therefore, these factors raise a substantial doubt about the Company's ability to continue as a going concern. The consolidated financial statements do not include any adjustments to the carrying amounts and classifications of assets and liabilities that might result should the Company be unable to continue as a going concern.

NOTE 2:- SIGNIFICANT ACCOUNTING POLICIES

The consolidated financial statements are prepared according to United States generally accepted accounting principles ("U.S. GAAP").

a. Use of estimates:

The Company's management believes that the estimates, judgments and assumptions used are reasonable based upon information available at the time they are made. These estimates, judgments and assumptions can affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the dates of the consolidated financial statements, and the reported amounts of revenues and expenses during the reporting periods. Actual results could differ from those estimates.

b. Consolidated financial statements in U.S. dollars:

The accompanying consolidated financial statements have been prepared in United States of America dollars ("$" or "U.S. dollars").

A substantial portion of the Company's expenses are incurred in New Israeli Shekels ("NIS"). However, the Company finances its operations mainly in U.S. dollars, a substantial portion of its expenses are incurred in U.S. dollars and potential revenues from its primary markets are anticipated to be generated in U.S. dollars. As such, the Company's management believes that the U.S. dollar is the currency of the primary economic environment in which the Company and its subsidiaries operate. Thus, the functional and reporting currency of the Company is the U.S. dollar.

Transactions and balances denominated in U.S. dollars are presented at their original amounts. Monetary accounts maintained in currencies other than the dollar are re-measured into U.S. dollars in accordance with Accounting Standards Codification ("ASC") No. 830, "*Foreign Currency Matters*". All transaction gains and losses of the re-measurement of monetary balance sheet items are reflected in the statements of operations as financial income or expenses, as appropriate.

c. Principles of consolidation:

The consolidated financial statements include the accounts of the Company and its subsidiaries. Intercompany balances have been eliminated upon consolidation.

d. Cash equivalents:

Cash equivalents are short-term, highly liquid investments that are readily convertible into cash with an original maturity of three months or less, at the date acquired.

e. Restricted deposits:

Restricted cash is primarily invested in a bank deposit and is used as security for the Company's lease commitments and for its forward and options transactions activities (see Note 2p).

NOTE 2:- SIGNIFICANT ACCOUNTING POLICIES (CONT.)

f. Segment reporting:

The Company identifies operating segments in accordance with ASC No. 280, "*Segment Reporting*", as components of an entity for which discrete financial information is available and is regularly reviewed by the chief operating decision maker, or decision-making group, in making decisions regarding resource allocation and evaluating financial performance. The Company's chief operating decision maker is its chief executive officer. The Company determined it operates in one operating segment.

g. Short-term deposits:

A short-term bank deposit is a deposit with a maturity of more than three months, but less than one year. Short-term deposits are presented at cost, which approximates market value due to their short maturities.

h. Property and equipment, net:

Property and equipment are stated at cost, net of accumulated depreciation. Depreciation is calculated using the straight-line method over the estimated useful lives of the assets at the following rates:

	%
Computers and software	33
Laboratory equipment	10 – 15
Furniture and office equipment	15
Leasehold improvements	*Over the shorter of the term of the lease or its useful life*

i. Leases:

The Company adopted ASC No. 842, "*Leases*", which requires the recognition of lease assets and lease liabilities by lessees for leases classified as operating leases. The Company determines if an arrangement is a lease at inception. The Company's assessment is based on: (1) whether the contract includes an identified asset, (2) whether the Company obtains substantially all of the economic benefits from the use of the asset throughout the period of use, and (3) whether the Company has the right to direct how and for what purpose the identified asset is used throughout the period of use.

Leases are classified as either finance leases or operating leases. A lease is classified as a finance lease if any one of the following criteria are met: the lease transfers ownership of the asset by the end of the lease term, the lease contains an option to purchase the asset that is reasonably certain to be exercised, the lease term is for a major part of the remaining useful life of the asset, the present value of the lease payments equals or exceeds substantially all of the fair value of the asset, or the underlying asset is of such a specialized nature that it is expected to have no alternative use to the lessor at the end of lease term. A lease is classified as an operating lease if it does not meet any one of these criteria. Since all of the Company's lease contracts do not meet any of the criteria above, the Company concluded that all of its lease contracts should be classified as operating leases.

NOTE 2:- SIGNIFICANT ACCOUNTING POLICIES (CONT.)

i. Leases: (Cont.)

Right-of-use ("ROU") assets and liabilities are recognized on the commencement date based on the present value of remaining lease payments over the lease term. For this purpose, the Company considers only payments that are fixed and determinable at the time of commencement. As most of the Company's leases do not provide an implicit rate, the Company uses its incremental borrowing rate based on information available on the commencement date in determining the present value of lease payments. All ROU assets are reviewed for impairment. The lease terms may include options to extend or terminate the lease when it is reasonably certain that the Company will exercise such options.

The Company also elected the practical expedient to not separate lease and non-lease components for its leases. The Company elected to not recognize a lease liability and a ROU asset for lease with a term of twelve months or less.

j. Impairment of long-lived assets:

The Company's long-lived assets are reviewed for impairment in accordance with ASC No. 360, "*Property, Plant and Equipment*", whenever events or changes in circumstances indicate that the carrying amount of the asset may not be recoverable. Recoverability of an asset to be held and used is measured by a comparison of the carrying amount of an asset (assets group) to the future undiscounted cash flows expected to be generated by the asset. If such asset (assets group) is considered to be impaired, the impairment to be recognized is measured by the amount by which the carrying amount of the asset exceeds its fair value.

As of December 31, 2023 and 2022, no impairment losses have been identified.

k. Research and development, net expenses:

Research and development expenses consist of personnel costs (including salaries, benefits and share-based compensation), materials, consulting fees and payments to subcontractors, chemical, manufacturing and control activities, costs associated with obtaining regulatory approvals, executing pre-clinical and clinical studies and maintenance and prosecution of the Company's intellectual property rights. In addition, research and development expenses include overhead allocations consisting of various administrative and facilities related costs. The Company charges research and development expenses as expenses when incurred and are presented net of government grants (see Note 2l).

l. Grants and participations:

Royalty-bearing grants from the Israeli Innovation Authority ("IIA") of the Ministry of Economy and Industry in Israel for funding of approved research and development projects are recognized at the time the Company is entitled to such grants, on the basis of the costs incurred, and are presented as a deduction from research and development expenses. Non-royalty-bearing grants from the IIA MAGNET program and from European Commission's Seventh Framework Programme for Research ("FP7") for funding approved research and development projects are recognized at the time the Company is entitled to such grants, on the basis of the costs incurred, and are presented as a deduction from research and development expenses.

NOTE 2:- SIGNIFICANT ACCOUNTING POLICIES (CONT.)

l. Grants and participations: (Cont.)

Since the payment of royalties is not probable when the grants are received, the Company does not record a liability for amounts received from IIA until the related revenues are recognized. In the event of failure of a project that was partly financed by IIA, the Company will not be obligated to pay any royalties or repay the amounts received.

The Company recognizes participations in research and development, as a reduction from research and development expenses in the amount of $83, $738 and $542 for the years ended December 31, 2023, 2022, and 2021, respectively.

From inception up until December 31, 2023, the Company received a total of $7,290 in grants, out of which royalty-bearing grants in the amount of $4,888 from the IIA, non-royalty bearing grants in the amount of $1,675 from the IIA (out of which $97 were received during the year ended December 31, 2023) and non-royalty bearing grants in the amount of $727 from the FP7.

m. Accounting for share-based compensation:

Share-based compensation expense related to share-based awards is recognized based on the fair value of the awards granted and recognized as an expense on a straight-line basis over the requisite service period for share options. The fair value of each option award is estimated on the grant date using the Black-Scholes option pricing model. The Black-Scholes option pricing model requires the input of highly subjective assumptions, including the expected term of the award, the expected volatility of the price of the Company's Ordinary shares, risk-free interest rates, and the expected dividend yield of Ordinary shares. The assumptions used to determine the fair value of the share awards represent management's best estimates. These estimates involve inherent uncertainties and the application of management's judgment. Forfeitures are accounted for as they occur instead of estimating the number of awards expected to be forfeited.

n. Basic and diluted net loss per share:

The Company's basic net loss per share is calculated by dividing the net loss attributable to Ordinary shareholders by the weighted-average number of shares of Ordinary shares outstanding for the period, without consideration of potentially dilutive securities. The diluted net loss per share is calculated by giving effect to all potentially dilutive securities outstanding for the period using the treasury share method or the if-converted method based on the nature of such securities. Diluted net loss per share is the same as basic net loss per share in periods when the effects of potentially dilutive shares of Ordinary shares are anti-dilutive.

NOTE 2:- SIGNIFICANT ACCOUNTING POLICIES (CONT.)

o. Fair value of financial instruments:

The Company applies ASC No. 820, "*Fair Value Measurements and Disclosures*" ("ASC 820"), pursuant to which fair value is defined as the price that would be received to sell an asset or paid to transfer a liability (i.e., the "exit price") in an orderly transaction between market participants at the measurement date. In determining fair value, the Company uses various valuation approaches. ASC 820 establishes a hierarchy for inputs used in measuring fair value that maximizes the use of observable inputs and minimizes the use of unobservable inputs by requiring that the most observable inputs be used when available. Observable inputs are inputs that market participants would use in pricing the asset or liability developed based on market data obtained from sources independent of the Company.

Unobservable inputs are inputs that reflect the Company's assumptions about the assumptions market participants would use in pricing the asset or liability developed based on the best information available in the circumstances.

Fair value is an exit price, representing the amount that would be received from selling an asset or paid to transfer a liability in an orderly transaction between market participants. As such, fair value is a market-based measurement that should be determined based on assumptions that market participants would use in pricing an asset or a liability.

A three-tier fair value hierarchy is established as a basis for considering such assumptions and for inputs used in the valuation methodologies in measuring fair value:

Level 1 - Observable inputs that reflect quoted prices (unadjusted) in active markets for identical assets and liabilities.
Level 2 - Include other inputs that are directly or indirectly observable in the marketplace.
Level 3 - Unobservable inputs which are supported by little or no market activity

The fair value hierarchy also requires an entity to maximize the use of observable inputs and minimize the use of unobservable inputs when measuring fair value.

The carrying amounts of cash and cash equivalents, restricted cash, short-term deposits, long-term deposits, prepaid expenses and other current assets, trade payables, accrued expenses and other current and non-current liabilities approximate their fair value due to the short-term maturity of such instruments.

The fair value measurement of the FCA (as defined in Note 7) is measured using unobservable inputs that require a high level of judgment to determine fair value, and thus is classified as a Level 3 financial instrument. The Company estimates the fair value of the abovementioned instrument using the Monte-Carlo simulation and the Black-Scholes option pricing model.

