As filed with the Securities and Exchange Commission on April 24, 2023.

Registration No. 333-271034

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

AMENDMENT NO. 2
TO
FORM S-1
REGISTRATION STATEMENT
UNDER THE SECURITIES ACT OF 1933

OS THERAPIES INCORPORATED

(Exact name of registrant as specified in its charter)

Delaware	2834	82-5118368
(State or other jurisdiction of incorporation or organization)	(Primary SIC Code)	(IRS Employer Identification No.)

15825 Shady Grove Road, Suite 135
Rockville, Maryland 20850
(410) 297-7793
(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

Paul A. Romness, MPH
President and Chief Executive Officer
OS Therapies Incorporated
15825 Shady Grove Road, Suite 135
Rockville, Maryland 20850
(410) 297-7793
(Name, address, including zip code, and telephone number, including area code, of agent for service)

Copies to:

Spencer G. Feldman, Esq. Olshan Frome Wolosky LLP 1325 Avenue of the Americas, 15th Floor New York, New York 10019 (212) 451-2300	Ralph V. De Martino, Esq. Cavas Pavri, Esq. Johnathan Duncan, Esq. ArentFox Schiff, LLP 1717 K Street, NW Washington, DC 20006

Approximate date of commencement of proposed sale to the public:
As soon as practicable after the effective date of this registration statement.

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

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

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

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

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

Large Accelerated Filer	☐	Accelerated Filer	☐
Non-Accelerated Filer	☒	Smaller Reporting Company	☒
		Emerging Growth Company	☒

If an emerging growth company, 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 to Section 7(a)(2)(B) of the Securities Act. ☐

The Registrant hereby amends this Registration Statement on such date or dates as may be necessary to delay its effective date until the Registrant shall file a further amendment which specifically states that this Registration Statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933 or until the Registration Statement shall become effective on such date as the Commission, acting pursuant to said Section 8(a), may determine.

EXPLANATORY NOTE

This registration statement contains two prospectuses, as set forth below:

- ***Public Offering Prospectus.*** A prospectus to be used for the initial public offering of 2,000,000 shares of common stock of OS Therapies Incorporated (the "Public Offering Prospectus"), with such shares to be sold in an underwritten offering through the underwriters named on the cover page of the Public Offering Prospectus.
- ***Resale Prospectus.*** A prospectus to be used for the resale from time to time by the selling stockholders named therein of 544,421 shares of common stock to be issued before the effectiveness of this registration statement upon the automatic conversion of convertible promissory notes issued in our recent private placement, as set forth in the resale prospectus (the "Resale Prospectus").

The Resale Prospectus is substantially identical to the Public Offering Prospectus, except for the following principal differences:

- they contain different outside and inside front cover and back cover pages;
- they contain different "Summary of the Offering" sections on page Alt-1;
- they contain different "Use of Proceeds" sections on page Alt-2;
- no "Dilution" section in the Resale Prospectus;
- a "Selling Stockholders" section is included in the Resale Prospectus;
- a Selling Stockholders "Plan of Distribution" is included in the Resale Prospectus in lieu of the section "Underwriting" in the Public Offering Prospectus; and
- the "Legal Matters" section in the Resale Prospectus on page Alt-6 deletes the reference to counsel for the underwriters.

The registrant has included in this registration statement a set of alternate pages after the back cover page of the Public Offering Prospectus (the "Alternate Pages") to reflect the foregoing differences in the Resale Prospectus as compared to the Public Offering Prospectus. The Public Offering Prospectus will exclude the Alternate Pages and will be used for the initial public offering by the registrant. The Resale Prospectus will be substantially identical to the Public Offering Prospectus except for the addition or substitution of the Alternate Pages and will be used for the resale offering by the selling stockholders. Consummation of the offering made by the Resale Prospectus is conditioned on consummation of the initial public offering of shares of common stock by OS Therapies Incorporated pursuant to the Public Offering Prospectus.

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

PRELIMINARY PROSPECTUS **SUBJECT TO COMPLETION DATED APRIL 24, 2023**

2,000,000 Shares

OS THERAPIES INCORPORATED

Common Stock

This is the initial public offering of common stock of OS Therapies Incorporated. Prior to this offering, no public market has existed for our common stock. We are offering 2,000,000 shares. The initial public offering price is $5.00 per share. We have applied to list our shares of common stock for trading on the NYSE American under the symbol "OSTX." This listing is a condition to the offering.

Concurrently with this offering, we are registering for resale by selling stockholders an aggregate of 544,421 shares of common stock to be issued to them before the effectiveness of this offering upon the automatic conversion of convertible promissory notes sold in our private placement commenced in November 2022. The notes will convert at a price of $2.44 per share. These shares are being registered to satisfy a contractual obligation owed by us to the selling stockholders pursuant to a convertible note purchase agreement. The selling stockholders have represented to us that they will not offer or sell their shares prior to the closing of this offering. Sales of these shares, or the potential of such sales, may have an adverse effect on the market price of the shares offered hereby.

Our business and investment in our common stock involve significant risks. These risks are described under the caption "Risk Factors" beginning on page 13 of this prospectus.

	Per Share	*Total*
Initial public offering price	$ 5.00	$ 10,000,000
Underwriting discounts and commissions[(1)]	$ 0.35	$ 700,000
Proceeds to us, before expenses	$ 4.65	$ 9,300,000

(1) Does not include a non-accountable expense allowance equal to 1% of the gross proceeds of this offering payable to Boustead Securities, LLC, the representative of the underwriters. We have also agreed to issue warrants to the representative of the underwriters. See the section entitled "Underwriting" beginning on page 105 of this prospectus for additional information regarding compensation payable to the underwriters.

We have granted a 45-day option to the underwriters to purchase up to 300,000 additional shares of our common stock, solely to cover over-allotments, if any, at the public offering price less underwriting discounts and commissions.

We are an "emerging growth company" and "smaller reporting company" as defined under the U.S. federal securities laws and, as such, have elected to comply with certain reduced public company reporting requirements for this prospectus and may elect to do so after this offering in future filings.

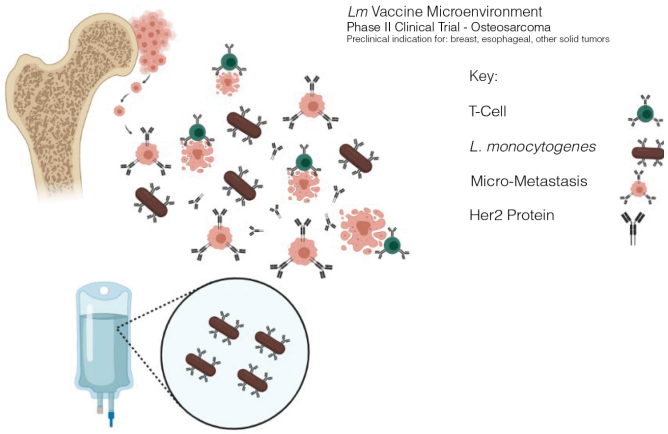
Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

The underwriters expect to deliver the shares of our common stock to purchasers on or about _____, 2023.

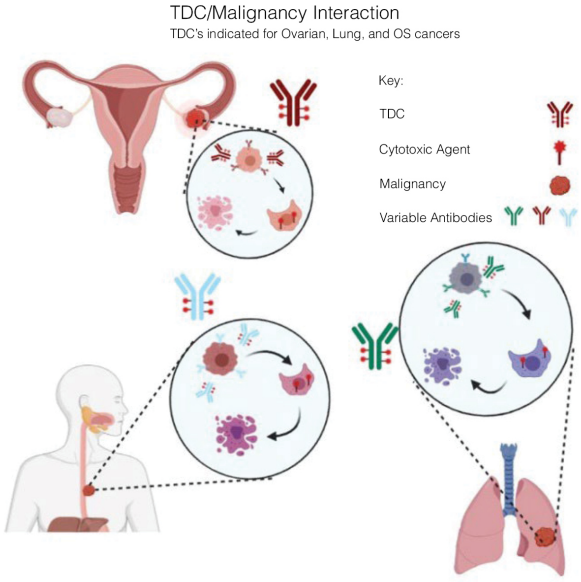
Boustead Securities, LLC **Sutter Securities, Inc.**

The date of this prospectus is _____, 2023

OST-HER2



OST-TDC



OS Therapies' pipeline includes two drug technologies — our lead core product candidate OST-HER2, an off-the-shelf immunotherapy, and OST-TDC, our next generation tunable antibody-drug conjugate platform that is in preclinical development.

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ABOUT THIS PROSPECTUS

We have not authorized anyone to provide any information or to make any representations other than those contained in this prospectus or any accompanying prospectus supplement. We take no responsibility for, and can provide no assurance as to the reliability of, any other information that others may give you. This prospectus is an offer to sell only the securities offered hereby and only under circumstances and in jurisdictions where it is lawful to do so. No dealer, salesperson or other person is authorized to give any information or to represent anything not contained in this prospectus or any applicable prospectus supplement. You should assume that the information appearing in this prospectus or any prospectus supplement is accurate only as of the date on the front of those documents only, regardless of the time of delivery of this prospectus or any applicable prospectus supplement, or any sale of a security. Our business, financial condition, results of operations and prospects may have changed since those dates.

We are not, and the underwriters are not, offering to sell or seeking offers to purchase these securities in any jurisdiction where the offer or sale is not permitted. We and the underwriters have not done anything that would permit this offering or possession or distribution of this prospectus in any jurisdiction where action for that purpose is required, other than in the United States. Persons outside the United States who come into possession of this prospectus must inform themselves about, and observe any restrictions relating to, the offering of the securities as to distribution of the prospectus outside of the United States.

The industry and market data and certain other statistical information used throughout this prospectus are from our own research, surveys or studies conducted by third parties and industry or general publications. Industry publications and third-party research, surveys, and studies generally indicate that their information has been obtained from sources believed to be reliable, although they do not guarantee the accuracy or completeness of such information. We are responsible for all of the disclosure contained in this prospectus, and we believe that these sources are reliable; however, we have not independently verified the information contained in such publications. While we are not aware of any misstatements regarding any third-party information presented in this prospectus, their estimates, in particular, as they relate to projections, involve numerous assumptions, are subject to risks and uncertainties, and are subject to change based on various factors, including those discussed under the section entitled “Risk Factors” and elsewhere in this prospectus. Some data are also based on our good faith estimates.

SiLinkers™, CAPs™ and other common law trade names, trademarks or service marks of our company appearing in this prospectus are the property of OS Therapies Incorporated. This prospectus contains additional trade names, trademarks and service marks of other companies that are the property of their respective owners. Solely for convenience, trademarks and trade names referred to in this prospectus appear without ™symbol, but those references are not intended to indicate that we will not assert, to the fullest extent under applicable law, our rights, or that the applicable owners will not assert their rights, to these trademarks and trade names. We do not intend our use or display of other companies’ trade names, trademarks or service marks to imply a relationship with, or endorsement or sponsorship by us of, these other companies.

PROSPECTUS SUMMARY

This summary highlights information contained in greater detail elsewhere in this prospectus. This summary is not complete and does not contain all of the information you should consider in making your investment decision. You should read the entire prospectus carefully before making an investment in our common stock. You should carefully consider, among other things, our financial statements and the related notes and the sections entitled "Risk Factors" and "Management's Discussion and Analysis of Financial Condition and Results of Operations" included elsewhere in this prospectus. Unless the context otherwise requires, the terms "OS Therapies," "OST," the "Company," "we," "us" and "our" refer to OS Therapies Incorporated.

Our Company and Mission

OS Therapies Incorporated is a clinical stage biopharmaceutical company focused on the identification, development and commercialization of treatments for Osteosarcoma (OS) and other solid tumors. Our mission is to address the significant need for new treatments in cancers of the bone in children and young adults. Osteosarcoma is an extremely challenging and often aggressive cancer that has particular treatment challenges due to its location, changing genotypes and high recurrence rates. We are currently seeking to answer the call for new treatments with our lead core product candidate OST-HER2 (also known as OST31-164). We intend to expand our pipeline beyond Osteosarcoma with this product candidate into other solid tumors with the same recurrence mechanism of action, including breast, esophageal and lung cancers. With the addition of our OST-Tunable Drug Conjugate (OST-TDC) platform, which we consider to be a next generation antibody-drug conjugate (ADC) technology, we will be targeting ovarian, lung and pancreatic cancers. "Tunable" is a term used in drug development that refers to the properties that can be influenced by chemical modifications, and "antibody-drug conjugate" or ADC is a term used to describe a drug made up of a monoclonal antibody attached to a cytotoxic payload, or a highly active and toxic pharmaceutical molecule, through chemical linkers. The ADC links an antibody that can home in on a targeted tumor and deploy the cytotoxic payload or toxic agent against the tumor. Furthering our founding mission, we also intend to investigate clinical indications for OST-TDC in Osteosarcoma.

We believe that there have not been any new treatments approved by the U.S. Food and Drug Administration (FDA) for Osteosarcoma for more than 40 years. In humans, Osteosarcoma is an extremely rare cancer that primarily affects children, teenagers and young adults generally under 40 years of age. We are not aware of any competing adjuvant therapy for Osteosarcoma to be tested in children that is further along in the development process than OST-HER2. This disease is difficult to diagnose. The standard of care following first line therapies is simply to screen and wait for possible recurrence/metastasis, or the development of secondary malignant growths at a distance from a primary site of cancer. Studies published in the Journal of Clinical Oncology, "Osteosarcoma Relapse After Combined Modality Therapy: An Analysis of Unselected Patients in the Cooperative Osteosarcoma Study Group (COSS)," by Kempf-Bielack B., et al. (January 2005), and "Second and Subsequent Recurrences of Osteosarcoma: Presentation, Treatment, and Outcomes of 249 Consecutive Cooperative Osteosarcoma Study Group Patients," by Bielack S., et al. (February 2009), reported that recurrence/metastasis happens in approximately half of all patients within 12 to 18 months following initial remittance. For those patients that experience recurrence, metastasis is typically to the lungs and brain, with survival rates of approximately 13% over the next year, according to these studies.

Our Pipeline of Product Candidates

We have built a pipeline of product candidates targeting multiple indications for solid cancers. Our pipeline includes two drug technologies: (i) OST-HER2, an off-the-shelf immunotherapy, which is a type of cancer treatment that helps one's immune system fight cancer, comprised of a genetically weakened and modified strain of *Listeria monocytogenes*, or a species of bacteria that causes the infection listeriosis, that expresses HER2 peptides, and (ii) OST-TDC, a next generation tunable ADC with a plug-and-play platform that features tunable pH sensitive silicone linkers (SiLinkers™). The payloads can include antibodies, chemotherapeutics, cytotoxins and potentially mRNA treatments directly into and in the vicinity of solid tumors.