Fair value estimates are made at a specific point in time, based on relevant market information and information about the financial instruments. These estimates are subjective in nature and involve uncertainties and matters of significant judgment and, therefore, cannot be determined with precision. Changes in assumptions could significantly affect these estimates.

NOTE 2:- SIGNIFICANT ACCOUNTING POLICIES (CONT.)

p. Derivative financial instruments:

The Company accounts for derivatives based on ASC 815. ASC 815 requires the Company to recognize all derivatives on the balance sheet at fair value. The Company enters into option and forward contracts in order to limit the exposure to exchange rate fluctuation associated with expenses mainly incurred in NIS. Since the derivative instruments that the Company holds were not designated as hedging instruments under ASC 815, any gain or loss derived from such instruments is recognized immediately as "financial (income) expense, net".

The Company measured the fair value of the contracts in accordance with ASC 820. Foreign currency derivative contracts are classified within Level 2 as the valuation inputs are based on quoted prices and market observable data of similar instruments. As of December 31, 2023 and 2022, the fair value of the options and forward contracts was $0 and $12, respectively, which were presented as prepaid expenses and other current assets. Financial expense (income) for the years ended December 31, 2023, 2022 and 2021, amounted to $75, $273 and ($58), respectively.

q. Income taxes:

The Company accounts for income taxes in accordance with ASC No. 740, "*Income Taxes*" ("ASC 740"). ASC 740 prescribes the use of the liability method whereby deferred tax asset and liability account balances are determined based on differences between the financial reporting and tax bases of assets and liabilities and are measured using the enacted tax rates and laws that will be in effect when the differences are expected to reverse. The Company provides a valuation allowance to reduce deferred tax assets to their estimated realizable value, if needed.

ASC 740 contains a two-step approach to recognizing and measuring a liability for uncertain tax positions. The first step is to evaluate the tax position taken or expected to be taken in a tax return by determining if the weight of available evidence indicates that it is more likely than not that, on an evaluation of the technical merits, the tax position will be sustained on audit, including resolution of any related appeals or litigation processes. The second step is to measure the tax benefit as the largest amount that is more than 50% likely to be realized upon ultimate settlement.

As of December 31, 2023 and 2022, the Company's uncertain tax position liability was immaterial. The Company's policy is to accrue interest and penalties related to unrecognized tax benefits in its taxes on income.

r. Revenue Recognition:

The Company recognizes revenue from contracts with customers under ASC No. 606, "*Revenue from Contracts with Customers*". Accordingly, the Company recognizes revenue when it transfers promised goods or services to customers in an amount that reflects the consideration to which it expects to be entitled in exchange for those goods or services.

To determine revenue recognition for contracts with customers, the Company performs the following five steps: (i) identify the contract(s) with a customer; (ii) identify the performance obligations in the contract; (iii) determine the transaction price; (iv) allocate the transaction price to the performance obligations in the contract; and (v) recognize revenue when (or as) the Company satisfies its performance obligations.

NOTE 2:- SIGNIFICANT ACCOUNTING POLICIES (CONT.)

r. Revenue Recognition: (Cont.)

At contract inception, the Company assesses the goods or services agreed upon within each contract and assesses whether each good or service is distinct to determine the performance obligations. The Company then recognizes as revenue the amount of the transaction price that is allocated to the respective performance obligation when (or as) the performance obligation is satisfied.

On August 2, 2022, the Company entered into a license, distribution and supply agreement (the "Agreement") with Mercury Pharma Group Limited, under the trade name Advanz Pharma Holdings (the "Customer"), with respect to the Company's product, the D-PLEX$_{100}$ (the "Product"), for the prevention of (i) post abdominal surgery incisional infection; and/or (ii) post cardiac surgery sternal infection.

The term of the Agreement is until the later of December 31, 2035, or 10 years after the first commercial sale of the Product. The Agreement can also be terminated by either party under certain limited circumstances. Pursuant to the Agreement, the Customer was granted an exclusive license to market, commercialize, and distribute the Product in the European Economic Area and in the United Kingdom. Under the Agreement, the Company will carry out all activities required to obtain marketing authorization in each territory, approving the commercial sale of the Product in that territory. Once marketing authorization will be granted in a territory, the Customer will be required to achieve minimum sales requirements for that territory.

Under the terms of the Agreement, the Company received a non-refundable, one-time payment of €2.5 million (approximately $2,548). The Company is also entitled to receive additional development-related milestones payments for a total of up to €23 million. In addition, the Company will be entitled to receive up to additional €87 million upon achievement of certain commercial sale milestones.

The Company has concluded that the Agreement includes a single performance obligation. The Company has concluded that the license and development are not distinct from the manufacturing since the Customer could not use, consume, or sell the license and development services on their own or with resources readily available to the Customer because of the Company's specialized knowledge and the associated manufacturing know-how and because currently, and in the foreseeable future, there are no other parties that could manufacture the Product. As such, the transaction price was fully allocated to the single performance obligation. Since it is not probable that a significant reversal in the amount of cumulative revenue recognized will not occur when the uncertainty associated with the milestone payments is resolved, the Company estimated the transaction price at €2.5 million (approximately $2,548).

As of December 31, 2023, the Company has yet to satisfy its performance obligation under the Agreement and, therefore, no revenues were recognized. Accordingly, the upfront payment amount was classified as a long-term deferred revenue in the Company's consolidated balance sheet as of December 31, 2023.

NOTE 2:- SIGNIFICANT ACCOUNTING POLICIES (CONT.)

s. Concentration of credit risks:

Financial instruments that potentially subject the Company to concentration of credit risk consist principally of cash and cash equivalents and short-term deposits.

Cash, cash equivalents, restricted cash and short-term deposits are deposited in major banks in Israel and in the United States of America. Such investments may be in excess of insured limits or not insured. Generally, cash and cash equivalents may be redeemed upon demand and, therefore, bear minimal risk.

The Company utilizes option and forward contracts to protect against the risk of overall changes in exchange rates. The derivative instruments hedge a portion of the Company's non-dollar currency exposure. Counterparties to the Company's derivative instruments are all major financial institutions.

t. Severance pay:

All the Company's employees who are Israeli citizens have subscribed to Section 14 of Israel's Severance Pay Law, 5723-1963 ("Section 14"). Pursuant to Section 14, employees covered by this section are entitled to monthly deposits at a rate of 8.33% of their monthly salary, made on their behalf by the Company. Payments in accordance with Section 14 release the Company from any future severance liabilities in respect of those employees. Neither severance pay liability nor severance pay fund under Section 14 for such employees is recorded on the Company's consolidated balance sheets. Severance pay expense for the years ended December 31, 2023, 2022 and 2021, amounted to $401, $537 and $547, respectively.

The US Subsidiary has a Safe Harbor 401(k) plan covering all the US Subsidiary employees. All eligible employees may elect to contribute up to 100% of their payroll compensation (minus mandatory payroll deductions) to the plan, for 2023, up to a maximum of $23 per year (for employees over 50 years of age the maximum contribution was $30 per year), as determined by the U.S. Internal Revenue Service ("IRS"). The US Subsidiary matches at 100%, on each payroll, up to 5% of the employee compensation to the plan within the IRS limits (which was set at $330 in 2023 for purposes of the plan). During the year ended December 31, 2023, the Company recorded expenses for matching contributions in the amount of $14 (for one employee), as compared to $30 in 2022 (for three employees).

u. Contingent liabilities:

The Company accounts for its contingent liabilities in accordance with ASC No. 450, "*Contingencies*". A provision is recorded when it is both probable that a liability has been incurred and the amount of the loss can be reasonably estimated.

With respect to legal matters, provisions are reviewed and adjusted to reflect the impact of negotiations, estimated settlements, legal rulings, advice of legal counsel and other information and events pertaining to a particular matter. The Company is occasionally a party to routine claims or litigation incidental to its business. The Company does not believe that it is a party to any pending legal proceeding that is likely to have a material adverse effect on its business, financial condition or results of operations. The Company recorded an accrual in the consolidated statement of operations, which it deems appropriate.

As of December 31, 2023 and 2022, no liability due to legal matters has been accrued.

NOTE 2:- SIGNIFICANT ACCOUNTING POLICIES (CONT.)

v. Recently Adopted accounting pronouncements: an

As an "Emerging Growth Company", the Jumpstart Our Business Startups Act ("JOBS Act") allows the Company to delay adoption of new or revised accounting pronouncements applicable to public companies until such pronouncements are made applicable to private companies. The Company has elected to use this extended transition period under the JOBS Act. The adoption dates discussed below reflect this election.

In June 2016, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU") No. 2016-13, "*Financial Instruments - Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments*," which replaces the existing incurred loss impairment model with an expected credit loss model and requires a financial asset measured at amortized cost to be presented at the net amount expected to be collected. The guidance will be effective for the Company beginning January 1, 2023, and interim periods thereafter. The Company adopted ASU 2016-13 on January 1, 2023. The adoption of the standard did not result in a material impact to the Company's consolidated financial statements.

w. Recently issued accounting pronouncements, not yet adopted:

In November 2023, the FASB issued ASU 2023-07, "Segment Reporting (Topic 280): Improvements to Reportable Segment Disclosures", which requires public entities to disclose information about their reportable segments' significant expenses and other segment items on an interim and annual basis. Public entities with a single reportable segment are required to apply the disclosure requirements in ASU 2023-07, as well as all existing segment disclosures and reconciliation requirements in ASC 280 on an interim and annual basis. ASU 2023-07 is effective for fiscal years beginning after December 15, 2023, and for interim periods within fiscal years beginning after December 15, 2024, with early adoption permitted. The Company is currently evaluating the impact of adopting ASU 2023-07.

In December 2023, the FASB issued ASU 2023-09, "Income Taxes (Topic 740): Improvements to Income Tax Disclosures", which requires public entities, on an annual basis, to provide disclosure of specific categories in the rate reconciliation, as well as disclosure of income taxes paid disaggregated by jurisdiction. ASU 2023-09 is effective for fiscal years beginning after December 15, 2025, with early adoption permitted. The Company is currently evaluating the impact of adopting ASU 2023-09.

U.S. dollars in thousands (except share and per share data)

NOTE 3:- PREPAID EXPENSES AND OTHER CURRENT ASSETS

	December 31,	
	2023	2022
Prepaid expenses	$ 352	$ 552
Government authorities	96	239
Other current assets	10	298
	$ 458	$ 1,089

NOTE 4:- PROPERTY AND EQUIPMENT, NET

	December 31,	
	2023	2022
Cost:		
Computers and software	$ 620	$ 613
Laboratory equipment	8,122	7,933
Furniture and office equipment	173	173
Leasehold improvements	6,503	6,503
	15,418	15,222
Accumulated depreciation	(7,797)	(5,975)
Depreciated cost	$ 7,621	$ 9,247

Depreciation expenses amounted to $1,822, $1,721 and $1,118 for the years ended December 31, 2023, 2022 and 2021, respectively.

The majority of the Company's property and equipment is located in Israel.

NOTE 5:- LEASES

a. The Company's facilities are leased under operating lease agreements for periods ending no later than 2027. The Company has bank guarantees in connection with the facilities lease agreements in the total amount of $209. Accordingly, cash, in the same amount, was restricted in bank deposits. The Company also leases motor vehicles under various operating leases, the latest of which expires in 2026.

b. The weighted average remaining lease term as of December 31, 2023, is 3.29 years.

Weighted average discount rate is 8.45%.

c. The components of operating lease expense for the year ended December 31, 2023, were $1,170.

U.S. dollars in thousands (except share and per share data)

NOTE 5:- LEASES (CONT.)

d. Lease liability as of December 31, 2023, is as follows:

2024	$ 587
2025	414
2026	374
2027	184
Total undiscounted lease payments	1,559
Less - imputed interest	(162)
Present value of lease liabilities	$ 1,397

e. The following table presents supplemental cash flow information related to the lease costs for operating leases as of December 31, 2023:

Cash paid for amounts included in measurement of lease liability:	
Operating cash flows for operating leases	$ 1,020
ROU asset recognized with corresponding lease liability:	
Operating leases	$ 241

NOTE 6:- ACCRUED EXPENSES AND OTHER CURRENT LIABILITIES

	December 31,	
	2023	**2022**
Accrued expenses	$ 995	$ 1,246
Employees and payroll accruals	958	1,167
Other liabilities	18	16
	$ 1,971	$ 2,429

NOTE 7:- LINE OF CREDIT ARRANGEMENT

On April 5, 2022, the Company entered into a secured line of credit agreement for up to $15,000 (the "Credit Line") with Kreos Capital VI (Expert Fund) LP ("Kreos"). The Credit Line is comprised of three tranches in the amount of $10,000, $2,500 and $2,500, respectively, in which the first tranche and in the amount of $10,000 (the "First Tranche") and the second tranche in the amount of $2,500 (the "Second Tranche) were drawn on April 26, 2022 and July 19, 2022, respectively. In addition, in accordance with the Credit Line agreement, the Company will issue to Kreos warrants to purchase the Company's Ordinary shares equal to 8% of the amount of each tranche, when and if borrowed, with an exercise price of $154.05 per share. The expiration date for each warrant issued will be seven years from the agreement date. Accordingly, as a result of the First Tranche and Second Tranche withdrawal, the Company issued to Kreos a warrant in the total amount of $1,000. The total number of shares issuable upon exercise is equal to the total amount divided by the exercise price.

On each drawdown date, the Company shall pay to Kreos on the drawdown date the last period payment for such drawdown. For the First Tranche and Second Tranche, the amount the Company paid was $317 and $85, respectively.

NOTE 7:- LINE OF CREDIT ARRANGEMENT (CONT.)

The third and final tranche of $2,500 will never be drawn since the third tranche milestone has not been met.

The Company has concluded that the Credit Line includes several legally detachable and separately exercisable freestanding financial instruments: The First Tranche term loan, the warrants, and the right to receive additional loan tranches (the "FCA").

The Company has concluded that the warrants should be classified as equity since the warrants are not an ASC 480 liability, are indexed to the Company's own Ordinary share and meet all the equity classification conditions pursuant to ASC 815-40. The Company has also concluded that the FCA is not indexed to the Company's own Ordinary share and should be measured at fair value, with changes in fair value recognized in earnings. In addition, the First Tranche and the Second Tranche term loan were accounted for using the effective interest method.

The Company allocated the proceeds received to the FCA at fair value. The remaining proceeds were allocated between the warrants and the First Tranche term loan using the relative fair value method. The proceeds allocation resulted in $9,532 allocated to the First Tranche and $468 allocated to the warrants, net of issuance costs. The proceeds allocated to the FCA were immaterial.

The Company allocated the proceeds received under the Credit Line between the warrants and the Second Tranche term loan using the relative fair value method. The proceeds allocation resulted in $2,380 allocated to the Second Tranche and $120 allocated to the warrants.

On March 29, 2023, the Company entered into an amendment to the Credit Line (the "Amendment").

Pursuant to the Amendment, 70% of the remaining principal and interest repayments will be delayed and repaid on a monthly equal basis from August 2024 to May 2026. The amended secured credit line now bears an interest at the rate of 10%. In addition, the Company paid to Kreos a restructuring fee consisting of 1% on the closing date of the Amendment and will pay an incremental 3% at the maturity of the Amendment. In return for this additional deferral of repayment, Kreos has the right to receive a potential claw-back payment on account of the then outstanding principal amount (the "Claw-Back"). This Claw-Back mechanism will be triggered by additional incoming funds from future collaboration and partnership agreements or additional funding. If triggered, the minimum Claw-Back to be paid will be $1,500, but will not exceed $3,000. During the first quarter of 2024 the Company repaid $1,500 due to the Claw-Back.

The Company evaluated the amendment under ASC 470-50, "*Debt - modification and extinguishment*", and concluded that the terms of the new debt and the original debt are not substantially different, therefore the debt restructuring is accounted as debt modification where no gain or loss was recognized.

The Credit Line is denominated in U.S. dollars and bears interest at an annual rate equal to 9.25% until the Amendment and 10% from the Amendment. The interest paid due to the Credit Line for the years ended December 31, 2023 and 2022 amounted to $1,038 and $734, respectively.

During the years ended December 31, 2023 and 2022, the Company recognized $1,685 and $1,023 of interest expenses related to the Credit Line, respectively, which were included as part of financial expenses in the Company's statements of operations.

U.S. dollars in thousands (except share and per share data)

NOTE 7:- LINE OF CREDIT ARRANGEMENT (CONT.)

In addition, the Company's debt includes the Claw-Back feature, which meets the definition of embedded derivative under ASC 815. Consequently, the embedded derivative was bifurcated and accounted for separately at fair value. The fair value of the derivative amounted to $127 and $60 as of March 29, 2023 and December 31, 2023, respectively. Changes in the fair value of the derivative liabilities are determined at each period end. The liability due to the derivative was classified under other long-term liabilities in the consolidated balance sheet as of December 31, 2023.

Further to the above, the outstanding warrants issued to Kreos were repriced and as a result bear an exercise price of $12.60 per share. As a result of the modification, the Company recorded an incremental value in the amount of $31, that was calculated based on the Black-Scholes option pricing model, which increased the additional paid-in capital against an offset of the long-term debt due to the Credit Line.

The Company incurred debt restructuring costs, which were fully paid in cash, and are presented as a direct deduction against the carrying amount of the debt and amortized to interest expense using the effective interest method.

NOTE 8:- COMMITMENTS AND CONTINGENT LIABILITIES

In connection with its research and development programs, through December 31, 2023, the Company received participation payments from the IIA in the aggregate amount of $4,888. In return for the IIA's participation, the Company is committed to pay royalties at a rate of 3% of sales of the developed products, up to 100% of the amount of grants received plus interest at SOFR rate. Through December 31, 2023, no royalties have been paid or accrued.

NOTE 9:- INCOME TAXES

a. Corporate tax rates:

The corporate tax rate in Israel in 2023, 2022 and 2021 was 23%.

The United States of America federal rate was 21% and the state corporate income tax rates range from 6.5% to 11.5%, for the years ended December 31, 2023, 2022 and 2021. The Company didn't account for any federal, state and foreign income tax expenses for the years ended December 31, 2023, 2022 and 2021. The Company is subject to United States of America income tax laws. There are no provisions for United States of America federal, state or other taxes for any period.

Loss before taxes is comprised as follows:

	Year Ended December 31,		
	2023	2022	2021
Domestic (Israel)	$ 23,348	$ 38,274	$ 41,197
Foreign	448	1,154	1,404
	$ 23,796	$ 39,428	$ 42,601

U.S. dollars in thousands (except share and per share data)

NOTE 9:- INCOME TAXES (CONT.)

b. Net operating losses carryforward:

The Company has accumulated losses for tax purposes as of December 31, 2023, in the amount of approximately $174,490 which may be carried forward and offset against taxable income in the future for an indefinite period.

c. Tax assessment:

The Company has net operating losses from prior tax periods which may be subjected to examination in future periods. As of December 31, 2023, the Company's tax years until December 31, 2018, are subject to the statute of limitation in Israel.

The US Subsidiary has yet to receive final tax assessments since its incorporation.

d. Deferred taxes:

Deferred income taxes reflect the net tax effects of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes. The Company's deferred tax assets are comprised of operating loss carryforwards and other temporary differences. Significant components of the Company's deferred tax assets are as follows:

	December 31,	
	2023	2022
Deferred tax assets:		
Carryforward losses	$ 40,133	$ 34,984
Research and development expenses	4,044	5,376
Operating lease liabilities	292	490
Reserves and allowances	207	157
Deferred tax assets before valuation allowance	44,676	41,007
Valuation allowance	(44,338)	(40,448)
Total deferred tax assets	338	559
Deferred tax liabilities:		
Operating lease ROU assets	(338)	(559)
Total deferred tax liabilities	(338)	(559)
Net deferred tax assets, net	$ -	$ -

Management currently believes that since the Company has a history of losses, and there is uncertainty with respect to future taxable income of the Company, it is more likely than not that the deferred tax assets will not be utilized in the foreseeable future. Thus, a full valuation allowance was provided to reduce deferred tax assets to their realizable value.

For both 2023 and 2022, the main reconciling items of the Company's statutory tax rate of 23% and the effective tax rate of (0.3)% were tax carryforward losses and other temporary differences, such as research and development expenses, for which a full valuation allowance was provided.

U.S. dollars in thousands (except share and per share data)

NOTE 9:- INCOME TAXES (CONT.)

e. Income taxes are comprised of current tax expenses, all foreign, which amounted to $69 and $129 for the years ended December 31, 2023 and 2022, respectively.

NOTE 10:- SHAREHOLDERS' EQUITY (DEFICIT)

a. Reverse Share Split:

On September 18, 2023, the Company's board of directors approved a 1-for-30 reverse share split (See Note 1.b). Following the reverse share split, all Ordinary shares, options, warrants, exercise prices and per share data have been adjusted retroactively for all periods presented in these consolidated financial statements.

b. Ordinary share capital (with no par value each) following the Reverse Share Split is composed as follows:

	December 31, 2023		December 31, 2022	
	Authorized	Issued and outstanding	Authorized	Issued and outstanding
	Number of shares			
Ordinary shares	107,800,000	1,653,559	47,800,000	669,605

c. Controlled Equity Offering Sales Agreement (the "Sales Agreement"):

In July 2021, the Company entered into a Sales Agreement with Cantor Fitzgerald & Co. (the "Agent"), pursuant to which the Company may offer and sell, from time to time, its Ordinary shares, through the Agent in an at the market offering ("ATM'"), as defined in Rule 415(a)(4) promulgated under the Securities Act of 1933, as amended, for an aggregate offering price of up to $45,000, which was subsequently reduced to $8,707 on May 19, 2023.