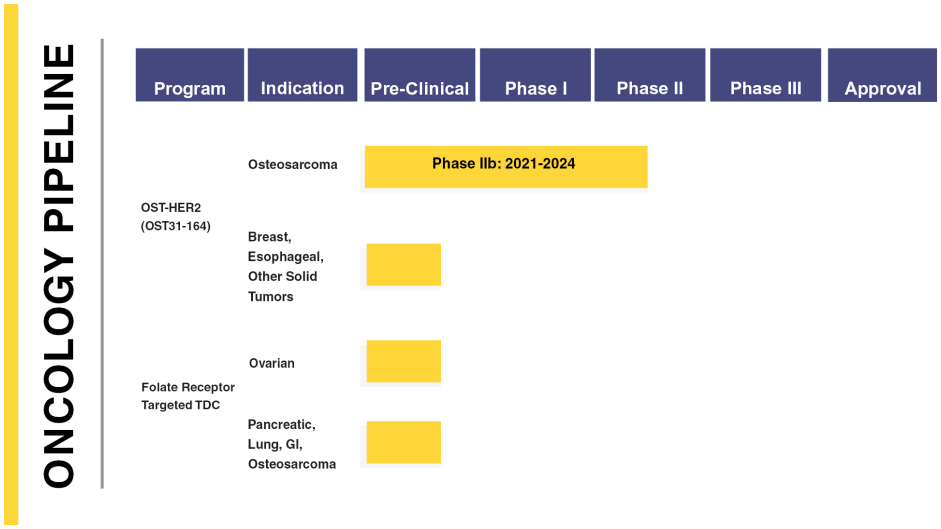
OST-HER2 (OST31-164) **.** Our most advanced product candidate, OST-HER2, is a genetically engineered strain of *Listeria monocytogenes*, attenuated for reduced virulence, increased antibiotic susceptibility and the expression of three HER2 protein epitopes fused to immune-enhancing peptides on the membrane of the bacteria.

OST-HER2 has received an orphan drug designation in the United States. The FDA may designate a biologic product as an orphan product if it is intended to treat a rare disease or condition, which generally is defined as having a patient population of fewer than 200,000 individuals in the United States. Osteosarcoma has an incidence rate of approximately 1,000 individuals affected per year in the United States. Orphan product designation, subject to limited exceptions, can provide a period of market exclusivity for a product that is the first to receive marketing

approval for the designated indication. Other potential indications may include breast, esophageal, lung and other solid tumors. In August 2021, OST-HER2 was awarded rare pediatric disease designation and previously received fast track designation by the FDA. Such designations by the FDA do not convey any advantages in, or shorten the duration of, the regulatory review or approval process.

OST-TDC. Our tunable drug conjugate (TDC) platform is currently in preclinical development. Each TDC contains four main components: ligand, payload cassette adaptor, linker and payload. In addition, TDCs contain units to optimize physicochemical properties. The ligands are selected to bind to receptors overexpressed on cancer cells. Upon binding, the TDC construct gets internalized into the cancer cell, where the payload is released, to cause cell death. The payload cassette adaptors enable the stoichiometrical attachments of linkers and payloads. The SiLinkers represent a novel and pH-sensitive linker system. The SiLinker release profile can be tuned with proximal functional groups, resulting in payload release in the endosome, lysosome or the slightly acidic tumor microenvironment. The SiLinker system is compatible with a variety of payloads and not limited to the employment of cytotoxic drug delivery. The first set of internal programs focus on the use of SiLinker and conditionally active payloads (CAPs™) drug products. CAPs are cytotoxic drugs which on their own, due to their functional groups, cannot readily permeate cells at physiological pH; however, at the slightly acidic pH of the tumor-microenvironment, after some linker cleavage, these payloads readily permeate into cancer cells, resulting in an enhanced bystander effect. Our lead program targets folate receptor alpha, a protein expressed on the surface of cells that participates in cell signaling, as well as cellular replication and division, and is overexpressed in multiple cancers such as ovarian and endometrial cancers. The lead compound employs folic acid, a small molecule, as the targeting ligands and contains six exatecan-silanols, which is a type of silanol-based cytotoxic payload. This discovery work is being carried out at Syngene International Limited, an integrated contract research organization (CRO) based in Bangalore, India.

From time to time, we may evaluate collaboration opportunities for our product candidates. We expect to work opportunistically with pharmaceutical and biotechnology companies, as we have done with BlinkBio, Inc. by in-licensing the OST-TDC technology, seeking to utilize our technology and know-how for developing additional oncologic drug products. The following table summarizes information regarding our product candidates and development programs.



In addition to our development of OST-HER2 for multiple indications of solid cancers in humans, OST-HER2 is a product candidate for veterinary use in canines. We hold a conditional license for OST-HER2 granted by the U.S. Department of Agriculture (USDA), which allows OST-HER2 to be commercialized but its use is limited to the treatment of dogs diagnosed with Osteosarcoma that are one year of age or older. As part of our growth strategies following this offering, we intend to consider potentially out-licensing OST-HER2 to animal health companies for such use. See "OS-Focused Clinical Trials and Studies – Preclinical Animal Study" for more information.

Our OS-Focused Clinical Trials and Studies

We and our licensors have conducted a number of clinical trials and studies in the field of Osteosarcoma and Tunable Drug Conjugates to date.

Phase IIb Clinical Trial. In July 2021, we commenced and are sponsoring a Phase IIb clinical trial to treat Osteosarcoma in humans, which is being conducted by George Clinical, Inc., our clinical research services provider, utilizing our OST-HER2 product candidate. The course of the trial involves a regimen of 16 infusions of OST-HER2 administered over 48 weeks to eligible patients from ages 12 to 39 years, of which 36 of 45 patients have already been enrolled. Enrollment remains ongoing and the Phase IIb trial is being conducted at major hospitals across 21 sites in 18 states. The primary outcome measures are the relative proportion of patients experiencing event-free (recurrence-free) survival at 12 months compared to historical controls by evaluating the patients for recurrence every 3 months, consistent with the standard of care. The secondary outcome measures are overall survival of patients for three years compared to the three-year overall survival of historical controls, which will be evaluated by assessing patients every three months over the course of three years, and the incidence of treatment-emergent adverse events as assessed by Common Terminology Criteria for Adverse Events (CTCAE) Grade 5, the safety of which will be assessed throughout the treatment period of 48 weeks with assessments of potential persistence of the vector every three months and continuing for three years after treatment. CTCAE is a method to categorize adverse events across all clinical trials of five grades, with Grade 5 being death. The expected completion date of OST-HER2's Phase IIb clinical trial is late 2024. We plan to submit a new drug application (NDA) with the FDA for approval to market the drug candidate following the completion of the Phase IIb clinical trial if there is sufficiently positive endpoint data from such trial supporting the safety and efficacy of the drug candidate. We expect that it will take six to eight months from the completion of the Phase IIb clinical trial, subject to the receipt of sufficiently positive endpoint data, to compile and file the NDA with the FDA for marketing approval. The FDA generally takes six to ten months to complete its review of an NDA, subject to any FDA request for additional information. We believe that it remains uncertain whether a Phase III clinical trial will be necessary for the advancement of OST-HER2 through the regulatory approval process. We will not know whether a Phase III trial will be required until we receive a determination from the FDA following the filing of an NDA for marketing approval as to whether the results of our ongoing Phase IIb trial provided sufficiently positive endpoint data.

Phase Ib Clinical Trial. From September 2015 to May 2017, a Phase Ib trial to treat Osteosarcoma in humans was sponsored and conducted by Advaxis, Inc. (now Ayala Pharmaceuticals, Inc.) ("Advaxis") utilizing ADXS-HER2 (also known as ADXS31-164), the patents of which we in-license to develop and commercialize our lead core product candidate, OST-HER2. The trial was conducted at hospitals in Colorado, Michigan, North Carolina, Pennsylvania and Texas. The course of the trial involved injecting 12 adult patients with HER2 expressing solid tumors with escalating doses of ADXS-HER2 every three weeks during a 12-week treatment cycle. Following the last dose of study treatment, all 12 patients participated in a three-year *Listeria monocytogenes* surveillance period. The primary outcome measures were the number of patients with dose limiting toxicities for each dose level as assessed by the CTCAE Grade 4 (time frame: four months), with Grade 4 being life threatening, and the frequency and severity of adverse effects as assessed by CTCAE Grade 4 (time frame: three years). The secondary outcome measures were proportion of patients who have objective tumor response (complete or partial) evaluated by the Response Evaluation Criteria in Solid Tumors (RECIST) 1.1 and RECIST-based immune criteria (ir-RECIST), as well as changes in clinical immunology based upon serum, which were measured and evaluated by collection of peripheral blood for preparation of peripheral blood mononuclear cells and serum at baseline, prior to each treatment and post-treatment in the first treatment cycle only. No objective tumor responses (complete or partial) were observed in this late stage, heavily pre-treated patient cohort. The data presented from the Phase Ib trial demonstrated that ADXS-HER2 IV infusion at the dose of 1×10^9 CFU was well tolerated. See "Business — Our OS-Focused Clinical Trials and Studies — Phase Ib Clinical Trial" for more information.

Preclinical Animal Study. From July 2012 to September 2015, a preclinical study to treat Osteosarcoma in 18 companion canines (sometimes referred to as a Phase I animal trial) was sponsored and conducted by a previous licensee of Advaxis utilizing ADXS -HER2, the product candidate of Advaxis, from whom we in-license patents for ADXS-HER2 constructs that enable us to develop OST-HER2. The results showed, in the setting of minimal residual disease where there is a very small number of cancer cells remaining in the body during or after initial treatment, significant improvements in overall survival and metastatic disease progression when compared to an historical control group with Human Epidermal Growth Factor Receptor 2-positive (HER2) appendicular Osteosarcoma, a well-recognized spontaneous model for pediatric Osteosarcoma, treated with amputation and chemotherapy alone. In September 2016, the study results, published in the journal, Clinical Cancer Research, "Immunotherapy with a HER2-Targeting Listeria Induces HER2-Specific Immunity and Demonstrates Potential Therapeutic Effects in a

Phase I Trial in Canine Osteosarcoma," by Mason, N. et al. (*https://pubmed.ncbi.nlm.nih.gov/26994144/*), indicated that ADXS-HER2 significantly increased the duration of survival time and one-, two- and three-year survival rates and significantly reduced the incidence of metastatic disease (the spread of cancer cells from an initial or primary site to a different or secondary site within the host's body) when compared with the historical control group. The overall survival rates at one, two and three years for dogs treated with ADXS-HER2 were 77.8%, 67% and 56%, respectively, compared to 55%, 28% and 22%, respectively, for the historical control group. The median survival time (MST) for the historical control group was 423 days, which was significantly shorter than the 956 days for ADXS-HER2 — treated dogs (p=0.014, HR 0.33; 95% confidence intervals; CI, 0.136 – 0.802). The study also noted the important translational relevance of the findings for children with Osteosarcoma. This study for canine Osteosarcoma indications constituted preclinical work as it relates to our development of OST-HER2 to treat Osteosarcoma in humans.

In analyzing preclinical study results, a p-value is used to determine the probability as to whether the difference between two data sets is due to chance. The smaller the p-value, the more likely the differences are not due to chance alone. In general, if the p-value is less than or equal to 0.05, the outcome is considered statistically significant. The FDA's evidentiary standard of efficacy generally relies on a p-value of less than or equal to 0.05. A p-value greater than 0.05 is considered statistically non-significant. As shown above, the results of this preclinical study were statistically significant compared to the historical control group.

Following the study, an application for the use of ADXS-HER2, our OST-HER2, in the treatment of canine Osteosarcoma was submitted to the USDA. In December 2017, ADXS-HER2 was granted a conditional license by the USDA. Because we are the current licensee of ADXS-HER2 constructs, we hold the conditional license previously granted to ADXS-HER2 for OST-HER2. The conditional license allows for commercialization but limits the use of OST-HER2 to treat dogs, one year of age and older, diagnosed with Osteosarcoma. To receive full licensure, the USDA requires the submission of additional data that further describes the effects of OST-HER2 on metabolism and shedding in canines and provides substantial evidence of the safety, purity, potency and effectiveness of OST-HER2. We do not intend to pursue full licensure from the USDA at this time. We are considering potentially out-licensing OST-HER2 to animal health companies for the treatment of dogs diagnosed with Osteosarcoma, one year of age and older. In the event that we determine to out-license OST-HER2 to animal health companies, the animal health companies will be responsible for obtaining full licensure from the USDA for OST-HER2 in order to market and sell the product candidate for use in dogs with Osteosarcoma without any limitation.

Preclinical Development. Our OST-HER2 product candidate for breast, esophageal, lung and other solid tumor indications is currently in preclinical development. Whether additional preclinical trials will be required will depend on several factors, including the outcome of our ongoing Phase IIb clinical trial, the inclusion or exclusion of breast, esophageal, lung or other solid tumor indications in any follow-on study, or master protocol, to the Phase IIb clinical trial and the FDA's determination of whether the preclinical data is sufficient to support the safety and efficacy of the drug. Although we cannot be certain, we believe that OST-HER2 may not require additional preclinical development before progressing to human clinical trials for breast, esophageal, lung and other solid tumor indications if the results of our ongoing Phase IIb clinical trial have sufficiently positive endpoint data as determined by the FDA.

Our OST-TDC product candidate for all indications is also currently in preclinical development. We will need to conduct further preclinical trials for OST-TDC prior to the submission of an investigational new drug application (IND) in order to pursue clinical trials with these candidates. Such preclinical trials are expected to include pharmacokinetics and pharmacodynamics, two-week dose finding toxicology studies *in vivo* (on living cell lines or in living animals), as well as good laboratory practice (GLP) trials ensuring stability, potency and purity of the IND product candidate.

Our Platform Technology

We are in the process of building a fully integrated platform technology to accelerate the development of a range of product candidates across multiple therapeutic areas. Our platform technology is intended to leverage our management's in-depth experience in immunotherapy research, development and manufacturing to enable us to pursue multiple therapeutic targets. Our scientists and scientific advisors have accumulated decades of collective experience in the field of immunotherapy, oncology and small-molecule drug production, contributing key insights and significant achievement in our clinical development process.

Our Management Team

We have assembled a management team of biopharmaceutical industry professionals with extensive experience in developing novel products and therapies from initial research through commercialization. Our team is led by our President and Chief Executive Officer, Paul A. Romness, MPH, who has more than 25 years of experience in the biopharmaceutical industry, and our Chief Financial Officer, Alan A. Musso. Our Chief Medical and Scientific Officer, Robert G. Petit, Ph.D., is an accomplished biopharmaceutical executive and medical scientist. Our management team is assisted by Colin Goddard, Ph.D., our Chairman of the Board, whose in-depth knowledge of the biotechnology market and experience leading OSI Pharmaceuticals make his input invaluable to our company.

Our Growth Strategies

Our goal is to enrich and lengthen the lives of patients by being a leading, fully integrated biotechnology company. We are seeking to develop, manufacture and commercialize multiple product candidates targeting orphan and non-orphan oncologic diseases across multiple tissue types and therapeutic areas. To achieve our goal, we are pursuing the following growth strategies:

- Consider potentially out-licensing OST-HER2 to animal health companies for veterinary use to treat dogs diagnosed with Osteosarcoma, one year of age or older.
- Obtain marketing approval for OST-HER2 in Osteosarcoma, then quickly pivot to a master protocol within breast, esophageal, lung and other solid tumors where metastases express HER2 that could be targeted by immune cells.
- Conclude pre-clinical and toxicology trials with the lead drug candidate for OST-TDC (OST-TDC-A, Exatecan-silanol-FRa), and file for an investigational new drug application (IND) to initiate a Phase I trial in ovarian cancer and other folate receptor alpha overexpressing cancers like endometrial cancer and some osteosarcomas. We believe that positive results from preclinical two-week and good laboratory practice (GLP) toxicology studies may also stimulate potential out-licensing activity of SiLinker and CAPs drug products, while not limiting therapeutic development.
- Establish global commercial and medical affairs capabilities for OST-HER2 based therapies.