During the year ended December 31, 2023, the Company sold 75,693 Ordinary Shares under the ATM for a total amount of $2,328, net of issuance cost in the amount of $92.

During the year ended December 31, 2022, the Company sold 35,505 Ordinary shares under the ATM for a total amount of $4,423, net of issuance cost in the amount of $222.

NOTE 10:- SHAREHOLDERS' EQUITY (DEFICIT) (CONT.)

d. On March 29, 2023, the Company entered into a private placement of unregistered pre-funded warrants to purchase up to 345,238 Ordinary shares (the "PFW"), at a price of $12.60 per PFW with certain of the Company's existing shareholders. The PFWs have an exercise price of $0.003 per Ordinary share. Accordingly, the consideration for the PFWs amounted to $3,987, net of related placement fees and other offering expenses which amounted to a total of $362. In accordance with ASC No. 480, "*Distinguishing Liabilities from Equity*" ("ASC 480"), and ASC No. 815-40, "*Derivatives and Hedging*" ("ASC 815"), the PFWs were qualified for equity accounting.

On March 31, 2023, the Company closed a public offering which was comprised of 561,967 Ordinary shares (inclusive of 73,300 Ordinary shares pursuant to the full exercise of an overallotment option granted to the underwriters), at a public offering price of $12.60 per share (the "Public Offering"). The proceeds to the Company from the Public Offering were $6,415, net of underwriting commissions and other offering expenses which amounted to $665.

Following the Public Offering, the Company did not have a sufficient number of authorized Ordinary shares to cover 167,115 PFWs, and as a result, in accordance with ASC 815-40, these PFWs, which amounted to $2,106, were classified as a liability at fair value.

On May 5, 2023, the shareholders of the Company approved to increase the Company's authorized share capital by 60,000,000, from 47,800,000 to 107,800,000 Ordinary shares, and as a result, in accordance with ASC 480 and 815-40, these PFWs were classified under equity accounting at their fair value, which amounted to $1,905. The change in the PFWs' fair value was accounted for as financial expenses in the amount of $201.

On May 11, 2023, all of the PFWs were exercised into 345,151 Ordinary shares on a cashless basis.

e. Ordinary shares rights:

The Ordinary shares confer upon their holders the right to participate in the general meetings of the Company, to vote at such meetings (each share represents one vote), and to participate in any distribution of dividends or any other distribution of the Company's property, including the distribution of surplus assets upon liquidation.

f. Share option plan:

The Company has authorized through its 2012 Share Option Plan, the grant of options to officers, directors, advisors, management and other key employees of up to 312,403 Ordinary shares. The options granted generally have a four-year vesting period and expire ten years after the date of grant. Options granted under the Company's option plan that are canceled or forfeited before expiration become available for future grant.

On August 7, 2023, the Company's board of directors approved to increase the Company's options pool by an additional 156,667 options from 155,736 to 312,403.

As of December 31, 2023, 52,390 of the Company's options were available for future grants.

U.S. dollars in thousands (except share and per share data)

NOTE 10:- SHAREHOLDERS' EQUITY (DEFICIT) (CONT.)

f. Share option plan: (Cont.)

During the first quarter of 2023, the Company decreased the exercise price of 67,385 options granted to all employees and a consultant under the 2012 Share Option Plan. As of the modification date, the options can be exercised for $23.07 (the "Repricing"). Following the Repricing, the Company accounted for an incremental value in the total amount of $562, of which $307 was recognized as of the modification date due to vested options, and the rest of the amount will be expensed based on the vesting conditions of each grant.

On May 5, 2023, the Company's board of directors also approved a similar exercise price decrease of 17,417 options previously granted to the Company's Chief Executive Officer and board members. Therefore, the Company accounted for an incremental value in the total amount of $63, of which $50 was recognized as of the modification date due to vested options, and the rest of the amount will be expensed based on the vesting conditions of each grant.

A summary of the status of options to employees under the Company's option plan as of December 31, 2023, and changes during the relevant period ended on that date is presented below:

	Number of options	Weighted average exercise price	Aggregate intrinsic value	Weighted average remaining contractual life (years)
Outstanding at beginning of year	110,110	$ 178.99	$ 115	6.14
Granted	159,087	15.06		
Exercised	(1,143)	6.97	$ 12	
Forfeited and expired	(30,398)	100.82		
Outstanding at end of year	**237,656**	**$ 21.30**	**$ -**	**8.29**
Exercisable options	59,426	$ 47.25	$ -	4.34
Vested and expected to vest	237,656	$ 21.30	$ -	8.29

The weighted average grant date fair value of options granted during the year ended December 31, 2023, was $7.66.

The Black-Scholes assumptions used to value the employee share options at the grant dates are presented in the following table by years:

	2023	2022	2021
Dividend yield (%)	0	0	0
Expected volatility (%)	92.59–95.67	70.45–92.67	72.97–78.69
Risk-free interest rate (%)	3.38–4.71	1.81–4.30	0.62–1.32
Expected term (in years)	5.7-6.1	1.2-6	5-6

U.S. dollars in thousands (except share and per share data)

NOTE 10:- SHAREHOLDERS' EQUITY (DEFICIT) (CONT.)

f. Share option plan: (Cont.)

These assumptions and estimates were determined as follows:

- Fair Value of Ordinary Shares - The fair value of each Ordinary share was based on the closing price of the Company's publicly traded Ordinary shares as reported on the date of the grant.
- Dividend Yield - The Company has never declared or paid any cash dividends and does not presently plan to pay cash dividends in the foreseeable future. As a result, an expected dividend yield of zero percent was used.
- Expected Volatility - As the Company has a short trading history for its Ordinary shares, the expected volatility is derived from the average historical share volatilities of several unrelated public companies within the Company's industry that the Company considers to be comparable to its own business over a period equivalent to the option's expected term.
- Risk-Free Interest Rate - The risk-free rate for the expected term of the options is based on the Black-Scholes option pricing model on the yields of United States of America Treasury securities with maturities appropriate for the expected term of employee share option awards.
- Expected term - The expected term represents the period that options are expected to be outstanding. For option grants that are considered to be "plain vanilla," the Company determines the expected term using the simplified method. The simplified method deems the term to be the average of the time-to-vesting and the contractual life of the options.

The total share-based compensation expense recognized by the Company's departments for the three years ended December 31, 2023, 2022 and 2021, was comprised as follows:

	Year Ended December 31,		
	2023	2022	2021
Research and development	$ 1,791	$ 2,081	$ 2,203
Marketing and business development	339	383	317
General and administrative	1,261	1,843	2,230
Total share-based compensation expense	$ 3,391	$ 4,307	$ 4,750

As of December 31, 2023, there were unrecognized compensation costs of $4,235, which are expected to be recognized over a weighted average period of approximately 2.27 years.

U.S. dollars in thousands (except share and per share data)

NOTE 10:- SHAREHOLDERS' EQUITY (DEFICIT) (CONT.)

g. Options issued to non-employees (including directors and consultants):

Outstanding options granted to non-employees as of December 31, 2023, were as follows:

Grant date	Options outstanding as of December 31, 2023	Average Exercise price per share ($)	Options exercisable as of December 31, 2023	Exercisable through
April 2016	199	$ 93.00	199	April 2026
December 2016	239	117.90	239	December 2026
June 2017	478	123.00	478	June 2027
November 2017	597	23.07	597	November 2027
August 2019	2,389	23.07	2,389	August 2029
June 2020	2,150	85.19	2,150	June 2030
April 2021	1,794	23.07	1,794	April 2031
August 2021	500	23.07	374	August 2031
December 2021	333	204.00	222	December 2031
May 2022	1,872	23.07	1,872	May 2032
November 2022	167	31.05	83	November 2032
February 2023	534	24.36	-	February 2033
May 2023	5,529	$ 18.13	1,633	May 2033
	16,781		12,030	

No options were exercised by non-employees during the year ended December 31, 2023.

g. Warrants:

Further to the discussion in Note 7, as of April 26, 2022 and July 19, 2022, the Company measured the fair value of the warrants to purchase Ordinary shares (a Level 3 valuation) using the Black-Scholes option pricing model.

As of April 26, 2022 and July 19, 2022, the relative fair value of the warrants to purchase Ordinary shares issued to Kreos was $468 and $120, respectively, which was calculated using the following assumptions:

	July 19, 2022	April 26, 2022
Share price ($)	153.60	148.80
Exercise price ($)	154.05	154.05
Expected volatility (%)	60.57	60.81
Adjustment to risk-free interest rate (%)	3.07	2.84
Dividend yield (%)	-	-
Risk-free interest rate (%)	3.11	2.88
Expected life (in years)	6.72	6.94

During the year ended December 31, 2021, 19,334 D-2 warrants were exercised into 3,866 Ordinary shares on a cashless basis. In addition, 2,283 D-2 warrants were exercised into 2,283 Ordinary shares for a total consideration of $632. As of December 31, 2023 and 2022, no D-2 warrants were outstanding.

U.S. dollars in thousands (except share and per share data)

NOTE 10:- SHAREHOLDERS' EQUITY (DEFICIT) (CONT.)

g. Warrants: (Cont.)

As of December 31, 2023, all warrants are exercisable into Ordinary shares, in which the outstanding issued warrants to purchase Ordinary shares as of December 31, 2023, were as follows:

Grant date	Warrants outstanding as of December 31, 2023	Average Exercise price per share ($)	Warrants exercisable as of December 31, 2023	Exercisable through
September 2020	597	$ 480.00	597	September 2024
April 2022	5,193	$ *) 12.60	5,193	April 2029
July 2022	1,298	$ *) 12.60	1,298	April 2029
	7,088		7,088	

*) Following the modification mentioned in Note 7.

NOTE 11:- FINANCIAL (INCOME) EXPENSES, NET

	Year Ended December 31,		
	2022	2022	2021
Financial expenses:			
Financial expenses from loan	$ 1,618	$ 1,023	$ -
Other financial expenses	93	316	26
Total financial expenses	1,711	1,339	26
Financial income:			
Foreign currency transaction gains, net	(33)	(532)	(44)
Interest from bank deposits	(548)	(267)	(468)
Remeasurement of warrants	(201)	-	-
Other financial income	-	-	(58)
Total financial income	(782)	(799)	(570)
Total financial (income) expense, net	$ 929	$ 540	$ (544)

U.S. dollars in thousands (except share and per share data)

NOTE 12:- BASIC AND DILUTED NET LOSS PER SHARE

Basic loss per share is computed using the weighted-average number of outstanding Ordinary shares during the period. Diluted loss per share is computed using the weighted-average number of outstanding Ordinary share and, when dilutive, potential Ordinary shares outstanding during the period.