Expansion Opportunities

We believe opportunities may exist from time to time to expand our current business through acquisitions or in-licenses of complementary products or technologies or acquisitions of companies with complementary products or technologies. While we have current collaborative agreements in place, we believe in an opportunistic approach to collaboration and licensing; thus, we expect to operate in a manner that is customary in the pharmaceutical industry, including potential acquisitions and partnerships.

We are also aware of increased acquisition and licensing interest from large pharmaceutical firms in biotechnology companies developing antibody-drug conjugate, or ADC, technology as a relatively new kind of cancer therapy. In the article, “Seagen Cancer Therapy Draws Suitors” (March 7, 2023), The Wall Street Journal reported that driving this interest, according to analysts, is the potential for ADCs to capture a chunk of the worldwide cancer market. Technical advances by combining the ADCs with widely used cancer agents like immunotherapies have also opened up exploring various potential cancer applications, according to the article.

The expected use of the net proceeds from this offering for development of our current product candidates represents our intentions based upon our current plans and business conditions, which could change in the future as our plans and business conditions evolve. The amounts and timing of our actual expenditures may vary significantly depending on numerous factors, including the progress of our development, the status of, and results from, clinical trials and the potential need to conduct additional clinical trials to obtain approval of our product candidates for all intended indications, as well as any additional collaborations that we may enter into with third parties for our product candidates and any unforeseen cash needs. As a result, our management will retain broad discretion over the allocation of the net proceeds from this offering.

Based on our planned use of the net proceeds from this offering and our existing cash, we estimate that such funds will be sufficient to enable us to fund our operating expenses and capital expenditure requirements over the next 12 to 18 months. We have based this estimate on assumptions that may prove to be wrong, and we could use our available capital resources sooner than we currently expect.

Recapitalization and Private Placements

Recapitalization Transactions

Unless otherwise indicated, this prospectus gives effect to the following transactions (referred to as the "Recapitalization"), which will be completed before the effectiveness of this offering:

- the automatic conversion of all of our outstanding convertible notes, including accrued interest, totaling approximately $14.3 million as of April 24, 2023, into 8,918,444 shares of our common stock (based on the initial public offering price of $5.00 per share), as described below;
- the issuance of an additional 325,000 shares of our common stock to the noteholders in our private placement commenced in November 2022 upon the automatic conversion of their outstanding convertible notes, as described below;
- the automatic conversion of all of our outstanding shares of Series A preferred stock into an aggregate of 1,302,082 shares of our common stock; and
- the elimination of our authorized shares of Class B common stock (none of which were outstanding) and renaming our Class A common stock as "common stock."

The financial statements of our company in this prospectus do not reflect the Recapitalization transactions. The effect of the transactions on the financial statements will essentially be to increase our outstanding shares of common stock by an additional 8,918,444 shares, reduce our long-term liabilities by approximately $10.4 million as of December 31, 2022, as a result of the extinguishment of all outstanding convertible notes payable by us, and to eliminate our senior class of Series A preferred stock as a result of converting such shares into an equal number of shares of common stock. Following this offering, our common stock will be our only outstanding class of capital stock and we will have no outstanding indebtedness. See "Capitalization," "Dilution" and "Certain Relationships and Related Party Transactions."

Private Placements

We have completed five separate private placement transactions from July 2018 to March 2023, in which we raised total gross proceeds of $15,253,020 from accredited investors. A summary of each private placement is set forth below.

From July 2018 through November 2021, we issued convertible notes with an aggregate principal amount of $1,154,000 (the "Group A Convertible Notes") to accredited investors, including related parties, in exchange for cash in an aggregate amount of $1,154,000. The Group A Convertible Notes bear interest at a rate of 10% per annum and mature on March 31, 2024. The Group A Convertible Notes will automatically convert into common stock at 80% to 87.5% of the price per share in our Next Equity Financing (which is this initial public offering), subject to valuation ceilings that range from $5 million to $25 million. The Group A Convertible Notes will have a conversion price that ranges from $0.40 to $1.98 per share, depending on the applicable valuation ceiling of each note (based on the initial public offering price of $5.00 per share).

From April 2020 through June 2021, we issued convertible notes with an aggregate principal amount of $5,154,000 (the "Group B Convertible Notes") to accredited investors in exchange for cash in an aggregate amount of $5,154,000. The Group B Convertible Notes bear interest at a rate of 6% per annum and mature on March 31, 2024. The Group B Convertible Notes will automatically convert into common stock at 80% of the price per share in our Next Equity Financing (which is this initial public offering), subject to a valuation ceiling of $19 million. As a result of the valuation ceiling, the Group B Convertible Notes will have a conversion price of $1.33 per share (based on the initial public offering price of $5.00 per share).

In connection with the private placement of Group B Convertible Notes, we issued to Noble Life Science Partners, a division of Noble Capital Markets, Inc., the placement agent for the offering, warrants to purchase 425,113 shares of common stock at an exercise price of $1.33 per share (the "Group B Warrants"), based on the initial public offering price of $5.00 per share. The Group B Warrants may, at the option of the holder, be exercised in whole or part on a cashless basis. The Group B Warrants expire five years after the effective date of this offering.

On August 19, 2020, we issued a convertible note with a principal amount of $2,400,000 (the "BlinkBio Convertible Note") to BlinkBio, Inc., which is a related party based on Dr. Goddard being our Chairman and as the Chairman and Chief Executive Officer of BlinkBio, in exchange for the entry into the license agreement to utilize a group of patents described as silicon based drug conjugates and methods, along with silanol based therapeutic payloads. The BlinkBio Convertible Note bears interest at a rate of 10% per annum. On March 15, 2021, we issued 1,302,082 shares of Series A preferred stock to BlinkBio in exchange for the BlinkBio Convertible Note.

From June 2021 through January 2023, we issued convertible notes with an aggregate principal amount of $3,945,020 (the "Group C Convertible Notes") to accredited investors in exchange for cash in an aggregate amount of $3,945,020. The Group C Convertible Notes bear interest at a rate of 6% per annum and mature on May 31, 2024. The Group C Convertible Notes will automatically convert into common stock at 80% of the price per share in our Next Equity Financing (which is this initial public offering), subject to a valuation ceiling of $50 million. As a result of the valuation ceiling, the Group C Convertible Notes will have a conversion price of $2.68 per share (based on the initial public offering price of $5.00 per share).

In connection with the private placement of Group C Convertible Notes, we issued to Noble Life Science Partners, a division of Noble Capital Markets, Inc., the placement agent for the offering, warrants to purchase 91,231 shares of common stock at an exercise price of $2.68 per share (the "Group C Warrants"), based on the initial public offering price of $5.00 per share. The Group C Warrants may, at the option of the holder, be exercised in whole or part on a cashless basis. The Group C Warrants expire five years after the effective date of this offering.

In November 2022, we issued convertible notes with an aggregate principal amount of $2,000,000 (the "November 2022 Convertible Notes") to accredited investors in exchange for cash in an aggregate amount of $2,000,000. In March 2023, we issued two convertible notes in the aggregate principal amount of $600,000 on the same terms as the November 2022 Convertible Notes (the "March 2023 Convertible Notes" and, together with the November 2022 Convertible Notes, the "Group D Convertible Notes") to a holder of November 2022 Convertible Notes and a holder of the Group C Convertible Notes in exchange for cash in an amount of $600,000. The Group D Convertible Notes bear interest at a rate of 6% per annum and mature on November 15, 2023. The Group D Convertible Notes automatically convert into common stock at 50% of the price per share in our Next Equity Financing (which is this initial public offering), subject to a valuation ceiling of $50 million. As a result of the valuation ceiling, the Group D Convertible Notes will have a conversion price of $2.44 per share (based on the initial public offering price of $5.00 per share).

In connection with the Group D Convertible Notes, we agreed to issue an additional 325,000shares of Class A common stock to the Group D investors, pro -rated based on such investor's investment amount, as an inducement for their investment in the Group D Convertible Notes. We will issue such shares upon the automatic conversion of the Group D Convertible Notes. Additionally, we issued to Noble Life Science Partners, a division of Noble Capital Markets, Inc., the placement agent for the offering, warrants to purchase 81,967 shares of common stock at an exercise price of $2.44 per share (the "Group D Warrants"), based on the initial public offering price of $5.00 per share. The Group D Warrants may, at the option of the holder, be exercised in whole or part on a cashless basis. The Group D Warrants expire five years after the effective date of this offering.

We have used the net proceeds of our private placements to develop our pipeline of product candidates and fund our working capital requirements.

Summary of Risks Associated with Our Business

An investment in our common stock involves substantial risk. Our ability to execute on our strategy is also subject to certain risks. The risks described under the heading "Risk Factors" immediately following this prospectus summary may have an adverse effect on our business, cash flows, financial condition and results of operations or may cause us to be unable to successfully execute all or part of our strategy. Below are the principal factors that make an investment in our company speculative or risky:

Risks Related to Our Financial Position and Need for Additional Capital

- We are a clinical stage biopharmaceutical company and have not generated any revenue to date from drug sales, and may never become profitable.
- We have incurred significant operating losses in recent periods and anticipate that we will incur continued losses for the foreseeable future.
- Even if we consummate this offering, we will need to raise substantial additional funding, and if we are unable to raise capital when needed or on attractive terms, we would be forced to delay, scale back or discontinue some of our product candidate development programs or commercialization efforts.
- We have identified conditions and events that raise substantial doubt about our ability to continue as a going concern.
- Our ability to utilize our net operating loss carryforwards and certain other tax attributes may be limited.

Risks Related to Drug Development and Regulatory Approval

- We depend heavily on the success of our core product candidates OST-HER2 and OST-TDC. We may not be able to obtain regulatory permission to conduct future clinical studies, or may not be able to obtain regulatory approval for, or successfully commercialize, any of our current or future product candidates.
- If we experience delays or difficulties in the enrollment of patients in clinical trials, our receipt of necessary regulatory approvals could be delayed or prevented.
- If we are not able to obtain, or if there are delays in obtaining, required regulatory approvals both for our current or future product candidates, we will not be able to commercialize, or will be delayed in commercializing, our current or future product candidates, and our ability to generate revenue will be materially impaired.
- Our current or future product candidates may cause adverse or other undesirable side effects that could delay or prevent their future testing in clinical studies or delay or prevent regulatory approval, limit the commercial profile of an approved label, or result in significant negative consequences following marketing approval, if any.
- We may not be able to obtain or maintain Orphan Drug Designation or exclusivity for any product candidates and, even if we do, that exclusivity may not prevent the FDA or the EMA from approving other competing products.
- Even if we receive regulatory approval for any of our current or future product candidates, we will be subject to ongoing obligations and continued regulatory review, which may result in significant additional expense. Additionally, our current or future product candidates, if approved, could be subject to labeling and other restrictions and market withdrawal, and we may be subject to penalties if we fail to comply with regulatory requirements or experience unanticipated problems with our drugs.
- Even if we receive marketing approval for our current or future product candidates in the U.S., we may never receive regulatory approval to market our current or future product candidates outside of the U.S.
- Manufacturing our current or future product candidates is complex and we may encounter difficulties in production. If we encounter such difficulties, our ability to provide supply of our current or future product candidates for preclinical studies and clinical trials or for commercial purposes could be delayed or stopped.

- Our future growth may depend, in part, on our ability to penetrate foreign markets, where we would be subject to additional regulatory burdens and other risks and uncertainties that could materially adversely affect our business.

Risks Related to Intellectual Property

- If we or those from whom we in-license patents are unable to obtain and maintain patent and other intellectual property protection for our technology and product candidates or if the scope of the intellectual property protection obtained is not sufficiently broad, our competitors could develop and commercialize technology and drugs similar or identical to ours, and our ability to successfully commercialize our technology and drugs may be impaired.
- If our trademarks and trade names for our products or company name are not adequately protected in one or more countries where we intend to market our products, we may delay the launch of product brand names, use different trademarks or tradenames in different countries, or face other potentially adverse consequences to building our product brand recognition.
- If we are unable to adequately protect and enforce our trade secrets, our business and competitive position would be harmed.
- We may initiate, become a defendant in, or otherwise become party to lawsuits to protect or enforce our intellectual property rights, which could be expensive, time-consuming and unsuccessful.
- We may not obtain or grant licenses or sublicenses to intellectual property rights in all markets on equally or sufficiently favorable terms with third parties.
- If we fail to comply with our obligations in any agreements under which we may license intellectual property rights from third parties or otherwise experience disruptions to our business relationships with our licensors, we could lose license rights that are important to our business.
- Any in-license patent covering our current or future product candidates or other valuable technology could be narrowed or found invalid or unenforceable if challenged in court or before administrative bodies in the U.S. or abroad, including the USPTO and the EPO.

Risks Related to Management and our Operations

- In our industry in particular, our future success depends on our ability to retain key scientific employees and to attract, retain and motivate qualified personnel.
- Our internal computer systems, or those of our third-party clinical research organizations, or CROs, or other contractors or consultants, may fail or suffer security breaches, which could result in a material disruption of our current or future product candidates' development programs.
- We will incur increased costs as a result of operating as a public company, and our management will be required to devote substantial time to new compliance initiatives.

Implications of Being an Emerging Growth Company and a Smaller Reporting Company

We qualify as an "emerging growth company" as defined in the Jumpstart Our Business Startups Act of 2012 (the "JOBS Act"). For as long as we remain an emerging growth company, we may take advantage of specified reduced reporting requirements and other burdens that are otherwise applicable generally to other public companies. These provisions include, but are not limited to:

- reduced obligations with respect to financial data, including presenting only two years of audited financial statements and selected financial data, and only two years of related Management's Discussion and Analysis of Financial Condition and Results of Operations disclosure in our initial registration statement;
- an exemption from the auditor attestation requirement in the assessment of our internal control over financial reporting pursuant to the Sarbanes-Oxley Act of 2002, as amended;

- reduced disclosure about executive compensation arrangements in our periodic reports, registration statements and proxy statements; and
- exemptions from the requirements to seek non-binding advisory votes on executive compensation or stockholder approval of any golden parachute arrangements.

We may take advantage of some or all of these provisions until we are no longer an emerging growth company. We will remain an emerging growth company until the earliest of (i) the last day the fiscal year following the fifth anniversary of the completion of this offering, (ii) the last day of the first fiscal year in which our annual gross revenues exceed $1.235 billion, (iii) the date on which we have, during the immediately preceding three-year period, issued more than $1.0 billion in non-convertible debt securities and (iv) the date on which we are deemed to be a large accelerated filer under the rules of the SEC. We may choose to take advantage of some but not all of these reduced burdens. For example, we have taken advantage of the reduced reporting requirements with respect to disclosure regarding our executive compensation arrangements, have presented only two years of audited financial statements and only two years of related "Management's Discussion and Analysis of Financial Condition and Results of Operations" disclosure in this prospectus, and have taken advantage of the exemption from auditor attestation on the effectiveness of our internal control over financial reporting. To the extent that we take advantage of these reduced burdens, the information that we provide stockholders may be different than you might obtain from other public companies in which you hold shares.

In addition, the JOBS Act permits emerging growth companies to take advantage of an extended transition period to comply with new or revised accounting standards applicable to public companies. We have elected to use this extended transition period. As a result of this election, our timeline to comply with new or revised accounting standards will in many cases be delayed as compared to other public companies that are not eligible to take advantage of this election or have not made this election. Therefore, our financial statements may not be comparable to those of companies that comply with the public company effective dates for these accounting standards.

We are also a "smaller reporting company" as defined in the Securities Exchange Act of 1934, as amended (the "Exchange Act"), and have elected to take advantage of certain of the scaled disclosures available to smaller reporting companies. To the extent that we continue to qualify as a "smaller reporting company" as such term is defined in Rule 12b-2 under the Exchange Act, after we cease to qualify as an emerging growth company, certain of the exemptions available to us as an "emerging growth company" may continue to be available to us, including exemption from compliance with the auditor attestation requirements pursuant to the Sarbanes-Oxley Act and reduced disclosure about our executive compensation arrangements. We will continue to be a "smaller reporting company" until we have $250 million or more in public float (based on our common stock) measured as of the last business day of our most recently completed second fiscal quarter or, in the event we have no public float (based on our common stock) or a public float (based on our common stock) that is less than $700 million, annual revenues of $100 million or more during the most recently completed fiscal year.

Corporate History and Information

We were formed as a Delaware limited liability company on April 12, 2018 under the name OS Therapies, LLC. On June 24, 2019, we converted from a limited liability company to a Delaware corporation and changed our name to OS Therapies Incorporated.

Our principal executive office is located at 15825 Shady Grove Road, Suite 135, Rockville, Maryland 20850, and our telephone number is (410) 297-7793. Our website address is *www.ostherapies.com*. The information contained on, or that can be accessed through, our website is not incorporated by reference into this prospectus, and you should not consider any information contained on, or that can be accessed through, our website as part of this prospectus or in deciding whether to purchase our common stock.

Summary of the Offering

Common stock offered	2,000,000 shares.
Common stock outstanding immediately before this offering	10,745,000 shares.[(1)]
Common stock to be outstanding immediately after this offering	23,290,526 shares (23,590,526 shares if the underwriters exercise their option to purchase additional shares in full).[(1)]
Underwriters' option to purchase additional shares	We have granted a 45-day option to the underwriters to purchase up to an aggregate of 300,000 additional shares of common stock from us at the public offering price, less underwriting discounts and commissions on the same terms as set forth in this prospectus.
Use of proceeds	We estimate that our net proceeds from the sale of shares of our common stock in this offering will be approximately $8,560,000, or $9,940,000 if the underwriters exercise in full their option to purchase additional shares, based on the initial public offering price of $5.00 per share, and after deducting underwriting discounts and commissions and estimated offering expenses payable by us. We expect to use the net proceeds from this offering as follows: (i) approximately $4.2 million to advance the clinical development of OST-HER2 for Osteosarcoma, (ii) approximately $2.0 million to advance the development of OST-TDC for ovarian cancer and (iii) the remainder of the net proceeds of approximately $2.36 million for the discovery and development of new product candidates and for working capital and other general corporate purposes.
Representative's warrants	We have agreed to issue warrants to Boustead Securities, LLC, as the representative of the underwriters named in this prospectus, to purchase a number of shares of common stock equal to 7% of the total number of shares sold in this offering at an exercise price equal to 100% of the public offering price of the shares sold in this offering. The representative's warrants will be exercisable upon issuance, will have a cashless exercise provision and will terminate on the fifth anniversary of the commencement date of sales in this offering. The representative's warrants are not exercisable or convertible for more than five years from the commencement date of sales in this offering. See the section entitled "Underwriting" beginning on page 105 of this prospectus for additional information regarding compensation payable to the underwriters.
Risk Factors	You should carefully read the "Risk Factors" section of this prospectus for a discussion of factors that you should consider before deciding to invest in our common stock.
Proposed ticker symbol	"OSTX"

(1) The number of shares of common stock outstanding immediately before this offering (as of April 24, 2023) excludes, and the number of shares of common stock to be outstanding immediately after this offering includes, the issuance of the following shares which will occur before the effectiveness of this offering:

(i) 8,918,444 shares of common stock upon the automatic conversion of all outstanding convertible notes, including accrued interest, totaling approximately $14.3 million as of April 24, 2023 (based on the initial public offering price of $5.00 per share);

(ii) 325,000 additional shares of common stock issuable to the noteholders in our private placement commenced in November 2022 upon the automatic conversion of their outstanding convertible notes; and

(iii) 1,302,082 shares of common stock upon the automatic conversion of all outstanding shares of Series A preferred stock.

Additionally, we currently have outstanding warrants to purchase up to 598,311 shares of common stock and expect to issue warrants to purchase up to 140,000 shares of common stock to the representative of the underwriters (up to 161,000 shares if the underwriters exercise their over-allotment option in full) in connection with this offering. These shares are not included in the common stock figures above.

Summary Financial Data

The following table summarizes the relevant financial data for our business and should be read with our financial statements, which are included at the end of this prospectus. We have derived the summary financial data for the years ended December 31, 2022 and 2021 from our audited financial statements and related notes included at the end of this prospectus. Our historical results are not necessarily indicative of results that may be expected in the future. You should read the following summary financial data together with our audited financial statements and related notes thereto and the information in the section titled "Management's Discussion and Analysis of Financial Condition and Results of Operations."

Statements of Operations Data:

	Year Ended December 31,	
	2022	2021
Operating expenses:		
Research and development	$ 3,291,417	$ 2,174,179
General and administrative	$ 1,153,672	$ 1,503,534
Licensing	$ 1,210	$ 1,159,642
Total operating expenses	$ 4,446,299	$ 4,837,355
Loss from operations	$ (4,446,299)	$ (4,837,355)
Other income (expenses):		
Other income (expense)	$ (1,808,386)	$ (2,582,893)
Total other income (expense)	$ (1,808,386)	$ (2,582,893)
Net income (loss)	$ (6,254,685)	$ (7,420,248)
Cumulative Series A preferred stock dividend requirement	$ (125,000)	$ (93,750)
Net loss available to common shareholders	$ (6,379,685)	$ (7,513,998)
Weighted average number of shares – Class A	9,980,000	9,980,000
Basic and diluted loss per common share – Class A	$ (0.64)	$ (0.75)

Balance Sheet Data:

	As of December 31, 2022		
	Actual	Pro Forma[(1)]	Pro Forma, As Adjusted[(2)]
Total current assets	$ 496,835	$ 867,625	$ 10,167,625
Working capital (deficit)	$ (5,650,957)	$ (1,017,270)	$ 8,282,730
Total assets	$ 509,105	$ 879,895	$ 10,179,895
Total liabilities	$ 18,066,333	$ 2,675,804	$ 2,675,804
Total stockholders' (deficit) equity	$ (17,557,228)	$ (1,795,908)	$ 7,504,092

(1) The pro forma balance sheet data gives effect to (i) the renaming of our Class A common stock as "common stock" and the issuances of shares of our common stock in connection with the Recapitalization transactions, (ii) the issuance of 740,000 shares of our common stock that we previously agreed to issue to certain directors, officers, key employees and key advisors in consideration for accrued services rendered to our company and (iii) the grant of 25,000 shares of our common stock to our Chief Financial Officer in March 2023.

(2) The pro forma, as adjusted balance sheet data gives effect to the pro forma adjustments described in footnote (1) above and the sale of 2,000,000 shares of our common stock in this offering at the initial public offering price of $5.00 per share after deducting the underwriting discount and estimated offering expenses payable by us. The pro forma, as adjusted information discussed above is illustrative only and will be adjusted based on the actual public offering price and other terms of this offering determined at pricing.

RISK FACTORS

You should carefully review and consider the risk factors described below and described under the heading "Risk Factors" in the accompanying prospectus and the other information contained in this prospectus, including the financial statements and notes to the financial statements, matters addressed in the sections entitled "Management's Discussion and Analysis of Financial Condition and Results of Operations" and "Risk Factor Summary" included in this prospectus. The occurrence of one or more of the events or circumstances described in these risk factors, alone or in combination with other events or circumstances, may have an adverse effect on our business, cash flows, financial condition and results of operations. We may face additional risks and uncertainties that are not presently known to us, or, or that we currently deem immaterial, which may also harm our business, financial condition, results of operations and prospects.

Risks Related to Our Financial Position and Need for Additional Capital

We are a clinical stage biopharmaceutical company, and have not generated any revenue to date from drug sales, and may never become profitable.

Our ability to become profitable depends upon our ability to generate revenue. To date, while we have generated significant interest in various research collaboration revenue, we have not generated any commercial revenue from our current core product candidates, including our lead core product candidate OST-HER2 and our other core product candidate OST-TDC, and we do not know and do not expect to generate any revenue from the sale of drugs in the near future. We do not expect to generate revenue unless and until we complete the development of, obtain marketing approval for, and begin to sell, OST-HER2, which is being evaluated in a Phase IIb clinical trial, or OST-TDC, which is still being evaluated at the preclinical stage. We are also unable to predict when, if ever, we will be able to generate revenue from such product candidates due to the numerous risks and uncertainties associated with drug development, including the uncertainty of:

- our ability to add and retain key research and development personnel;
- our ability to successfully develop, obtain regulatory approval for, and then successfully commercialize, OST-HER2 and OST-TDC;
- our successful enrollment in and completion of clinical trials, including our ability to generate positive data from any such clinical trials;
- our ability to establish an appropriate safety profile with IND-enabling toxicology and other preclinical studies for OST-TDC;
- the costs associated with the development of any additional development programs we identify in-house or acquire through collaborations or other arrangements;
- our ability to discover, develop and utilize biomarkers to demonstrate target engagement, pathway engagement and the impact on disease progression, as applicable, of our product candidates;
- our ability to establish and maintain agreements with third-party manufacturers for clinical supply for our clinical trials and commercial manufacturing;
- our ability to forecast and meet supply requirements for clinical trials and commercialized products using third-party manufacturers;
- the terms and timing of any additional collaboration, license or other arrangement, including the terms and timing of any payments thereunder;
- obtaining any necessary licenses to manufacture and distribute OST-HER2 and/or OST-TDC and/or contractual arrangements with third party logistics providers and/or distributors to distribute our products in the United States;
- obtaining and maintaining third-party coverage and adequate reimbursement, if OST-HER2 and/or OST-TDC is approved;

- acceptance of our core product candidates, if and when approved, by patients, the medical community and third-party payors;
- effectively competing with other therapies, if OST-HER2 and/or OST-TDC are approved;
- our ability and the ability or third parties from which we in-license patents to obtain and maintain patent, trade secret and other intellectual property protection, OST-HER2 and/or OST-TDC and regulatory exclusivity for OST-HER2 and/or OST-TDC if and when approved;
- our receipt of marketing approvals for OST-HER2 and/or OST-TDC from applicable regulatory authorities; and
- the continued acceptable safety profiles of our core product candidates following approval.

We have incurred significant operating losses in recent periods and anticipate that we will incur continued losses for the foreseeable future.

Since inception, we have focused substantially all of our efforts on the development of OST-HER2 and OST-TDC and our other clinical developments. To date, we have financed our operations primarily through the sale of convertible notes to outside investors. From July 2018 to March 2023, we have raised an aggregate of approximately $15.2 million in gross proceeds from sales of our convertible notes. As of December 31, 2022, we had cash of $171,480. Due to our significant research and development expenditures, we have experienced negative cash flows from operations, even in periods of operating income. For each of the fiscal years ended December 31, 2021 and 2022, we incurred a loss from operations and negative cash flows from operations. We expect to continue to incur significant expenses and operating losses over the next several years and for the foreseeable future. Our prior losses, combined with expected future losses, have had and will continue to have an adverse effect on our stockholders' equity and working capital. We expect our expenses to significantly increase in connection with our ongoing activities, as we:

- complete preclinical studies, initiate and complete clinical trials for product candidates;
- consult with the FDA at each stage of development;
- seek a favorable outcome of our toxicology studies;
- contract to manufacture our product candidates;
- advance research and development related activities to expand our product pipeline;
- seek regulatory approval for our core product candidates that successfully complete clinical development;
- develop and scale up our capabilities to support our ongoing preclinical activities and clinical trials for our drug candidates and commercialization of any of our drug candidates for which we obtain marketing approval;
- maintain, expand, enforce, defend and protect our intellectual property portfolio;
- hire additional staff, including clinical, scientific and management personnel;
- secure facilities to support continued growth in our research, development and commercialization efforts; and
- incur additional costs associated with operating as a public company upon the completion of this offering.

Even if we consummate this offering, we will need to raise substantial additional funding. If we are unable to raise capital when needed or on attractive terms, we would be forced to delay, scale back or discontinue some of our product candidate development programs or commercialization efforts.

The development of pharmaceutical drugs is capital intensive. We are currently advancing OST-HER2 through clinical development and OST-TDC through preclinical development. The FDA allowed our OST31-164-01 study to be conducted in July 2021, and we initiated a Phase IIb clinical trial in 2022. We expect our expenses to increase in connection with our ongoing activities, particularly as we continue the research and development of, advance the

preclinical and clinical activities of, and seek marketing approval for, our current or future product candidates. In addition, depending on the status of regulatory approval or, if we obtain marketing approval for any of our current or future product candidates, we expect to incur significant commercialization expenses related to sales, marketing, product manufacturing and distribution to the extent that such sales, marketing, product manufacturing and distribution are not the responsibility of our collaborators. We may also need to raise additional funds sooner if we choose to pursue additional indications and/or geographies for our current or future product candidates or otherwise expand more rapidly than we presently anticipate. Further, upon the closing of this offering, we expect to incur additional costs associated with operating as a public company. Although we expect that the net proceeds from this offering, together with our existing cash, will be sufficient to fund our operations for the next 12 to 18 months, we will need to obtain substantial additional funding in connection with our continuing operations. If we are unable to raise capital on a timely basis or on favorable terms, we would be forced to delay, scale back or discontinue the development and commercialization of one or more of our product candidates or delay our pursuit of potential in-licenses or acquisitions, which could materially affect our business, financial condition and results of operations.

Raising additional capital may cause dilution to our existing shareholders, restrict our operations or require us to relinquish rights to our technologies or product candidates.

We may seek additional capital through a combination of public and private equity offerings, debt financings, strategic collaborations and alliances and licensing arrangements. The terms of any financing may adversely affect the holdings or the rights of our stockholders and 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. The sale of additional equity or convertible securities would dilute all of our stockholders. The incurrence of indebtedness would result in increased fixed payment obligations and we may be required to agree to certain restrictive covenants, such as limitations on our ability to incur additional debt, limitations on our ability to acquire, sell or license intellectual property rights and other operating restrictions that could adversely impact our ability to conduct our business. We could also be required to seek funds through arrangements with collaborators or otherwise at an earlier stage than otherwise would be desirable and we may be required to relinquish rights to some of our technologies or current or future product candidates or otherwise agree to terms unfavorable to us, any of which may have a material adverse effect on our business, operating results and prospects.

Our independent registered public accounting firm has expressed substantial doubt about our ability to continue as a going concern.

As of December 31, 2022, we had cash of $171,480. We have primarily financed our operations through proceeds from the sale of convertible notes to accredited investors. We have experienced significant negative cash flows from operations in each year since our inception. We do not expect to experience any significant positive cash flows from our existing collaboration agreements and do not expect to have any product revenue in the near term. We expect to incur substantial operating losses and negative cash flows from operations for the foreseeable future as we continue to invest significantly in research and development of our programs. As a result, our independent registered public accounting firm has issued a going concern opinion on our financial statements, expressing substantial doubt that we can continue as an ongoing business for the next 12 months after issuance of their report based on us having suffered recurring losses from operations and having a net capital deficiency.

Our financial statements do not include any adjustments that might result from the outcome of this uncertainty. We will need to raise additional capital in this offering and/or otherwise to fund our future operations and remain as a going concern. However, we cannot guarantee that we will be able to obtain sufficient additional funding in this offering or otherwise or that such funding, if available, will be obtainable on terms favorable to us. In the event that we are unable to obtain sufficient additional funding, there can be no assurance that we will be able to continue as a going concern.