The computation of loss per share is as follows:

	Year Ended December 31,		
	2023	2022	2021
Basic loss per share:			
Net loss	$ 23,865	$ 39,557	$ 42,601
Shares used in computation:			
Weighted-average shares of Ordinary shares outstanding	1,404,368	647,556	624,051
Basic loss per share	$ 16.99	$ 61.09	$ 68.27
Diluted loss per share:			
Net loss	$ 24,066	$ 39,557	$ 42,601
Shares used in computation:			
Weighted-average shares of Ordinary shares outstanding	1,421,308	647,556	624,051
Diluted loss per share	$ 16.93	$ 61.09	$ 68.27

The potential ordinary shares that were excluded from the computation of diluted net loss per share attributable to ordinary shareholders for the periods presented because including them would have been anti-dilutive are as follows:

	December 31,		
	2023	2022	2021
	Number of Ordinary shares		
Ordinary share options	71,456	82,914	66,525
Warrants	7,088	13,775	7,284
	78,544	96,689	73,809

NOTE 14:- SUBSEQUENT EVENTS

a. On January 4, 2024, the Company entered into a definitive securities purchase agreement for a private placement financing, led by leading U.S. life sciences-focused investors and certain existing investors. Under the securities purchase agreement, the investors purchased 3,143,693 of the Company's Ordinary shares at a purchase price of $4.81 per share, pre-funded warrants to purchase up to 227,619 Ordinary shares at an exercise price of $0.0001 per share and warrants to purchase up to 3,371,312 Ordinary shares at an exercise price of $5.50 per share. The warrants expire upon the earlier of two years from the date of issuance and 10 trading days following the Company's announcement of the positive recommendation by Data Safety Monitoring Board regarding the Company's unblinded interim analysis in its SHIELD II Phase 3 trial of D-PLEX$_{100}$ resulting in the stopping of the trial due to positive efficacy. The gross proceeds to the Company amounted to $16,216. Exercise of the warrants in full would result in an additional $18,542 in gross proceeds to the Company. The closing of the offering occurred on January 9, 2024.

b. On January 14, 2024, the Company extended the lease agreement for one of its premises up until July 2027.

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Exhibit 2.4

Description of Rights of Each Class of Securities

Type and Class of Securities

PolyPid Ltd.'s (the "Company") authorized share capital consists of 107,800,00 ordinary shares, no par value per share ("Ordinary Shares").

Registration Number and Purposes and Objects of the Company

The Company's registration number with the Israeli Registrar of Companies is 51-410592-3. The Company's purpose is set forth in section 3 of the Company's amended and restated articles of association and includes every lawful purpose.

The Powers of the Directors

The Company's board of directors ("Board") may exercise all powers that are not required under the Israeli Companies Law of 1999 (the "Companies Law") or under the Company's amended and restated articles of association, other than the powers which are to be exercised or taken by the Company's shareholders.

Preemptive Rights

The Company's Ordinary Shares are not redeemable and are not subject to any preemptive right.

Voting Rights of Directors

Subject to the provisions of the Companies Law and the Company's amended and restated articles of association, no director shall be disqualified by virtue of his or her office from holding any office or place of profit in the Company or in any company in which the Company shall be a shareholder or otherwise interested, or from contracting with the Company as vendor, purchaser or otherwise, nor shall any such contract, or any contract or arrangement entered into by or on behalf of the Company in which any director shall be in any way interested, be avoided, nor, other than as required under the Companies Law, shall any director be liable to account to the Company for any profit arising from any such office or place of profit or realized by any such contract or arrangement by reason only of such director's holding that office or of the fiduciary relations thereby established, but the nature of his or her interest, as well as any material fact or document, must be disclosed by him at the meeting of the Board at which the contract or arrangement is first considered, if his or her interest then exists, or, in any other case, at no later than the first meeting of the Board after the acquisition of his or her interest.

Limitations or Qualifications

Not applicable.

Other Rights

Not applicable.

Rights of the Shares

The Company's Ordinary Shares shall confer upon the holders thereof:

- equal right to attend and to vote at all of the Company's general meetings, whether regular or special, with each Ordinary Share entitling the holder thereof, which attends the meeting and participates in the voting, either in person or by a proxy or by a written ballot, to one vote;
- equal right to participate in distribution of dividends, if any, whether payable in cash or in bonus shares, in distribution of assets or in any other distribution, on a per share pro rata basis; and
- equal right to participate, upon the Company's dissolution, in the distribution of the Company's assets legally available for distribution, on a per share pro rata basis.

Election of Directors

Pursuant to the Company's amended and restated articles of association, the Company's directors are elected solely at an annual general meeting of the Company's shareholders and serve on the Board until the next annual general meeting of the Company's shareholders following his or her appointment, or until they cease to act as Board members pursuant to the provisions of the Company's amended and restated articles of association or any applicable law. The Board may at any time and from time to time appoint any person as a director to fill a vacancy (whether such vacancy is due to a director no longer serving or due to the number of directors serving being less than the maximum number of eleven, as stated in the Company's amended and restated articles of association). In the event of one or more such vacancies in the Board, the continuing directors may continue to act in every matter, provided, however, that if they number less than the minimum number of five, as provided in the Company's amended and restated articles of association, they may only act in an emergency or to fill the office of director which has become vacant up to a number equal to the minimum number of five. The office of a director that was appointed by the Board to fill any vacancy shall only be for the remaining period of time during which the director whose service has ended was filled would have held office, or in case of a vacancy due to the number of directors serving being less than the maximum number of eleven. The Company is not currently required to have external directors serving as Board members, based on an exemption that the Company has elected to be governed by under the Companies Law regulations.

Annual and Special Meetings

Under Israeli law, the Company is required to hold an annual general meeting of the Company's shareholders once every calendar year, at such time and place which shall be determined by the Board, which must be no later than 15 months after the date of the previous annual general meeting. All meetings other than the annual general meeting of shareholders are referred to as special general meetings.

Subject to the provisions of the Companies Law and the regulations promulgated thereunder, shareholders entitled to participate and vote at general meetings are the shareholders of record on a date to be decided by the Board, that will be in any event not more than the maximum period and not less than the minimum period permitted by the Companies Law. Resolutions regarding the following matters must be passed at a general meeting of the Company's shareholders:

- amendments to the Company's amended and restated articles of association;
- the exercise of the Board's powers by a general meeting if the Board's is unable to exercise its powers and the exercise of any of its powers is required for the Company's proper management;
- appointment or termination of the Company's auditors;
- appointment of directors (other than in the cases specified in the Company's amended and restated articles of association);
- approval of acts and transactions requiring general meeting approval pursuant to the provisions of the Companies Law and any other applicable law;
- increases or reductions of the Company's authorized share capital; and
- a merger (as such term is defined in the Companies Law).

Notices

The Companies Law require that a notice of any annual or special shareholders meeting be provided at least 21 days prior to the meeting, and if the agenda of the meeting includes the appointment or removal of directors, the approval of transactions with office holders or interested or related parties, approval of the company's general manager to serve as the chairman of the board of directors or an approval of a merger, notice must be provided at least 35 days prior to the meeting.

Quorum

As permitted under the Companies Law and our amended and restated articles of association, the quorum required for the Company's general meetings consists of at least two shareholders present in person, by proxy, written ballot or voting by means of electronic voting system, who hold or represent between them in the aggregate at least twenty five percent (25%) of the voting power of the Company. If within half an hour of the time set forth for the general meeting a quorum is not present, the general meeting shall stand adjourned either (i) to the same day of the following week, at the same hour and in the same place (ii) to such other date, time and place as prescribed in the notice to the shareholders and in such adjourned meeting or (iii) to such day and at such time and place as the chairperson of the general meeting shall determine (which may be earlier or later than the date pursuant to clause (i) above). If no quorum is present within half an hour of the time arranged, any number of shareholders participating in the meeting, shall constitute a quorum.

Access to Corporate Records

Under the Companies Law, shareholders are provided access to: minutes of the Company's general meetings; the Company's shareholders register and principal shareholders register, articles of association and annual audited financial statements; and any document that the Company is required by law to file publicly with the Israeli Companies Registrar or the Israel Securities Authority. These documents are publicly available and may be found and inspected at the Israeli Registrar of Companies. In addition, shareholders may request to be provided with any document related to an action or transaction requiring shareholder approval under the related party transaction provisions of the Companies Law. The Company may deny this request if the Company believes it has not been made in good faith or if such denial is necessary to protect the Company's interest or protect a trade secret or patent.

Adoption of Resolutions

Except as required by the Companies Law or the Company's amended and restated articles of association, a resolution of the shareholders shall be adopted if approved by the holders of a simple majority of the voting power represented at the general meeting in person or by proxy and voting thereon, as one class, and disregarding abstentions from the count of the voting power present and voting. Without limiting the generality of the foregoing, a resolution with respect to a matter or action for which the Companies Law prescribes a higher majority or pursuant to which a provision requiring a higher majority would have been deemed to have been incorporated into the Company's amended and restated articles of association, but resolutions with respect to which the Companies Law allows the Company's amended and restated articles of association to provide otherwise, shall be adopted by a simple majority of the voting power represented at the General Meeting in person or by proxy and voting thereon, as one class, and disregarding abstentions from the count of the voting power present and voting.

Changing Rights Attached to Shares

If at any time the share capital of the Company is divided into different classes of shares, the rights attached to any class, unless otherwise provided by the Companies Law or the Company's amended and restated articles of association, may be modified or cancelled by the Company by a resolution of the general meeting of the holders of all shares as one class, without any required separate resolution of any class of shares.

The enlargement of an existing class of shares or the issuance of additional shares thereof, shall not be deemed to modify the rights attached to the previously issued shares of such class or of any other class, unless otherwise provided by the terms of the shares.

Limitations on the Rights to Own Ordinary Shares

There are no limitations on the right to own the Company's securities.

Provisions Restricting Change in Control of the Company

There are no specific provisions of the Company's amended and restated articles of association that would have an effect of delaying, deferring or preventing a change in control of the Company or that would operate only with respect to a merger, acquisition or corporate restructuring involving the Company (or the Company's subsidiaries). However, as described below, certain provisions of the Companies Law may have such effect.