Our ability to utilize our net operating loss carryforwards and certain other tax attributes in the future may be limited.

Under Sections 382 and 383 of the Internal Revenue Code of 1986, as amended, or the Code, if a corporation undergoes an “ownership change” (generally defined as a greater than 50 percentage points (by value) in the ownership of its equity over a three-year period), the corporation’s ability to use its pre-change tax attributes to offset its post-change income may be limited. We have experienced such ownership changes in the past, and we may experience ownership

changes in the future as a result of this offering or subsequent shifts in our stock ownership, some of which are outside our control. As of December 31, 2022 and 2021, we had federal and state NOLs of approximately $16,453,174 and $11,509,196, respectively, and we had federal and state research and development tax credit and general business credit carryforwards of approximately $292,144 and $320,120, respectively. Our ability to utilize these NOLs and tax credit carryforwards may be limited by an "ownership change." If we undergo future ownership changes, many of which may be outside of our control, our ability to utilize our NOLs and tax credit carryforwards could be further limited by Sections 382 and 383 of the Code. There is also a risk that due to regulatory changes, such as suspensions on the use of NOLs, or other unforeseen reasons, our existing NOLs could expire or otherwise become unavailable to offset future income tax liabilities. Additionally, our NOLs and tax credit carryforwards could be limited under state law. For these reasons, even if we attain profitability, we may be unable to use a material portion of our NOLs and other tax attributes.

Risks Related to Drug Development and Regulatory Approval

We depend heavily on the success of our lead product candidates, OST-HER2 and OST-TDC. We may not be able to obtain regulatory approval for, or successfully commercialize, any of our current or future product candidates.

We currently have no product candidates approved for sale and may never be able to develop marketable product candidates. Our business depends heavily on the successful development, regulatory approval and commercialization of the current or future immunotherapy for Osteosarcoma product candidates, of which our lead product candidate, OST-HER2, is in Phase IIb clinical development. OST-TDC will require additional preclinical development and substantial clinical development, testing and regulatory approval before we are permitted to commence its commercialization. The preclinical studies and clinical trials of our current or future product candidates are, and the manufacturing and marketing of our current or future product candidates will be, subject to extensive and rigorous review and regulation by numerous government authorities in the United States and in other countries where we intend to test or, if approved, market any of our current or future product candidates. Before obtaining regulatory approvals for the commercial sale of any of our current or future product candidates, we must demonstrate through preclinical studies and clinical trials that each product candidate is safe and effective for use in each target indication. Drug development is a long, expensive and uncertain process, and delay or failure can occur at any stage of any of our clinical trials. This process can take many years and may include post-marketing studies and surveillance, which will require the expenditure of substantial resources beyond the proceeds we raise in this offering. Of the large number of drugs in development in the United States, only a small percentage will successfully complete the FDA regulatory approval process and will be commercialized, with similarly low rates of success for drugs in development in the European Union obtaining regulatory approval from the European Medicines Agency (EMA). Accordingly, even if we are able to obtain the requisite financing to continue to fund our development and preclinical studies and clinical trials, we cannot assure you that any of our current or future product candidates will be successfully developed and commercialized.

We are not permitted to market our current or future product candidates in the United States until we receive approval of a new drug application (NDA) from the FDA, in the European Economic Area (EEA) until we receive approval of a marketing authorization applications (MAA) from the EMA, or in any other foreign countries until we receive the requisite approval from such countries. Obtaining approval of an NDA or MAA is a complex, lengthy, expensive and uncertain process, and the FDA or EMA may delay, limit or deny approval of any of our current or future product candidates for many reasons, including, among others:

- we may not be able to demonstrate that our current or future product candidates are safe and effective in treating their target indications to the satisfaction of the FDA or applicable foreign regulatory agencies;
- the results of our preclinical studies and clinical trials may not meet the level of statistical or clinical significance required by the FDA or applicable foreign regulatory agencies for marketing approval;
- the FDA or applicable foreign regulatory agencies may disagree with the number, design, size, conduct or implementation of our preclinical studies and clinical trials;
- the FDA or applicable foreign regulatory agencies may require that we conduct additional preclinical studies and clinical trials;
- the FDA or applicable foreign regulatory agencies may not approve the formulation, labeling or specifications of any of our current or future product candidates;

- the contract research organizations (CROs) that we retain to conduct our preclinical studies and clinical trials may take actions that materially adversely impact our preclinical studies and clinical trials;
- the FDA or applicable foreign regulatory agencies may find the data from preclinical studies and clinical trials insufficient to demonstrate that our current or future product candidates' clinical and other benefits outweigh their safety risks;
- the FDA or applicable foreign regulatory agencies may disagree with our interpretation of data from our preclinical studies and clinical trials;
- the FDA or applicable foreign regulatory agencies may not accept data generated at our preclinical studies and clinical trial sites;
- if our NDA, if and when submitted, is reviewed by an advisory committee, the FDA may have difficulties scheduling an advisory committee meeting in a timely manner or the advisory committee may recommend against approval of our application or may recommend that the FDA require, as a condition of approval, additional preclinical studies or clinical trials, limitations on approved labeling or distribution and use restrictions;
- the FDA may require development of a risk evaluation and mitigation strategy (REMS) as a condition of approval or post-approval;
- the FDA or an applicable foreign regulatory agency may determine that the manufacturing processes or facilities of third-party manufacturers with which we contract do not conform to applicable requirements, including current good manufacturing practices (GMPs); or
- the FDA or applicable foreign regulatory agencies may change their approval requirements or policies or adopt new regulations.

Any of these factors, many of which are beyond our control, could jeopardize our ability to obtain regulatory approval for and successfully market our current or future product candidates. Any such setback in our pursuit of regulatory approval would have a material adverse effect on our business and prospects.

If we experience delays or difficulties in the enrollment of patients in clinical trials, our receipt of necessary regulatory approvals could be delayed or prevented.

We may not be able to initiate or continue clinical trials for our current or future product candidates if we are unable to locate and enroll a sufficient number of eligible patients to participate in these trials as required by the FDA or similar regulatory authorities outside the United States. In particular, because we are focused on patients with rare Osteosarcoma, our ability to enroll eligible patients may be limited or may result in slower enrollment than we anticipate. Some of our competitors have ongoing clinical trials for current or future product candidates that treat the same patient populations as our current or future product candidates, and patients who would otherwise be eligible for our clinical trials may instead enroll in clinical trials of our competitors' current or future product candidates.

Patient enrollment may be affected by other factors that we may not be able to control including:

- the willingness of participants to enroll in our clinical trials and available support in our countries of interest;
- the obtaining of informed consent from parents or guardians of pediatric patients which meet evolving regulatory requirements in the United States and other countries;
- the severity of the disease under investigation;
- the eligibility criteria for the clinical trial in question;
- the availability of an appropriate screening test;
- the perceived risks and benefits of the product candidate under study;
- the efforts to facilitate timely enrollment in clinical trials;

- the patient referral practices of physicians;
- the ability to monitor patients adequately during and after treatment; and
- the proximity and availability of clinical trial sites for prospective patients.

Rare Osteosarcoma has relatively low prevalence and it may be difficult to identify patients with driver genes of the disease, which may lead to delays in enrollment for our trials.

Osteosarcoma has relatively low prevalence and it may be difficult to identify patients with the eligibility criteria we are targeting. Osteosarcoma has an incident rate of approximately 1,000 individuals affected per year in the United States. Our inability to enroll a sufficient number of patients with the target indication for our clinical trials would result in significant delays and could require us to abandon one or more clinical trials altogether. Enrollment delays in our clinical trials may result in increased development costs for our current or future product candidates, which would cause the value of our company to decline and limit our ability to obtain additional financing. If we are unable to include patients with the target indication, this could compromise our ability to seek participation in the FDA's expedited review and approval programs, or otherwise to seek to accelerate clinical development and regulatory timelines for our other product candidates.

If we are not able to obtain, or if there are delays in obtaining, required regulatory approvals both for our current or future product candidates, we will not be able to commercialize, or will be delayed in commercializing, our current or future product candidates, and our ability to generate revenue will be materially impaired.

Our current or future product candidates and the activities associated with their development and commercialization, including their design, testing, manufacture, safety, efficacy, recordkeeping, labeling, storage, approval, advertising, promotion, sale, distribution, import and export are subject to comprehensive regulation by the FDA and other regulatory agencies in the United States and by comparable authorities in other countries. Before we can commercialize any of our current or future product candidates, we must obtain marketing approval. We have not received approval to market any of our current product candidates and may not obtain regulatory approvals for our future product candidates, if any, from regulatory authorities in any jurisdiction and it is possible that none of our current or future product candidates or any current or future product candidates we may seek to develop in the future will ever obtain regulatory approval. We have only limited experience in filing and supporting the applications necessary to gain regulatory approvals and expect to rely on third-party CROs and/or regulatory consultants to assist us in this process. Securing regulatory approval requires the submission of extensive preclinical and clinical data and supporting information to the various regulatory authorities for each therapeutic indication and line of treatment to establish the product candidate's safety and efficacy. Securing regulatory approval also requires the submission of information about the drug manufacturing process to, and inspection of manufacturing facilities by, the relevant regulatory authority. Our current or future product candidates may not be effective, may be only moderately effective or may prove to have undesirable or unintended side effects, toxicities or other characteristics that may preclude our obtaining marketing approval or prevent or limit commercial use.

The process of obtaining regulatory approvals, both in the United States and abroad, is expensive, may take many years if additional clinical trials are required, if approval is obtained at all, and can vary substantially based upon a variety of factors, including the type, complexity and novelty of the current or future product candidates involved. Changes in marketing approval requirements or policies during the development period, changes in or the enactment of additional statutes or regulations, or changes in regulatory review for each submitted NDA. The FDA and comparable authorities in other countries have substantial discretion in the approval process and may refuse to accept any application or may decide that our data are insufficient for approval and require additional preclinical, clinical or other studies. Our current or future product candidates could be delayed in receiving, or fail to receive, regulatory approval for many reasons, including the following:

- the FDA or comparable foreign regulatory authorities may disagree with the design or implementation of our clinical trials;
- we may be unable to demonstrate to the satisfaction of the FDA or comparable foreign regulatory authorities that a product candidate is safe and effective for its proposed indication or that it is suitable to identify appropriate patient populations;

- the results of clinical trials may not meet the level of statistical significance required by the FDA or comparable foreign regulatory authorities for approval;
- we may be unable to demonstrate that a product candidate's clinical and other benefits outweigh its safety risks;
- the FDA or comparable foreign regulatory authorities may disagree with our interpretation of data from preclinical studies or clinical trials;
- the data collected from clinical trials of our current or future product candidates may not be sufficient to support the submission of an NDA or other submission or to obtain regulatory approval in the United States or elsewhere;
- the FDA or comparable foreign regulatory authorities may fail to approve the manufacturing processes or facilities of third-party manufacturers with which we contract for clinical and commercial supplies; and
- the approval requirements or policies or regulations of the FDA or comparable foreign regulatory authorities may significantly change in a manner rendering our clinical data insufficient for approval.

In addition, even if we were to obtain approval, regulatory authorities may approve any of our current or future product candidates for fewer or more limited indications than we request, may not approve the price we intend to charge for our drugs, may grant approval contingent on the performance of costly post-marketing clinical trials, or may approve a product candidate with a label that does not include the labeling claims necessary or desirable for the successful commercialization of that product candidate. Any of the foregoing scenarios could materially harm the commercial prospects for our current or future product candidates, and our ability to generate revenues will be materially impaired.

Our current or future product candidates may cause adverse or other undesirable side effects 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 caused by our current or future product candidates could cause us to interrupt, delay or halt preclinical studies or 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 or other regulatory authorities. While we have initiated clinical trials for OST-HER2, and although there have been limited side effects with this therapy to date, it is likely that there may be adverse side effects associated with its use. Results of our trials could reveal a high and unacceptable severity and prevalence of these or other side effects. In such an event, our trials could be suspended or terminated and the FDA or comparable foreign regulatory authorities could order us to cease further development of or deny approval of our current or future product candidates for any or all targeted indications. The drug-related side effects could affect patient recruitment or the ability of enrolled patients to complete the trial or result in potential product liability claims. Any of these occurrences may significantly harm our business, financial condition and prospects.

Further, our current or future product candidates could cause undesirable side effects in clinical trials related to on-target toxicity, or exaggerated and adverse pharmacologic effects at the target of interest in the test system. If on-target toxicity is observed, or if our current or future product candidates have characteristics that are unexpected, we may need to abandon their development or limit development to more narrow uses or subpopulations in which the undesirable side effects or other characteristics are less prevalent, less severe or more acceptable from a risk-benefit perspective. In our industry, many compounds that initially showed promise in early stage testing for treating cancer have later been found to cause side effects that prevented further development of the compound.

Clinical trials by their nature utilize a sample of the potential patient population. For example, 39 to 45 patients in our Phase IIb trial of OST-HER2 may include a limited number of patients with side effects. With a limited number of patients and limited duration of exposure, rare and severe side effects of our current or future product candidates may only be uncovered with a significantly larger number of patients exposed to the product candidate. If our current

or future product candidates are tested in large numbers of patients or if they receive marketing approval and we or others identify undesirable side effects caused by such current or future product candidates after such approval, a number of potentially significant negative consequences could result, including:

- regulatory authorities may place a hold on an ongoing clinical trial or may refuse to allow a future clinical trial to be conducted;
- regulatory authorities may withdraw or limit their approval of current or future product candidates;
- we may or a regulatory authority might require that the product or products be recalled;
- regulatory authorities may require the addition of labeling statements, such as a "boxed" warning or a contraindication;
- we may be required to create a medication guide outlining the risks of such side effects for distribution to patients;
- we may be required to change the way such current or future product candidates are distributed or administered, conduct additional clinical trials or change the labeling of the current or future product candidates;
- regulatory authorities may require a REMS plan to mitigate risks, which could include medication guides, physician communication plans, or elements to assure safe use, such as restricted distribution methods, patient registries and other risk minimization tools;
- we may be subject to regulatory investigations and government enforcement actions;
- we may decide to remove such current or future product candidates from the marketplace; and
- we could be sued and held liable for injury caused to individuals exposed to or taking our current or future product candidates.

We believe that any of these events could prevent us from achieving or maintaining market acceptance of the affected current or future product candidates and could substantially increase the costs of commercializing our current or future product candidates, if approved, and significantly impact our ability to successfully commercialize our current or future product candidates and generate revenues.

A Breakthrough Therapy Designation by the FDA for our current or future product candidate does not convey any advantage in, or shorten the duration of, the regulatory review or approval process, and it does not increase the likelihood that our current or future product candidates will receive marketing approval.

We may seek a Breakthrough Therapy Designation for some of our current or future product candidates. A breakthrough therapy is defined as a drug 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 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. For drugs 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. Drugs designated as breakthrough therapies by the FDA are also eligible for accelerated approval.

Designation as a breakthrough therapy is within the discretion of the FDA. Accordingly, even if we believe that one of our current or future product candidates meets the criteria for designation as a breakthrough therapy, the FDA may disagree and instead determine not to make such designation. In any event, the receipt of a Breakthrough Therapy Designation for a product candidate does not convey any advantage in, or shorten the duration of, regulatory review or approval compared to drugs considered for approval under conventional FDA procedures and does not assure ultimate approval by the FDA. In addition, even if one or more of our current or future product candidates qualify as breakthrough therapies, the FDA may later decide that the drugs no longer meet the conditions for qualification.

A Fast Track Designation by the FDA does not convey any advantage in, or shorten the duration of, the regulatory review regulatory review or approval process.

If a drug is intended for the treatment of a serious or life-threatening condition and the drug demonstrates the potential to address unmet medical needs for this condition, the drug sponsor may apply for Fast Track Designation. The FDA has broad discretion whether or not to grant this designation, so even if we believe that a particular product candidate is eligible for this designation, we cannot assure you that the FDA would decide to grant it. Even though we have received Fast Track Designation for OST-HER2 and may receive Fast Track Designation again in the future for certain current or future product candidates, this designation does not convey any advantage in, or shorten the duration of, regulatory 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.

We may not be able to obtain or maintain orphan drug designation or exclusivity for any product candidates and, even if we do, that exclusivity may not prevent the FDA or EMA from approving other competing products.

We received orphan drug designation for OST-HER2 for Osteosarcoma in the United States, and we may seek Orphan Drug Designation for other current or future product candidates. Regulatory authorities in some jurisdictions, including the United States and the European Union, may designate drugs for relatively small patient populations as orphan drugs. Under the Orphan Drug Act of 1983, the FDA may designate a product as an orphan drug if it is a drug intended to treat a rare disease or condition, which is generally defined as a patient population of fewer than 200,000 individuals in the United States.

Generally, if a product with an orphan drug designation subsequently receives the first marketing approval for the indication for which it has such designation, the product is entitled to a period of marketing exclusivity, which precludes the FDA or EMA from approving another marketing application for the same drug for that time period. The applicable period is seven years in the United States and ten years in the European Union. The exclusivity period in the European Union can be reduced to six years if a drug no longer meets the criteria for Orphan Drug Designation or if the drug is sufficiently profitable so that market exclusivity is no longer justified. Orphan drug exclusivity may be lost if the FDA or EMA determines that the request for designation was materially defective or if the manufacturer is unable to assure sufficient quantity of the drug to meet the needs of patients with the rare disease or condition.

Even if we obtain orphan drug exclusivity for a product, that exclusivity may not effectively protect the product from competition because competing drugs containing a different active ingredient can be approved for the same condition. In addition, even after an orphan drug is approved, the FDA can subsequently approve the same drug for the same condition if the FDA concludes that the later drug is clinically superior in that it is shown to be safer, more effective or makes a major contribution to patient care. Further, we may not be the first to obtain marketing approval for any particular orphan indication due to the uncertainties associated with developing pharmaceutical products, and thus, for example, approval of our product candidates could be blocked for seven years if another company previously obtained approval and orphan drug exclusivity in the United States for the same drug and same condition.

On August 3, 2017, the U.S. Congress passed the FDA Reauthorization Act of 2017. This act, among other things, codified the FDA's pre-existing regulatory interpretation to require that a drug sponsor demonstrate the clinical superiority of an orphan drug that is otherwise the same as a previously approved drug for the same rare disease in order to receive orphan drug exclusivity. The new legislation reverses prior precedent holding that the Orphan Drug Act unambiguously requires that the FDA recognize the orphan exclusivity period regardless of a showing of clinical superiority. The FDA may further reevaluate the Orphan Drug Act and its regulations and policies. We do not know if, when or how the FDA may change the orphan drug regulations and policies in the future, and it is uncertain how any changes might affect our business. Depending on what changes the FDA may make to its Orphan Drug regulations and policies, our business could be adversely impacted.

Although we have obtained Rare Pediatric Disease Designation for OST-HER2 for Osteosarcoma patients, we may not be eligible to receive a priority review voucher in the event that FDA approval does not occur prior to September 30, 2026.

The Rare Pediatric Disease Priority Review Voucher Program ("PRV Program") is intended to incentivize pharmaceutical sponsors to develop drugs for rare diseases. A sponsor who obtains approval of an NDA or biological license application for a rare disease may be eligible for a Priority Review Voucher ("PRV") under this program,

which may be redeemed by the owner of such PRV to obtain priority review for a marketing application. A PRV is fully transferrable and can be sold to any sponsor, who in turn can redeem the PRV for priority review of a marketing application in six months, compared to the standard timeframe of approximately ten months. Under the 21st Century Cures Act, a drug that receives Rare Disease Designation before September 30, 2024, will continue to be eligible for a PRV if the drug is approved before September 30, 2026. If we do not obtain approval of an NDA for OST-HER2 in patients with Osteosarcoma, and if the PRV Program is not extended by Congressional action, we may not receive a PRV.

Even if we receive regulatory approval for any of our current or future product candidates, we will be subject to ongoing obligations and continued regulatory review, which may result in significant additional expense. Additionally, our current or future product candidates, if approved, could be subject to labeling and other restrictions and market withdrawal and we may be subject to penalties if we fail to comply with regulatory requirements or experience unanticipated problems with our drugs.

If the FDA or a comparable foreign regulatory authority approves any of our current or future product candidates, the manufacturing processes, labeling, packaging, distribution, adverse event reporting, storage, advertising, promotion and recordkeeping for the drug will be subject to extensive and ongoing regulatory requirements. These requirements include submissions of safety and other post-marketing information and reports, registration, as well as continued compliance with cGMPs and Good Clinical Practices, or GCPs, for any clinical trials that we conduct post-approval. Any regulatory approvals that we receive for our current or future product candidates may also be subject to limitations on the approved indicated uses for which the drug may be marketed or to the conditions of approval, or contain requirements for potentially costly post-marketing testing, including Phase IV clinical trials, and surveillance to monitor the safety and efficacy of the drug. Later discovery of previously unknown problems with a drug, including adverse events of unanticipated severity or frequency, or with our third-party manufacturers or manufacturing processes, or failure to comply with regulatory requirements, may result in, among other things:

- restrictions on the marketing or manufacturing of the drug, withdrawal of the drug from the market, or drug recalls;
- fines, warning or other letters or holds on clinical trials;
- refusal by the FDA to approve pending applications or supplements to approved applications filed by us, or suspension or revocation of drug license approvals;
- drug seizure or detention, or refusal to permit the import or export of drugs; and
- injunctions or the imposition of civil or criminal penalties.

The FDA's policies may change and additional government regulations may be enacted that could prevent, limit or delay regulatory approval of our current or future 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, which would adversely affect our business, prospects and ability to achieve or sustain profitability.

Positive results from early preclinical studies and clinical trials of our current or future product candidates are not necessarily predictive of the results of later preclinical studies and clinical trials of our current or future product candidates. If we cannot replicate the positive results from our earlier preclinical studies and clinical trials of our current or future product candidates in our later preclinical studies and clinical trials, we may be unable to successfully develop, obtain regulatory approval for and commercialize our current or future product candidates.

Positive results from our preclinical studies of our current or future product candidates, and any positive results we may obtain from our early clinical trials of our current or future product candidates, may not necessarily be predictive of the results from required later preclinical studies and clinical trials. Similarly, even if we are able to complete our planned preclinical studies or clinical trials of our current or future product candidates according to our current development timeline, the positive results from our preclinical studies and clinical trials of our current or future product candidates may not be replicated in subsequent preclinical studies or clinical trial results. For example, our later-stage clinical trials could differ in significant ways from our ongoing Phase IIb clinical trial of OST-HER2, which could cause the outcome of these later-stage trials to differ from our earlier-stage clinical trials. For example, these differences may

include changes to inclusion and exclusion criteria, final dosage formulation, efficacy endpoints and statistical design. Many companies in the pharmaceutical and biotechnology industries have suffered significant setbacks in late-stage clinical trials after achieving positive results in early-stage development, and we cannot be certain that we will not face similar setbacks. These setbacks have been caused by, among other things, preclinical findings made while clinical trials were underway or safety or efficacy observations made in preclinical studies and clinical trials, including previously unreported adverse events. Moreover, preclinical and clinical data are often susceptible to varying interpretations and analyses, and many companies that believed their product candidates performed satisfactorily in preclinical studies and clinical trials nonetheless failed to obtain FDA approval. If we fail to produce positive results in our planned preclinical studies or clinical trials of any of our current or future product candidates, the development timeline and regulatory approval and commercialization prospects for our current or future product candidates, and, correspondingly, our business and financial prospects, would be materially adversely affected.

Manufacturing our current or future product candidates is complex and we may encounter difficulties in production. If we encounter such difficulties, our ability to provide our current or future product candidates for preclinical studies and clinical trials or for commercial purposes could be delayed or stopped.

The process of manufacturing of our current or future product candidates is complex and highly regulated. We do not have our own manufacturing facilities or personnel and currently rely, and expect to continue to rely, on third parties based in the United States, Europe and Asia for the manufacture of our current or future product candidates. These third-party manufacturing providers may not be able to provide adequate resources or capacity to meet our needs and may incorporate their own proprietary processes into our product candidate manufacturing processes. We have limited control and oversight of a third-party's proprietary process, and a third-party may elect to modify its process without our consent or knowledge. These modifications could negatively impact our manufacturing, including product loss or failure that requires additional manufacturing runs or a change in manufacturer, both of which could significantly increase the cost of and significantly delay the manufacture of our current or future product candidates. As our current or future product candidates progress through preclinical studies and clinical trials towards approval and commercialization, it is expected that various aspects of the manufacturing process will be altered in an effort to optimize processes and results. Such changes may require amendments to be made to regulatory applications which may further delay the timeframes under which modified manufacturing processes can be used for any of our current or future product candidates and additional bridging studies or trials may be required.

Our future growth may depend, in part, on our ability to penetrate foreign markets, where we would be subject to additional regulatory burdens and other risks and uncertainties that could materially adversely affect our business.

We are not permitted to market or promote any of our current or future product candidates in foreign markets before we receive regulatory approval from the applicable regulatory authority in that foreign market, and we may never receive such regulatory approval for any of our current or future product candidates. To obtain separate regulatory approval in many other countries we must comply with numerous and varying regulatory requirements of such countries regarding safety and efficacy and governing, among other things, clinical trials and commercial sales, pricing and distribution of our current or future product candidates, and we cannot predict success in these jurisdictions. If we obtain approval of our current or future product candidates and ultimately commercialize our current or future product candidates in foreign markets, we would be subject to additional risks and uncertainties, including:

- differing regulatory requirements in foreign countries, which may cause obtaining regulatory approvals outside of the United States to take longer and be more costly than obtaining approval in the United States;
- the burden of complying with complex and changing foreign regulatory, tax, accounting and legal requirements;
- different medical practices and customs in foreign countries affecting acceptance in the marketplace;
- import or export licensing requirements;
- reduced protection of intellectual property rights and the existence of additional potentially relevant third-party intellectual property rights;
- economic weakness, including inflation, or political instability in particular foreign economies and markets;

- compliance with tax, employment, immigration and labor laws for employees living or traveling abroad;
- foreign currency fluctuations, which could result in increased operating expenses and reduced revenue, and other obligations incident to doing business in another country;
- workforce uncertainty in countries where labor unrest is more common than in the United States;
- potential liability under the Foreign Corrupt Practices Act of 1977 or comparable foreign regulations;
- production shortages resulting from any events affecting raw material supply or manufacturing capabilities abroad; and
- business interruptions resulting from geopolitical actions, including war and terrorism.

Foreign sales of our current or future product candidates could also be adversely affected by the imposition of governmental controls, political and economic instability, trade restrictions and changes in tariffs.

We may in the future conduct clinical trials for current or future product candidates outside the United States, and the FDA and comparable foreign regulatory authorities may not accept data from such trials.

We may in the future choose to conduct one or more clinical trials outside the United States, including in Europe. The acceptance of study data from clinical trials conducted outside the United States or another jurisdiction by the FDA or comparable foreign regulatory authority may be subject to certain conditions or may not be accepted at all. In cases where data from foreign clinical trials are intended to serve as the basis for marketing approval in the United States, the FDA will generally not approve the application on the basis of foreign data alone unless (i) the data are applicable to the United States population and United States medical practice and (ii) the trials were performed by clinical investigators of recognized competence and pursuant to GCP regulations. Additionally, the FDA's clinical trial requirements, including sufficient size of patient populations and statistical powering, must be met. Many foreign regulatory authorities have similar approval requirements. In addition, such foreign trials would be subject to the applicable doctrines or local laws of the foreign jurisdictions where the trials are conducted. There can be no assurance that the FDA or any comparable foreign regulatory authority will accept data from trials conducted outside of the United States or the applicable jurisdiction. If the FDA or any comparable foreign regulatory authority does not accept such data, it would result in the need for additional trials, which could be costly and time-consuming, and which may result in current or future product candidates that we may develop not receiving approval for commercialization in the applicable jurisdiction.

We may not be successful in our efforts to identify or discover additional product candidates or we may expend our limited resources to pursue a particular product candidate or indication and fail to capitalize on product candidates or indications that may be more profitable or for which there is a greater likelihood of success.

The success of our business depends primarily upon our ability to identify, develop and commercialize our product candidates. Although some of our current product candidates are in preclinical and clinical development, our scientific hypotheses may be incorrect or our research programs may fail to identify other potential product candidates for clinical development for a number of reasons. Our research methodologies may be unsuccessful in identifying potential product candidates, or our potential product candidates may be shown to have harmful side effects or may have other characteristics that may make the products unmarketable or unlikely to receive marketing approval.

Because we have limited financial and management resources, we focus on a limited number of research programs and product candidates and are currently focused on our core programs, including our lead core product candidate OST-HER2 for the treatment of Osteosarcoma and our other core product candidate OST-TDC for the treatment of Osteosarcoma. As a result, we may forego or delay pursuit of opportunities with other current or future product candidates or for other indications that later prove to have greater commercial potential. Our resource allocation decisions may cause us to fail to capitalize on viable commercial drugs or profitable market opportunities. Our spending on current and future research and development programs and current or future product candidates for specific indications may not yield any commercially viable drugs. If we do not accurately evaluate the commercial potential or target market for a particular product candidate, we may relinquish valuable rights to that product candidate through future collaboration, licensing or other royalty arrangements in cases in which it would have been more advantageous for us to retain sole development and commercialization rights to such product candidate.

If any of these events occur, we may be forced to abandon our development efforts for a program, which would have a material adverse effect on our business and could potentially cause us to cease operations. 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 current or future product candidates that ultimately prove to be unsuccessful.

In light of the larger population of patients with Osteosarcoma who reside in foreign countries, our ability to generate meaningful revenues in those jurisdictions may be limited due to the strict price controls and reimbursement limitations imposed by governments outside of the United States. There is additionally a remote possibility that price controls may be enacted in the United States.

The incidence of new cases of Osteosarcoma is approximately 1,000 individuals in the United States annually and approximately 20,000 individuals globally. In some countries, particularly in the European Union, the pricing of prescription pharmaceuticals is subject to governmental control. In these countries, pricing negotiations with governmental authorities can take considerable time after the receipt of marketing approval for a drug. To obtain coverage and reimbursement or pricing approval in some countries, we may be required to conduct a clinical trial that compares the cost-effectiveness of our product candidate to other available therapies. In addition, many countries outside the United States have limited government support programs that provide for reimbursement of drugs such as are product candidates, with an emphasis on private payors for access to commercial products. If reimbursement of our product candidates is unavailable or limited in scope or amount, or if pricing is set at unsatisfactory levels, our business could be harmed, possibly materially, based, in part, on the larger population of patients with Osteosarcoma who reside in foreign countries. In parts of Africa and certain countries in the Middle East, the lack of healthcare infrastructure to help adequately diagnose and treat patients may limit our business potential in those otherwise viable markets. Finally, there is a remote possibility that price controls may be enacted in the United States.