The Companies Law includes provisions that allow a merger transaction and requires that each company that is a party to the merger have the transaction approved by its board of directors and, unless certain requirements described under the Companies Law are met, a vote of the majority of its shareholders, and, in the case of the target company, also a majority vote of each class of its shares. For purposes of the shareholder vote of each party, unless a court rules otherwise, the merger will not be deemed approved if shares representing a majority of the voting power present at the shareholders meeting and which are not held by the other party to the merger (or by any person or group of persons acting in concert who holds 25% or more of the voting power or the right to appoint 25% or more of the directors of the other party) vote against the merger. If, however, the merger involves a merger with a company's own controlling shareholder or if the controlling shareholder has a personal interest in the merger, then the merger is instead subject to the same Special Majority (as defined below) approval that governs all extraordinary transactions with controlling shareholders. Upon the request of a creditor of either party to the proposed merger, the court may delay or prevent the merger if it concludes that there exists a reasonable concern that, as a result of the merger, the surviving company will be unable to satisfy the obligations of any of the parties to the merger, and may further give instructions to secure the rights of creditors. In addition, a merger may not be completed unless at least (1) 50 days have passed from the time that the requisite proposals for approval of the merger were filed with the Israeli Registrar of Companies by each merging company and (2) 30 days have passed since the merger was approved by the shareholders of each merging company.

The term "Special Majority" is defined in the Companies Law as:

- at least a majority of the shares held by shareholders who are not controlling shareholders and do not have personal interest in the merger (excluding a personal interest that did not result from the shareholder's relationship with the controlling shareholder) have voted in favor of the proposal (shares held by abstaining shareholders shall not be considered); or

- the total number of shares voted against the merger, does not exceed 2% of the aggregate voting rights of the company.

The Companies Law also provides that an acquisition of shares in an Israeli public company must be made by means of a "special" tender offer if as a result of the acquisition (1) the purchaser would become a holder of 25% or more of the voting rights in the company, unless there is already another holder of at least 25% or more of the voting rights in the company, or (2) the purchaser would become a holder of 45% or more of the voting rights in the company, unless there is already a holder of more than 45% of the voting rights in the company. These requirements do not apply if, in general, the acquisition (1) was made in a private placement that received shareholders' approval, subject to certain conditions, (2) was from a holder of 25% or more of the voting rights in the company which resulted in the acquirer becoming a holder of 25% or more of the voting rights in the company, or (3) was from a holder of more than 45% of the voting rights in the company which resulted in the acquirer becoming a holder of more than 45% of the voting rights in the company. A "special" tender offer must be extended to all shareholders. In general, a "special" tender offer may be consummated only if (1) at least 5% of the voting power attached to the company's outstanding shares will be acquired by the offeror and (2) the offer is accepted by a majority of the offerees who notified the company of their position in connection with such offer (excluding the offeror, controlling shareholders, holders of 25% or more of the voting rights in the company or anyone on their behalf, or any person having a personal interest in the acceptance of the tender offer). If a special tender offer is accepted, then the purchaser or any person or entity controlling it or under common control with the purchaser or such controlling person or entity may not make a subsequent tender offer for the purchase of shares of the target company and may not enter into a merger with the target company for a period of one year from the date of the offer, unless the purchaser or such person or entity undertook to effect such an offer or merger in the initial special tender offer.

If, as a result of an acquisition of shares, the acquirer will hold more than 90% of an Israeli public company's outstanding shares, the acquisition must be made by means of a tender offer for all of the outstanding shares. In general, if less than 5% of the outstanding shares are not tendered in the tender offer and more than half of the offerees who have no personal interest in the offer tendered their shares, all the shares that the acquirer offered to purchase will be transferred to it by operation of law. However, a tender offer will also be accepted if the shareholders who do not accept the offer hold less than 2% of the issued and outstanding share capital of the company or of the applicable class of shares. Shareholders may request appraisal rights in connection with a full tender offer for a period of six months following the consummation of the tender offer, but the acquirer is entitled to stipulate, under certain conditions, that tendering shareholders will forfeit such appraisal rights.

Differences Between Law of Different Jurisdictions

Not applicable.

Borrowing Powers

Pursuant to the Companies Law and the Company's amended and restated articles of association, the Board may exercise all powers and take all actions that are not required under law or under the Company's amended and restated articles to be exercised or taken by the shareholders, including the power to borrow money for company purposes.

Changes in the Company's Capital

The general meeting may, by a simple majority vote of the shareholders attending the general meeting and subject to the provisions of the Companies Law:

- increase the Company's registered share capital by the creation of new shares from the existing class or a new class, as determined by the general meeting;
- cancel any registered share capital which has not been taken or agreed to be taken by any person;
- consolidate and divide all or any of the Company's share capital into shares of larger nominal value than the Company's existing shares;
- subdivide the Company's existing shares or any of them, the Company's share capital or any of it, into shares of smaller nominal value than is fixed; and
- reduce the Company's share capital and any fund reserved for capital redemption in any manner, and with and subject to any incident authorized, and consent required, by the Companies Law.

Debt Securities

The Company does not have any debt securities that are registered under Section 12 of the Securities Exchange Act of 1934, as amended.

Warrants and Rights

The Company does not have any warrants or rights that are registered under Section 12 of the Securities Exchange Act of 1934, as amended.

Other Securities

The Company does not have any other securities that are registered under Section 12 of the Securities Exchange Act of 1934, as amended.

Exhibit 4.15

Addendum to Lease dated March 27, 2014
Made and signed in Tel Aviv on January 14, 2024

Between: **Isras Investment Company Ltd., Company No. 520017807**
Of 3 Har Sinai Street, Tel Aviv
(hereinafter: the "Lessor")

Of the first part;

And: **PolyPid Ltd., Company No. 514105923**
By its authorized signatories
Of 18 HaSivim Street, Petah Tikva
(hereinafter: the "Lessee")

Of the second part;

Whereas: On March 27, 2014, Ogen Yielding Real Estate Ltd. (hereinafter: "Ogen") and the Lessee signed a lease under which the Lessee leases the Leased Property, as defined in that agreement, in Ogen Park, Petah Tikva (hereinafter: the "Park") and later signed addenda to that lease (the lease dated March 27, 2014 and the addenda signed thereafter will be referred to hereinafter jointly as: the "Lease"); and

Whereas: As part of restructuring measures carried out in the Lessor's group, an agreement was signed according to which on October 1, 2021, all Ogen's interests and obligations in the land on which the project is located and leased were transferred to the Lessor; and

Whereas: In accordance with the lease, as of the date of signing this addendum, the Lessee leases from the Lessor total space of **2,130 sq.m** gross in the Tamar Building in the Park (hereinafter: "Space in the Tamar Building") and total space of **1,713 sq.m** gross in the Alon Building in the Park (hereinafter: "Space in the Alon Building");

The Space in the Tamar Building and Space in the Alon Building will be referred to hereinafter jointly as: the "Leased Premises"; and

Whereas: Ogen is the management company of the project where the Leased Premises is located and in that capacity, it handles both the project maintenance and the payment collection from the lessees, and therefore, also attached as **Appendix 1** to this Addendum is a letter of instructions and assignment, under which the Lessor instructs the Lessee to transfer all payments payable by them under this agreement to Ogen and to provide all the collateral under this agreement in favor of Ogen, and Ogen will issue payment requests, tax invoices and receipts to the Lessor; and

Whereas: The Lessee filed a request with the Lessor to lease, in addition to the Space in the Alon Building, additional north-facing space of **396 sq.m** gross located on the first floor of the Alon Building, as specified in the plan attached as **Appendix A** to this Addendum (hereinafter: the "Additional Space"); and

Whereas: The Lessee sought to extend the Lease Term of the Space in the Tamar Building, as specified in this Addendum below;

/s/Orna Blum; /s/Dikla Czaczkes Akselbrad
The Lessee

/s/Adi Dana; /s/ Ben Vidro
The Lessor

Therefore, it is declared, stipulated and agreed between the parties as follows:

1. **Preamble and definitions**

1.1. The Preamble to this Addendum is an integral part thereof.

1.2. In the event of any discrepancy between the provisions of the lease and the provisions of this Addendum, that stated in this Addendum will prevail.

1.3. The section headings of this Addendum are intended for orientation convenience and will not be assigned any interpretive meanings.

1.4. The Lessee declares that as of the date of signing this Addendum, it has no claim and/or demand and/or allegation against the Lessor regarding the Leased Premises and/or the lease.

1.5. Any change or addition to this Addendum and the lease will only be valid if made in writing and signed by both parties.

2. **The Additional Space**

2.1. The Lessor declares that it leases many areas in the Alon Building and well acquainted with the project and the building and that it has checked and inspected the Additional Space thoroughly from a physical, legal and planning aspect and found it satisfactory, that the Additional Space will be handed over to it in its as is condition on the date of signing this Addendum and it shall have no allegation and/or demand and/or claim in respect of the Additional Space other than any hidden defect that could not be discovered by reasonable inspection, if discovered after the Lessee enters the Leased Premises.

2.2. The Lessee undertakes to be registered as the holder of the Additional Space at Petah Tikva Municipality by then end of March 2024.

2.3. The Lessee undertakes to use the Additional Space for the purpose of **offices** or **storage** or a **production plant** and for such purpose only.

2.4. The Lease Term for the Additional Space will start on **January 1, 2024** and end at the end of the lease for all space leased by the Lessee from the Lessor in the Alon Building, i.e. **July 22, 2027** (hereinafter: the "Lease Term")

2.5. It is agreed between the parties that as of January 1, 2024, the Leased Premises will also include the Additional Space.

2.6. The rent for the Additional Space will be NIS **42** per sq.m gross and a total of NIS **16,632** will be added to the rent for the Leased Premises plus VAT and linkage differences to the August 2023 index published on September 15, 2023 (hereinafter: the "Base CPI") (hereinafter: "Rent for the Additional Space").

2.7. The management fees for the Additional Space will be **NIS 13** per sq.m gross and a total of **NIS 5,148** will be added to the management fees for the Leased Premises plus VAT and linkage differences to the Base CPI (hereinafter: "Management Fees for the Additional Space").

2.8. The Rent for the Additional Space and the Management Fees for the Additional Space will be paid on the payment dates of the rent and management fees specified in the lease.

2.9. Notwithstanding the above, it is clarified that in the first 4 months of the Lease Term of the Additional Space, i.e. until **April 31, 2024**, the Lessee will be exempt from payment of the Rent for the Additional Space and 50% of the Management Fees for the Additional Space. The other expenses for the Additional Space (including rates and taxes, water, electricity, etc.) will apply according to the provisions of the lease and will be paid by the Lessee as of the start date of the Lease Term of the Additional Space, within the deadlines set in the lease and under any law.

2.10. It is clarified that if the Lessee seeks to perform any adjustment work in the Leased Premises (hereinafter: the "Work"), the provisions of the lease regarding performance of adjustment work in the Leased Premises will apply. The Lessee confirms that the terms for the Lessor's approval to perform the Work will be prior written approval for the type of Work before performance thereof and that the Lessee will provide appropriate insurance certificates before performing the Work in the format of the certificates attached as **Appendix B** to this Addendum.