Business interruptions resulting from the Covid-19 outbreak or similar public health crises could cause a disruption to the development of our product candidates and adversely impact our business.

Public health crises such as pandemics or similar outbreaks could adversely impact our business. The continued spread of Covid-19 globally could adversely impact our preclinical or clinical trial operations in the United States (and outside of the United States), including our ability to recruit and retain patients and principal investigators and site staff who, as healthcare providers, may have heightened exposure to Covid-19 if an outbreak occurs in their geography. For example, similar to other biopharmaceutical companies, we are experiencing delays in the dosing of patients in our clinical trials as well as in activating new trial sites. Covid-19 may also affect employees of third-party CROs located in affected geographies that we rely upon to carry out our clinical trials. In addition, as a result of medical complications associated with Osteosarcoma, the patient populations that our lead core and other core product candidates target may be particularly susceptible to Covid-19, which may make it more difficult for us to identify patients able to enroll in our current and future clinical trials and may impact the ability of enrolled patients to complete any such trials. Any negative impact Covid-19 has to patient enrollment or treatment or the execution of our product candidates could cause costly delays to clinical trial activities, which could adversely affect our ability to obtain regulatory approval for and to commercialize our product candidates, increase our operating expenses, and have a material adverse effect on our financial results.

Additionally, timely enrollment in planned clinical trials is dependent upon clinical trial sites which will be adversely affected by global health matters, such as pandemics. We plan to conduct clinical trials for our product candidates in geographies which are currently being affected by the Covid-19. Some factors from the coronavirus outbreak that will delay or otherwise adversely affect enrollment in the clinical trials of our product candidates, as well as our business generally, include:

- the potential diversion of healthcare resources away from the conduct of clinical trials to focus on pandemic concerns, including the attention of physicians serving as our clinical trial investigators, hospitals serving as our clinical trial sites and hospital staff supporting the conduct of our prospective clinical trials;
- limitations on travel that could interrupt key trial and business activities, such as clinical trial site initiations and monitoring, domestic and international travel by employees, contractors or patients to clinical trial sites, including any government-imposed travel restrictions or quarantines that will impact the ability or willingness of patients, employees or contractors to travel to our clinical trial sites or secure visas or entry permissions, a loss of face-to-face meetings and other interactions with potential partners, any of which could delay or adversely impact the conduct or progress of our prospective clinical trials;
- the potential negative effect on the operations of our third-party manufacturers;

- interruption in global shipping affecting the transport of ingredients used in our product candidates and clinical trial materials, such as patient samples, investigational drug product and conditioning drugs, or drugs that are designed to prepare the body for a certain treatment or procedure, and other supplies used in our prospective clinical trials; and
- business disruptions caused by potential workplace, laboratory and office closures and an increased reliance on employees working from home, disruptions to or delays in ongoing laboratory experiments and operations, staffing shortages, travel limitations or mass transit disruptions, any of which could adversely impact our business operations or delay necessary interactions with local regulators, ethics committees and other important agencies and contractors.

These and other factors arising from the coronavirus could worsen in countries that are already afflicted with the coronavirus or could continue to spread to additional countries. Any of these factors, and other factors related to any such disruptions that are unforeseen, could have a material adverse effect on our business and our results of operations and financial condition. Further, uncertainty around these and related issues could lead to adverse effects on the economy of the United States and other economies, which could impact our ability to raise the necessary capital needed to develop and commercialize our product candidates.

Risks Related to Commercialization

Even if we receive marketing approval for our current or future product candidates, our current or future product candidates may not achieve broad market acceptance, which would limit the revenue that we generate from their sales.

The commercial success of our current or future product candidates, if approved by the FDA or other applicable regulatory authorities, will depend upon the awareness and acceptance of our current or future product candidates among the medical community, including physicians and patients, as well as reimbursement and coverage by third party payors including Medicare and Medicaid. Market acceptance of our current or future product candidates, if approved, will depend on a number of factors, including, among others:

- the efficacy of our current or future product candidates as demonstrated in clinical trials, and, if required by any applicable regulatory authority in connection with the approval for the applicable indications, to provide patients with incremental health benefits, as compared with other available medicines;
- limitations or warnings contained in the labeling approved for our current or future product candidates by the FDA or other applicable regulatory authorities;
- the clinical indications for which our current or future product candidates are approved;
- availability of alternative treatments already approved or expected to be commercially launched in the near future;
- the potential and perceived advantages of our current or future product candidates over current treatment options or alternative treatments, including future alternative treatments;
- the willingness of the target patient population to try new therapies or treatment methods and of physicians to prescribe these therapies or methods;
- the need to dose such product candidates in combination with other therapeutic agents, and related costs;
- the strength of marketing and distribution support and timing of market introduction of competitive products;
- pricing and cost effectiveness;
- the effectiveness of our sales and marketing strategies;
- our ability to increase awareness of our current or future product candidates;
- our ability to obtain sufficient third-party coverage and reimbursement, including from federal healthcare programs such as Medicare and Medicaid; or
- the ability or willingness of patients to pay out-of-pocket in the absence of third-party coverage.

If our current or future product candidates are approved but do not achieve an adequate level of acceptance by patients, physicians and payors, we may not generate sufficient revenue from our current or future product candidates to become or remain profitable. Before agreeing to cover and reimburse our products, third party payors may require us to demonstrate that our current or future product candidates, in addition to treating these target indications, are not only safe but cost effective compared to alternative therapies. Our efforts to educate the medical community, patient organizations and third-party payors about the benefits of our current or future product candidates may require significant resources and may never be successful.

We face substantial competition, which may result in others discovering, developing or commercializing drugs before or more successfully than we do.

The development and commercialization of new drugs is highly competitive. We face competition with respect to our current product candidates and will face competition with respect to any product candidates that we may seek to develop or commercialize in the future from major pharmaceutical companies, specialty pharmaceutical companies and biotechnology companies worldwide. There are a number of large pharmaceutical and biotechnology companies that currently market and sell drugs or are pursuing the development of therapies for rare diseases and cancers, including Osteosarcoma. Some of these competitive drugs and therapies are based on scientific approaches that are similar to our approach, and others are based on entirely different approaches. Potential competitors also include academic institutions, government agencies and other public and private research organizations that conduct research, seek patent protection and establish collaborative arrangements for research, development, manufacturing and commercialization.

Specifically, there are a large number of companies developing or marketing treatments for rare diseases and cancers, including many major pharmaceutical and biotechnology companies. If OST-HER2 receives marketing approval for the treatment of Osteosarcoma, it may face competition from other product candidates in development for these indications, including product candidates in development from AstraZeneca, Y-mAbs Therapeutics and MD Anderson Cancer Center, among others.

Many of the companies against which we are competing or against which we may compete in the future have significantly greater financial resources and expertise in research and development, manufacturing, preclinical testing, conducting clinical trials, obtaining regulatory approvals and reimbursement and marketing approved drugs than we do. Mergers and acquisitions in the pharmaceutical and biotechnology industries may result in even more resources being concentrated among a smaller number of our competitors. Smaller or early-stage companies may also prove to be significant competitors, particularly through collaborative arrangements with large and established companies. These competitors also compete with us in recruiting and retaining qualified scientific, sales, marketing and management personnel and establishing clinical trial sites and patient registration for clinical trials, as well as in acquiring technologies complementary to, or necessary for, our programs.

Our commercial opportunity could be reduced or eliminated if our competitors develop and commercialize drugs that are safer, more effective, have fewer or less severe side effects, are more convenient or are less expensive than any drugs that we or our collaborators may develop. Our competitors also may obtain FDA or other regulatory approval for their drugs more rapidly than we may obtain approval for ours, which could result in our competitors establishing a strong market position before we or our collaborators are able to enter the market. The key competitive factors affecting the success of all of our current or future product candidates, if approved, are likely to be their efficacy, safety, convenience, price, the level of generic competition and the availability of reimbursement from government and other third-party payors.

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

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

- decreased demand for any current or future product candidates that we may develop;
- injury to our reputation and significant negative media attention;

- withdrawal of clinical trial participants;
- significant costs and resources to defend the related litigation;
- substantial monetary awards to trial participants or patients; and
- the inability to commercialize any current or future product candidates that we may develop.

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

Even if we are able to commercialize any current or future product candidates, such drugs may become subject to unfavorable pricing regulations or third-party coverage and reimbursement policies, which would harm our business.

The regulations that govern regulatory approvals, pricing and reimbursement for new drugs vary widely from country to country. Some countries require approval of the sale price of a drug before it can be marketed. In many countries, the pricing review period begins after marketing approval is granted. In some foreign markets, prescription pharmaceutical pricing remains subject to continuing governmental control even after initial approval is granted. As a result, we might obtain marketing approval for a product candidate in a particular country, but then be subject to price regulations that delay our commercial launch of the product candidate, possibly for lengthy time periods, and negatively impact the revenues we are able to generate from the sale of the product candidate in that country. Adverse pricing limitations may hinder our ability to recoup our investment in one or more current or future product candidates, even if our current or future product candidates obtain marketing approval.

Our ability to commercialize any current or future product candidates successfully also will depend in part on the extent to which coverage and reimbursement for these current or future product candidates and related treatments will be available from government authorities, private health insurers and other organizations. Government authorities and other third-party payors, such as private health insurers and health maintenance organizations, decide which medications they will pay for (i.e., cover) and establish reimbursement levels. Factors payors consider in determining reimbursement are based on whether the product is:

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

A primary trend in the U.S. healthcare industry and elsewhere is cost containment. Government authorities and other third-party payors have attempted to control costs by limiting coverage and the amount of reimbursement for particular drugs. Increasingly, third-party payors are requiring that drug companies provide them with predetermined discounts from list prices and are challenging the prices charged for drugs. We cannot be sure that coverage will be available for any product candidate that we commercialize and, if coverage is available, the level of reimbursement. Reimbursement may impact the demand for, or the price of, any product candidate for which we obtain marketing approval. If reimbursement is not available or is available only to limited levels, we may not be able to successfully commercialize any product candidate for which we obtain marketing approval.

There may be significant delays in obtaining reimbursement for newly approved drugs, and coverage may be more limited than the purposes for which the drug is approved by the FDA or similar regulatory authorities outside the United States. Moreover, eligibility for reimbursement does not imply that any drug will be paid for in all cases or at a rate that covers our costs, including research, development, manufacture, sale and distribution. Interim reimbursement levels for new drugs, if applicable, may also not be sufficient to cover our costs and may not be made permanent. Reimbursement rates may vary according to the use of the drug and the clinical setting in which it is used, may be based on reimbursement levels already set for lower cost drugs and may be incorporated into existing payments for other services. Net prices for

drugs may be reduced by mandatory discounts or rebates required by government healthcare programs or private payors and by any future relaxation of laws that presently restrict imports of drugs from countries where they may be sold at lower prices than in the United States. In the United States, decisions as to coverage and reimbursement by the Medicare program are typically made by the Centers for Medicare & Medicaid Services, or CMS, an agency within the U.S. Department of Health and Human Services, or HHS. CMS decides whether and to what extent a new medicine will be covered and reimbursed under Medicare. Third-party payors often rely upon Medicare coverage policy and payment limitations in setting their own reimbursement policies. Our inability to promptly obtain coverage and profitable payment rates from both government-funded and private payors for any approved drugs that we develop could have a material adverse effect on our operating results, our ability to raise capital needed to commercialize drugs and our overall financial condition.

Healthcare reform measures may have a material adverse effect on our business and results of operations.

The United States and many foreign jurisdictions have enacted or proposed legislative and regulatory changes affecting the healthcare system that could prevent or delay marketing approval of our current or future product candidates or any future product candidates, restrict or regulate post-approval activities and affect our ability to profitably sell a product for which we obtain marketing approval. Changes in regulations, statutes or the interpretation of existing regulations could impact our business in the future by requiring, for example: (i) changes to our manufacturing arrangements, (ii) additions or modifications to product labeling, (iii) the recall or discontinuation of our products or (iv) additional record-keeping requirements. If any such changes were to be imposed, they could adversely affect the operation of our business.

Our revenue prospects could be affected by changes in healthcare spending and policy in the United States and abroad. We operate in a highly regulated industry and new laws, regulations or judicial decisions, or new interpretations of existing laws, regulations or decisions, related to healthcare availability, the method of delivery or payment for healthcare products and services could negatively impact our business, operations and financial condition. We cannot predict the likelihood, nature or extent of government regulation that may arise from future legislation or administrative action in the United States or any other jurisdiction. It is possible that additional governmental action is taken to address the Covid-19 pandemic. If we or any third parties we may engage are slow or unable to adapt to changes in existing requirements or the adoption of new requirements or policies, or if we or such third parties are not able to maintain regulatory compliance, our product candidates may lose any regulatory approval that may have been obtained and we may not achieve or sustain profitability.

If, in the future, we are unable to establish sales and marketing and patient support capabilities or enter into agreements with third parties to sell and market our current or future product candidates, we may not be successful in commercializing our current or future product candidates if and when they are approved, and we may not be able to generate any revenue.

We do not currently have a sales or marketing infrastructure and have limited experience in the sales, marketing, patient support or distribution of drugs. To achieve commercial success for any approved product candidate for which we retain sales and marketing responsibilities, we must build our sales, marketing, patient support, managerial and other non-technical capabilities or make arrangements with third parties to perform these services. In the future, we may choose to build a focused sales and marketing infrastructure to sell, or participate in sales activities with our collaborators for, some of our current or future product candidates if and when they are approved.

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

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

- our inability to recruit and retain adequate numbers of effective sales and marketing personnel;
- the inability of sales personnel to obtain access to physicians or persuade adequate numbers of physicians to prescribe any future drugs;

- the lack of complementary drugs to be offered by sales personnel, which may put us at a competitive disadvantage relative to companies with more extensive product lines; and
- unforeseen costs and expenses associated with creating an independent sales and marketing organization.

If we enter into arrangements with third parties to perform sales, marketing, patient support and distribution services, our drug revenues or the profitability of these drug revenues to us are likely to be lower than if we were to market and sell any current or future product candidates that we develop ourselves. In addition, we may not be successful in entering into arrangements with third parties to sell and market our current or future product candidates or may be unable to do so on terms that are favorable to us. We likely will have little control over such third parties, and any of them may fail to devote the necessary resources and attention to sell and market our current or future product candidates effectively, or they may engage in practices that pose legal risks to us under applicable anti-kickback, fraud and abuse and other healthcare laws and regulations. If we do not establish sales and marketing capabilities successfully, either on our own or in collaboration with third parties, we will not be successful in commercializing our current or future product candidates.

Our relationships with prescribers, customers and third-party payors will be subject to applicable anti-kickback, fraud and abuse and other healthcare laws and regulations, which could expose us to criminal sanctions, civil penalties, exclusion from government healthcare programs, contractual damages, reputational harm and diminished profits and future earnings.