3. **Lease Terms of the Other Areas of the Leased Premises**

Space in the Alon Building

3.1. It is clarified that the Lessee will continue to lease the Space in the Alon Building according to the provisions of the lease and of the Addendum to the lease dated August 9, 2021.

Space in the Tamar Building

3.2. The Lease Term of the Space in the Tamar Building will be extended and the Lessee will continue to lease all the Space in the Tamar Building from **January 1, 2024** until **July 22, 2027** (hereinafter: "Additional Lease Term of the Space in the Tamar Building")

3.3. During the Additional Lease Term of the Space in the Tamar Building, the rent for the Space in the Tamar Building will be NIS **50** per sq.m gross plus VAT and linkage differences to the Base CPI.

3.4. During the Additional Lease Term of the Space in the Tamar Building, the management fees for the Space in the Tamar Building will be **NIS 12** per sq.m gross plus VAT and linkage differences to the Base CPI.

3.5. Notwithstanding the above, it is clarified that in the period from **January 1, 2024** until **February 14, 2024** and **June 1, 2024** until **July 15, 2024**, the Lessee will be exempt from payment of rent only. The other expenses for those periods (including rates and taxes, water, electricity, etc.) will apply according to the provisions of the lease and will be paid by the Lessee within the deadlines set in the lease and under any law.

4. **Insurance**

4.1. Without derogating from the Lessee's responsibility by law and/or that stated in the lease and/or this Addendum, the Lessee undertakes to purchase and maintain, throughout the extended Lease Term, at its expense, the insurance listed in **Appendix B** attached to this agreement (hereinafter: the "Lessee's Insurance") for the entire Leased Premises, including the Additional Space, from a legally licensed and reputable insurance company.

4.2. As a condition to entry into effect of this Addendum, the Lessee undertakes to provide the Lessor with a certificate from its insurer on preparation of the Lessee's Insurance in the format attached to this agreement as **Appendix B**.

5. **Collateral**

5.1. In addition to the collateral under the lease, the Lessor will provide the Lessor with a bank guarantee for the Additional Space in the amount of 3 months' rent and 3 months' management fees plus VAT totaling **NIS 76,448** linked to the Base CPI.

5.2. Provision of the above guarantee valid until 90 days after the end of the Lease Term is another condition to entry into effect of this Addendum.

6. **General**

6.1. Any amendment and/or addition to the lease and/or this Addendum will be made in writing on this document with the signatures of both parties.

6.2. The Lessee may not offset from any payment of rent and/or management fees and/or any other payment set forth in the lease, for any reason.

6.3. The other provisions of the lease that were not explicitly revised in this Addendum will continue to be fully valid. In the event of any discrepancy between the provisions of the lease and the provisions of this Addendum, the provisions of this Addendum will prevail.

And in witness thereof, the parties hereto set their hand:

/s/Orna Blum; /s/Dikla Czaczkes Akselbrad	/s/Adi Dana; /s/ Ben Vidro
The Lessee	The Lessor

Appendix A
Appendix to the Lease - Letter of Instructions and Assignment
Made and entered into on the 14th day of October 2024

Between: **Isras Investment Company Ltd., Company No. 520017807**
Of 3 Har Sinai Street, Tel Aviv
(hereinafter: the "Lessor")

And: **PolyPid Ltd., Company No. 514105923**
Of 18 HaSivim Street, Petah Tikva
(hereinafter: **the "Lessee**")

Whereas: On January 1, 2024, an addendum to the lease was signed between the parties under which the Lessee leases the Leased Premises, as defined in the lease agreement, from the Lessor in an unprotected lease (hereinafter accordingly: the "Lease" and the "Leased Premises"); and

Whereas: The Company responsible for managing the leases in the project in which the Leased Premises is located is Ogen Yielding Real Estate Ltd., Company No. 520033093 (hereinafter: "Ogen"); and

Whereas: The parties wish to sign the attached letter of instructions regarding the transfer of all payments due to the Lessor by virtue of the Lease to Ogen according to the terms below in this document:

Therefore it is agreed, declared and stipulated between the parties as follows:

1. Ogen is the management company of the project where the Leased Premises is located. As part of this role, Ogen handles both the project maintenance and collection of funds from the lessees.

2. The Lessor hereby instructs the Lessee to transfer all payments under the Lease to Ogen's bank account. All payments in this regard include any payment which the Lessee is required to transfer to the Lessor in accordance with the Lease, including rent, parking fees, management fees, electricity and water bills (if not paid to the authorities), etc.

3. Such payment transfer to Ogen will be by standing order signed by the Lessee and/or bank transfer and/or delivery of a note and/or check, all in accordance with the Lease.

4. Furthermore, the Lessor instructs the Lessee to issue all collateral, including bank guarantees and/or deposits and/or promissory notes specified in the Lease to the order of Ogen.

5. According to this assignment letter, payment demands and/or tax invoices and/or receipts for funds due to the Lessor from the Lessee under the Lease will also be issued by Ogen.

6. The Lessee undertakes to fulfill the provisions of this appendix according to the Lessor's guidelines, as they shall be from time to time.

7. The provisions of this special appendix will apply as long as the Lessor does not inform the Lessee otherwise in advance and in writing.

8. This appendix is an integral part of the Lease and its provisions prevail over that stated in the Lease.

And in witness thereof, the parties hereto set their hand:

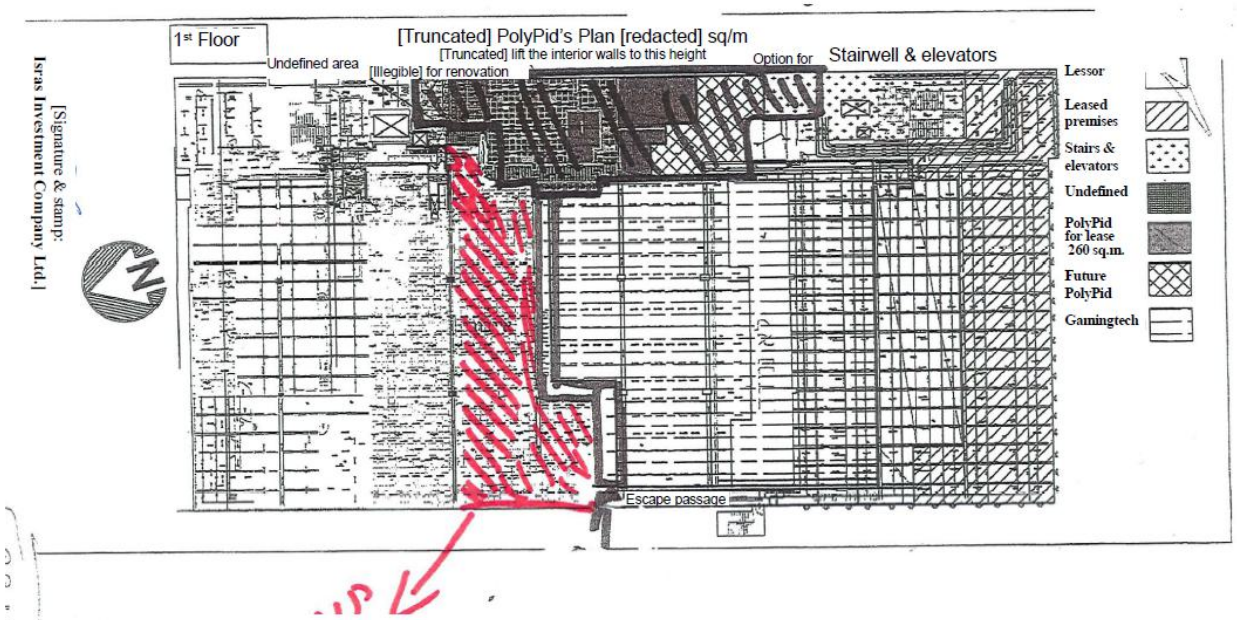
/s/ Ben Vidro	/s/Orna Blum; /s/Dikla Czaczkes Akselbrad
The Lessor	**The Lessee**

I, the undersigned, Ogen Yielding Real Estate Ltd., Company No. 520033093 confirm the aforesaid and undertake to act accordingly.

	/s/Adi Dana; /s/ Ben Vidro
Date	**Ogen Yielding Real Estate Ltd.**

/s/Dikla Czaczkes Akselbrad
PolyPid Ltd.

The Lessee	**The Lessor**



[Hw] PolyPid Additional Space 111/24

Exhibit 12.1

CERTIFICATION PURSUANT TO EXCHANGE ACT RULE 13a-14(a) or 15d-14(a)

I, Dikla Czaczkes Akselbrad, certify that:

1. I have reviewed this annual report on Form 20–F of PolyPid Ltd.;

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 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.

5. The Company's other certifying officer 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: March 6, 2024

/s/ Dikla Czaczkes Akselbrad

Dikla Czaczkes Akselbrad
Chief Executive Officer

Exhibit 12.2

CERTIFICATION PURSUANT TO EXCHANGE ACT RULE 13a-14(a) or 15d-14(a)

I, Jonny Missulawin, certify that:

1. I have reviewed this annual report on Form 20–F of PolyPid Ltd.;

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 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 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: March 6, 2024

/s/ Jonny Missulawin

Jonny Missulawin
Chief Financial Officer

Exhibit 13.1

CERTIFICATION PURSUANT TO
18 U.S.C. Section 1350

In connection with the filing of the Annual Report on Form 20-F for the period ended December 31, 2023 (the "Report") by PolyPid Ltd. (the "Company"), the undersigned, as the Chief Executive Officer of the Company, hereby certifies pursuant to 18 U.S.C. Section 1350, that, to my knowledge:

(1) the Report fully complies with the requirements of Section 13(a) or Section 15(d) of the Securities Exchange Act of 1934; and

(2) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: March 6, 2024

/s/ Dikla Czaczkes Akselbrad
Dikla Czaczkes Akselbrad
Chief Executive Officer

Exhibit 13.2

CERTIFICATION PURSUANT TO
18 U.S.C. Section 1350

In connection with the filing of the Annual Report on Form 20-F for the period ended December 31, 2023 (the "Report") by PolyPid Ltd. (the "Company"), the undersigned, as the Chief Financial Officer of the Company, hereby certifies pursuant to 18 U.S.C. Section 1350, that, to my knowledge:

(1) the Report fully complies with the requirements of Section 13(a) or Section 15(d) of the Securities Exchange Act of 1934; and

(2) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: March 6, 2024

/s/ Jonny Missulawin
Jonny Missulawin
Chief Financial Officer

Exhibit 15.1

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in the following Registration Statements:

(1) Registration Statement (Form F-3 Nos. 333-257651 and 333-276826) of PolyPid Ltd.,

(2) Registration Statements (Form S-8 Nos. 333-239517 and 333-271060) pertaining to the equity incentive plan of PolyPid Ltd.;

of our report dated March 6, 2024, with respect to the consolidated financial statements of PolyPid Ltd. included in this Annual Report (Form 20-F) of PolyPid Ltd. for the year ended December 31, 2023.

March 6, 2024
Haifa, Israel

/s/ Kost Forer Gabbay & Kasierer
A Member of EY Global

POLYPID LTD. (the "Company")

CLAWBACK POLICY

Effective as of November 6, 2023

Background

The Board of Directors of the Company (the "**Board**") believes that it is in the best interest of the Company and its shareholders to create and maintain a culture that emphasizes integrity and accountability and that reinforces the Company's pay-for-performance compensation philosophy. The Compensation Committee of the Board (the "Compensation Committee") and the Board have therefore adopted this policy, which provides for the recoupment (or clawback) of certain executive compensation in the event of an accounting restatement resulting from material noncompliance with financial reporting requirements under the federal securities laws of the United States (the "**Policy**"). This Policy is designed to comply with Section 10D of the Securities Exchange Act of 1934, as amended (the "**Exchange Act**"), Rule 10D-1 promulgated under the Exchange Act ("**Rule 10D-1**") and the listing standards of the Nasdaq Stock Market ("**Nasdaq**") under Nasdaq Listing Rule 5608. In addition, this Policy is designed to comply with the requirements under the Israeli Companies Law 5759-1999 (the "**Companies Law**") with respect to clawback provisions to be included in the Company's Compensation Policy, as may be amended from time to time.

Administration

This Policy shall be administered by the Compensation Committee. Any determinations made by the Compensation Committee shall be final and binding on all affected individuals. Subject to any limitation under applicable law, the Compensation Committee may authorize and empower any officer or employee of the Company to take any and all actions necessary or appropriate to carry out the purpose and intent of this Policy (the "Authorized Officers") (other than with respect to any recovery under this Policy involving such officer or employee).

Covered Executives

This Policy applies to the Company's current and former executive officers, as determined by the Board in accordance with Section 10D of the Exchange Act and the listing standards of the Nasdaq ("**Covered Executives**").

Recoupment; Accounting Restatement

In the event the Company is required to prepare an accounting restatement of its financial statements due to the Company's material noncompliance with any financial reporting requirement under the securities laws, the Compensation Committee will require prompt reimbursement or forfeiture of any excess Incentive Compensation (as defined below) received by any Covered Executive during the three completed fiscal years immediately preceding the date on which the Company is required to prepare an accounting restatement. For the sake of clarity, recoupment is required in the event of any restatement that either: (a) corrects an error in previously issued financial statements that is material to the previously issued financial statements; or (b) corrects an error not material to previously issued financial statements, but that would result in a material misstatement if (i) the error was left uncorrected in the then current period; or (ii) the error correction was recognized in the then current period. The Company's obligation to recover erroneously awarded compensation is not dependent on if or when the restated financial statements are filed. For purposes of determining the relevant recovery period, the date that the Company is required to prepare an accounting restatement as described above is the earlier to occur of: (A) the date the Board, a committee of the Board, the Authorized Officers, or officers of the Company authorized to take such action if Board action is not required, concludes, or reasonably should have concluded, that the Company is required to prepare an accounting restatement as described above; or (B) the date a court, regulator, or other legally authorized body directs the Company to prepare an accounting restatement as described above. In accordance with Nasdaq Rule 5608(e), this Policy is applicable to Incentive Compensation (as described below) received on or after October 2, 2023.

Incentive Compensation

For purposes of this Policy, "Incentive Compensation" means any of the following, provided that such compensation is granted, earned or vested based wholly or in part on the attainment of a financial reporting measure affected by the restated financial statements:

- Annual bonuses and other short- and long-term cash incentives.
- Share options.
- Share appreciation rights.
- Restricted shares.
- Restricted share units.
- Performance shares.
- Performance units.

Financial reporting measures are measures that are determined and presented in accordance with the accounting principles used in preparing the Company's financial statements, and any measures that are derived wholly or in part from such measures. Share price and total shareholder return are also financial reporting measures. A financial reporting measure need not be presented within the financial statements or included in a filing with the Securities and Exchange Commission. The Company's financial reporting measures may include, but are not limited to, the following:

- Company stock price.
- Total shareholder return.
- Revenues.
- Net income.
- Earnings before interest, taxes, depreciation and amortization (EBITDA).
- Funds from operations.
- Liquidity measures such as working capital, operating cash flow or Free Cash Flow.
- Return measures such as return on invested capital or return on assets.
- Earnings measures such as earnings per share.

This Policy applies to all Incentive Compensation received by a Covered Executive:

- After beginning service as an executive officer;

- Who served as an executive officer at any time during the performance period for that Incentive Compensation;

- While the Company has a class of securities listed on a national securities exchange or a national securities association; and

- During the three completed fiscal years immediately preceding the date that the Company is required to prepare an accounting restatement as described in this Policy. In addition to these last three completed fiscal years, this Policy applies to any transition period (that results from a change in the Company's fiscal year) within or immediately following those three completed fiscal years. However, a transition period between the last day of the Company's previous fiscal year end and the first day of its new fiscal year that comprises a period of nine to 12 months would be deemed a completed fiscal year.

Incentive Compensation is deemed received in the Company's fiscal period during which the financial reporting measure specified in the Incentive Compensation award is attained, even if the payment or grant of the Incentive Compensation occurs after the end of that period.

Excess Incentive Compensation: Amount Subject to Recovery

The amount to be recovered will be the excess of the Incentive Compensation paid to the Covered Executive based on the erroneous data over the Incentive Compensation that would have been paid to the Covered Executive had it been based on the restated results, as determined by the Compensation Committee, and without regard to any taxes paid by or withheld from the Covered Executive. If the Compensation Committee cannot determine the amount of excess Incentive Compensation received by the Covered Executive directly from the information in the accounting restatement, then it will make its determination based on a reasonable estimate of the effect of the accounting restatement. For Incentive Compensation based on share price or total shareholder return, where the amount of erroneously awarded compensation is not subject to mathematical recalculation directly from the information in an accounting restatement, the amount will be based on a reasonable estimate of the effect of the accounting restatement on the share price or total shareholder return upon which the Incentive Compensation was received. In such case, the Company shall maintain documentation of the determination of that reasonable estimate and provide such documentation to Nasdaq if required.

Method of Recoupment

The Compensation Committee will determine, in its sole discretion, the method for recouping Incentive Compensation hereunder which may include, without limitation:

- Requiring reimbursement of cash Incentive Compensation previously paid;

- Seeking recovery of any gain realized on the vesting, exercise, settlement, sale, transfer, or other disposition of any equity-based awards;

- Offsetting the recouped amount from any compensation otherwise owed by the Company to the Covered Executive in accordance with applicable law;

- Cancelling outstanding vested or unvested equity awards; and/or

- Taking any other remedial and recovery action permitted by law, as determined by the Compensation Committee.

No Indemnification

The Company shall not indemnify any Covered Executives against the loss of any Incentive Compensation recovered under this Policy or from any consequence arising therefrom.

Interpretation

The Compensation Committee is authorized to interpret and construe this Policy and to make all determinations necessary, appropriate or advisable for the administration of this Policy. It is intended that this Policy be interpreted in a manner that is consistent with the requirements of Section 10D of the Exchange Act, Rule 10D-1 and any applicable rules or standards adopted by the Securities and Exchange Commission or Nasdaq and the Companies Law.

Effective Date

This Policy shall be effective as of the date it is adopted by the Board (the "**Effective Date**") and, in accordance with Nasdaq Rule 5608(e), shall apply to Incentive Compensation that is received by Covered Executives on or after October 2.

Amendment; Termination

The Board may amend this Policy from time to time in its discretion and shall amend this Policy as it deems necessary to reflect regulations adopted by the Securities and Exchange Commission under Section 10D of the Exchange Act and to comply with any rules or standards adopted by Nasdaq. The Board may terminate this Policy at any time.

Other Recoupment Rights

The Board intends that this Policy will be applied to the fullest extent of applicable law. The Board and/or the Compensation Committee may require that any employment agreement, equity award agreement, or similar agreement entered into or amended on or after the Effective Date shall, as a condition to the grant of any benefit thereunder, require a Covered Executive to agree to abide by the terms of this Policy. Any right of recoupment under this Policy is in addition to, and not in lieu of: (a) any other remedies or rights of recoupment that may be available to the Company pursuant to the terms of any similar policy in any employment agreement, equity award agreement or similar agreement and any other legal remedies available to the Company, including termination of employment or institution of legal proceedings; and (b) any statutory recoupment requirement, including Section 304 of the Sarbanes-Oxley Act of 2022. For the avoidance of doubt, any amounts paid to the Company pursuant to Section 304 of the Sarbanes-Oxley Act of 2022 shall be considered (and may be credited) in determining any amounts recovered under this Policy.

Impracticability

The Compensation Committee shall recover any excess Incentive Compensation in accordance with this Policy unless such recovery would be impracticable, as determined in accordance with Rule 10D-1(b)(1)(iv) under the Exchange Act and the listing standards of Nasdaq. In order for the Company to determine that recovery would be impracticable, the Compensation Committee must conclude the following:

a) The direct expense paid to a third party to assist in enforcing this Policy would exceed the amount to be recovered after making a reasonable attempt to recover such Incentive Compensation. Note that the attempt(s) to recover must be documented by the Company and such documentation provided to Nasdaq if required;

b) Recovery would violate home country law where that law was adopted prior to November 28, 2022. Note that the Company must obtain a legal opinion of home country counsel that such recovery would result in a violation of local law and provide such opinion to Nasdaq; or

c) Recovery would likely cause an otherwise tax-qualified retirement plan under which benefits are broadly available to Company employees to fail to meet the requirements for qualified pension, profit-sharing and stock bonus plans under Section 401(a)(13) of the U.S. Internal Revenue Code or the minimum vesting standards under Section 411(a) of the U.S. Internal Revenue Code.

Successors

This Policy shall be binding and enforceable against all Covered Executives and their beneficiaries, heirs, executors, administrators or other legal representatives.

Exhibit Filing

A copy of this Policy shall be filed as an exhibit to the Company's annual report on Form 20-F.

ATTESTATION AND ACKNOWLEDGEMENT OF CLAWBACK POLICY FOR POLYPID LTD. (the "Company")

By my signature below, I acknowledge and agree that:

- I have received and read the attached Clawback Policy (this "Policy") of the Company.
- I hereby agree to abide by all of the terms of the Policy both during and after my employment with the Company, including, without limitation, by promptly repaying or returning any incorrectly awarded Incentive Compensation to the Company as determined in accordance with the Policy.
- I hereby waive any claim against the Company, its Authorized Officers and the Board in connection with the implementation of the Policy.

Signature: _____

Printed Name: _____

Date: _____