Although we do not currently have any drugs on the market, if we begin commercializing our current or future product candidates, we will be subject to additional healthcare statutory and regulatory requirements and enforcement by the federal government and the states and foreign governments in which we conduct our business. Healthcare providers, including physicians, play a primary role in the recommendation and prescription of any current or future product candidates for which we obtain marketing approval. Our future arrangements with healthcare providers, as well as third-party payors and customers, will expose us to broadly applicable fraud and abuse and other healthcare laws and regulations will constrain the business and/or financial arrangements and relationships through which we market, sell and distribute our current or future product candidates for which we obtain marketing approval. Restrictions under applicable federal and state healthcare laws and regulations, include the following:

- the federal Anti-Kickback Statute prohibits, among other things, persons from knowingly and willfully soliciting, offering, receiving or providing remuneration, directly or indirectly, in cash or in kind, to induce or reward either the referral of an individual for, or the purchase, order or recommendation of, any good or service, for which payment may be made under federal and state healthcare programs such as Medicare, Medicaid and TRICARE. 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. A person or entity does not need to have actual knowledge of the statute or specific intent to violate it in order to have committed a violation
- the federal False Claims Act imposes criminal and civil penalties, including through civil whistleblower or qui tam actions, against individuals or entities for knowingly presenting, or causing to be presented, to the federal government, claims for payment that are false or fraudulent or making a false statement to avoid, decrease or conceal an obligation to pay money to the federal government. In addition, manufacturers can be held liable under the False Claims Act even when they do not submit claims directly to government payors if they are deemed to “cause” the submission of false or fraudulent claims. False Claims Act liability is potentially significant in the healthcare industry because the statute provides for treble damages and mandatory per claim penalties. Government enforcement agencies and private whistleblowers have investigated pharmaceutical companies for or asserted liability under the False Claims Act 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 Drug Rebate Program. In addition, the government may assert that a claim including items and services resulting from a violation of the federal Anti-Kickback Statute constitutes a false of fraudulent claim for purposes of the False Claims Act;

- the federal Health Insurance Portability and Accountability Act of 1996, or HIPAA, imposes criminal and civil liability for executing a scheme to defraud any healthcare benefit program, or knowingly and willfully falsifying, concealing or covering up a material fact or making any materially false statement in connection with the delivery of or payment for healthcare benefits, items or services; similar to the federal Anti-Kickback Statute, a person or entity does not need to have actual knowledge of the statute or specific intent to violate it in order to have committed a violation;

- the federal physician payment transparency requirements, sometimes referred to as the "Sunshine Act" under the Affordable Care Act (ACA) require manufacturers of drugs, devices, biologics and medical supplies that are reimbursable under Medicare, Medicaid, or the Children's Health Insurance Program to report to the Department of Health and Human Services information related transfers of value to certain covered recipients (defined to include doctors, dentists, optometrists, podiatrists and chiropractors, as well as physicians assistants, nurse practitioners, clinical nurse specialists, certified nurse anesthetists and certified nurse-midwives) and their immediate family members, and teaching hospitals. Effective January 1, 2022, these reporting obligations will extend to include transfers of value made to certain non-physician providers such as physician assistants and nurse practitioners;

- HIPAA, as amended by the Health Information Technology for Economic and Clinical Health Act of 2009, or HITECH, and its implementing regulations, which also imposes obligations on certain covered entity healthcare providers, health plans, and healthcare clearinghouses as well as their business associates that perform certain services involving the use or disclosure of individually identifiable health information, including mandatory contractual terms, with respect to safeguarding the privacy, security and transmission of individually identifiable health information. 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; and

- analogous state laws and regulations, such as state anti-kickback and false claims laws that may apply to sales or marketing arrangements and claims involving healthcare items or services reimbursed by non-governmental third-party payors, including private insurers; and some state laws require pharmaceutical companies to comply with the pharmaceutical industry's voluntary compliance guidelines and the relevant compliance guidance promulgated by the federal government in addition to requiring drug manufacturers to report information related to payments to physicians and other health care providers or marketing expenditures, 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 often are not preempted by HIPAA, thus complicating compliance efforts.

Ensuring that our future business arrangements with third parties comply with applicable healthcare laws and regulations could involve substantial costs. 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 to be 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, exclusion from government funded healthcare programs, such as Medicare and Medicaid, and the curtailment or restructuring of our operations. If any of the physicians or other providers or entities with whom we expect to do business is found to be not in compliance with applicable laws, they may be subject to criminal, civil or administrative sanctions, including exclusions from government funded healthcare programs.

We may face potential liability if we obtain identifiable patient health information from clinical trials sponsored by us.

Most healthcare providers, including certain research institutions from which we may obtain patient health information, are subject to privacy and security regulations promulgated under HIPAA, as amended by the HITECH. We are not currently classified as a covered entity or business associate under HIPAA and thus are not directly subject to its requirements or penalties. However, any person may be prosecuted under HIPAA's criminal provisions either directly or under aiding-and-abetting or conspiracy principles. Consequently, depending on the facts and circumstances, we could face substantial criminal penalties if we knowingly receive individually identifiable

health information from a HIPAA-covered healthcare provider or research institution that has not satisfied HIPAA's requirements for disclosure of individually identifiable health information. In addition, in the future, we may maintain sensitive personally identifiable information, including health information, that we receive throughout the clinical trial process, in the course of our research collaborations, and directly from individuals (or their healthcare providers) who may enroll in patient assistance programs if we choose to implement such programs. As such, we may be subject to state laws requiring notification of affected individuals and state regulators in the event of a breach of personal information, which is a broader class of information than the health information protected by HIPAA.

Further, certain health privacy laws, data breach notification laws, consumer protection laws and genetic testing laws may apply directly to our operations and/or those of our collaborators and may impose restrictions on our collection, use and dissemination of individuals' health information. Patients about whom we or our collaborators may obtain health information, as well as the providers who may share this information with us, may have statutory or contractual rights that limit our ability to use and disclose the information. We may be required to expend significant capital and other resources to ensure ongoing compliance with applicable privacy and data security laws. Claims that we have violated individuals' privacy rights or breached our contractual obligations, even if we are not found liable, could be expensive and time- consuming to defend and could result in adverse publicity that could harm our business.

If we or third-party CMOs, CROs or other contractors or consultants fail to comply with applicable federal, state/provincial or local regulatory requirements, we could be subject to a range of regulatory actions that could affect our or our contractors' ability to develop and commercialize our therapeutic candidates and could harm or prevent sales of any affected therapeutics that we are able to commercialize, or could substantially increase the costs and expenses of developing, commercializing and marketing our therapeutics. Any threatened or actual government enforcement action could also generate adverse publicity and require that we devote substantial resources that could otherwise be used in other aspects of our business. Increasing use of social media could give rise to liability, breaches of data security or reputational damage.

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.

We are subject to numerous environmental, health and safety laws and regulations, including those governing laboratory procedures and the handling, use, storage, treatment and disposal of hazardous materials and wastes. Our operations involve the use of hazardous and flammable materials, including chemicals and biological and radioactive materials. Our operations also produce hazardous waste products. We generally contract with third parties for the disposal of these materials and wastes. We cannot eliminate the risk of contamination or injury from these materials. In the event of contamination or injury resulting from our use of hazardous materials, we could be held liable for any resulting damages, and any liability could exceed our resources. We also could incur significant costs associated with civil or criminal fines and penalties. Although we maintain workers' compensation insurance to cover us for costs and expenses we may incur due to injuries to our employees resulting from the use of hazardous materials, this insurance may not provide adequate coverage against potential liabilities. We do not maintain insurance for environmental liability or toxic tort claims that may be asserted against us in connection with our storage or disposal of biological, hazardous or radioactive materials.

If the market opportunities for OST-HER2 and our other current and future product candidates are smaller than we believe they are, our revenue may be adversely affected and our business may suffer. Moreover, because the target patient populations we are seeking to treat are small, we must be able to successfully identify patients and capture a significant market share to achieve profitability and growth.

We focus our research and product development on treatments for Osteosarcoma. The incidence of new cases of Osteosarcoma is approximately 1,000 individuals in the United States annually and approximately 20,000 individuals globally. Given the smaller number of patients who have the diseases that we are targeting, it is critical to our ability to grow and become profitable that we continue to successfully identify patients with these rare diseases. Our projections of both the number of people who have these diseases, are based on our beliefs and estimates. These estimates have been derived from a variety of sources, including the scientific literature, surveys of clinics, patient foundations or market research that we conducted, and may prove to be incorrect or contain errors. New studies may change the estimated incidence or prevalence of these diseases. The number of patients may turn out to be lower than expected. The effort to identify patients with diseases we seek to treat is in early stages, and we cannot accurately predict the

number of patients for whom treatment might be possible. Further, even if we obtain significant market share for OST-HER2 and any of our other current or future product candidates, because the potential target populations are very small, we may never achieve profitability despite obtaining such significant market share.

Our target patient populations are relatively small, and there are currently limited standard of care treatments directed at Osteosarcoma. As a result, the pricing and reimbursement of OST-HER2 and any other product candidates we may develop, if approved, is uncertain, but must be adequate to support commercial infrastructure. If we are unable to obtain adequate levels of reimbursement, our ability to successfully market and sell OST-HER2 and any of our other current or future product candidates will be adversely affected.

Risks Related to Our Dependence on Third Parties

We rely, and expect to continue to rely, on third parties to conduct our ongoing and planned clinical trials for our current and future product candidates. If these third parties do not successfully carry out their contractual duties, comply with regulatory requirements or meet expected deadlines, we may not be able to obtain marketing approval for or commercialize our current and potential future product candidates and our business could be substantially harmed.

We do not have the ability to independently conduct clinical trials. We rely on medical institutions, clinical investigators, contract laboratories, and other third parties, including collaboration partners, to conduct or otherwise support our clinical trials for OST-HER2 and expect to rely on them when we begin clinical trials for OST-TDC and other current or future product candidates. We rely heavily on these parties for execution of clinical trials and control only certain aspects of their activities. Nevertheless, we are responsible for ensuring that each of our clinical trials is conducted in accordance with the applicable protocol, legal and regulatory requirements and scientific standards, and our reliance on CROs will not relieve us of our regulatory responsibilities. For any violations of laws and regulations during the conduct of our clinical trials, we could be subject to untitled and warning letters or enforcement action that may include civil penalties up to and including criminal prosecution.

We and any third parties that we contract with are required to comply with regulations and requirements, including GCP, for conducting, monitoring, recording and reporting the results of clinical trials to ensure that the data and results are scientifically credible and accurate, and that the trial patients are adequately informed of the potential risks of participating in clinical trials and their rights are protected. These regulations are enforced by the FDA, the Competent Authorities of the Member States of the European Economic Area and comparable foreign regulatory authorities for any drugs in clinical development. The FDA enforces GCP requirements through periodic inspections of clinical trial sponsors, principal investigators and trial sites. If we or the third parties we contract with fail to comply with applicable GCP, the clinical data generated in our clinical trials may be deemed unreliable and the FDA or comparable foreign regulatory authorities may require us to perform additional clinical trials before approving our marketing applications. We cannot assure you that, upon inspection, the FDA will determine that any of our current or future clinical trials will comply with GCP. In addition, our clinical trials must be conducted with current or future product candidates produced under cGMP regulations. Our failure or the failure of third parties that we contract with to comply with these regulations may require us to repeat some aspects of a specific, or an entire, clinical trial, which would delay the marketing approval process and could also subject us to enforcement action. We also are required to register certain ongoing clinical trials and provide certain information, including information relating to the trial's protocol, on a government-sponsored database, ClinicalTrials.gov, within specific timeframes. Failure to do so can result in fines, adverse publicity and civil and criminal sanctions.

Although we intend to design the clinical trials for our current or future product candidates, or be involved in the design when other parties sponsor the trials, we anticipate that third parties will conduct all of our clinical trials. As a result, many important aspects of our clinical development, including their conduct, timing and response to the ongoing COVID-19 pandemic, will be outside of our direct control. Our reliance on third parties to conduct future clinical trials will also result in less direct control over the management of data developed through clinical trials than would be the case if we were relying entirely upon our own staff. Communicating with outside parties can also be challenging, potentially leading to mistakes as well as difficulties in coordinating activities.

These factors may materially adversely affect the willingness or ability of third parties to conduct our clinical trials and may subject us to unexpected cost increases that are beyond our control. If our CROs do not perform clinical trials in a satisfactory manner, breach their obligations to us or fail to comply with regulatory requirements, the development, marketing approval and commercialization of our current or future product candidates may be delayed,

we may not be able to obtain marketing approval and commercialize our current or future product candidates, or our development programs may be materially and irreversibly harmed. If we are unable to rely on clinical data collected by our CROs, we could be required to repeat, extend the duration of, or increase the size of any clinical trials we conduct and this could significantly delay commercialization and require significantly greater expenditures.

If any of our relationships with these third-party CROs terminate, we may not be able to enter into arrangements with alternative CROs on commercially reasonable terms, or at all. 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 are compromised due to the failure to adhere to our clinical protocols, regulatory requirements or for other reasons, any clinical trials such CROs are associated with may be extended, delayed or terminated, and we may not be able to obtain marketing approval for or successfully commercialize our current or future product candidates. As a result, we believe that our financial results and the commercial prospects for our current or future product candidates in the subject indication would be harmed, our costs could increase and our ability to generate revenue could be delayed.

The third parties upon whom we rely for the supply of the active pharmaceutical ingredient, or API, drug product and drug substance used in our core product candidates are limited in number, and the loss of any of these suppliers could significantly harm our business.

The API drug product and drug substance used in our core product candidates are supplied to us from a small number of suppliers, and in some cases sole source suppliers. Our ability to successfully develop our current or future product candidates, and to ultimately supply our commercial drugs in quantities sufficient to meet the market demand, depends in part on our ability to obtain the API, drug product and drug substance for these drugs in accordance with regulatory requirements and in sufficient quantities for commercialization and clinical testing. We do not currently have arrangements in place for a redundant or second-source supply of all API, drug product or drug substance in the event any of our current suppliers of such API, drug product and drug substance cease their operations for any reason.

For all of our current or future product candidates, we intend to identify and qualify additional manufacturers to provide such API, drug product and drug substance prior to submission of an NDA to the FDA and/or an MAA to the EMA. We are not certain, however, that our single -source and dual source suppliers will be able to meet our demand for their products, either because of the nature of our agreements with those suppliers, our limited experience with those suppliers or our relative importance as a customer to those suppliers. It may be difficult for us to assess their ability to timely meet our demand in the future based on past performance. While our suppliers have generally met our demand for their products on a timely basis in the past, they may subordinate our needs in the future to their other customers.

Establishing additional or replacement suppliers for the API, drug product and drug substance used in our current or future product candidates, if required, may not be accomplished quickly. If we are able to find a replacement supplier, such replacement supplier would need to be qualified and may require additional regulatory approval, which could result in further delay. While we seek to maintain adequate inventory of the API, drug product and drug substance used in our current or future product candidates, any interruption or delay in the supply of components or materials, or our inability to obtain such API, drug product and drug substance from alternate sources at acceptable prices in a timely manner could impede, delay, limit or prevent our development efforts, which could harm our business, results of operations, financial condition and prospects.

Our success is dependent on our executive management team's ability to successfully pursue business development, strategic partnerships and investment opportunities as our company matures. We may also form or seek strategic alliances or acquisitions or enter into additional collaboration and licensing arrangements in the future, and we may not realize the benefits of such collaborations, alliances, acquisitions or licensing arrangements.

We have entered into licensing arrangements with Advaxis, Inc. (now Ayala Pharmaceuticals, Inc.) and BlinkBio, Inc. and a Research Service Agreement with George Clinical, Inc., and may in the future form or seek strategic alliances or acquisitions, create joint ventures, or enter into additional collaboration and licensing arrangements with third parties that we believe will complement or augment our development and commercialization efforts with respect to our current product candidates and any future product candidates that we may develop.

Going forward, we are seeking strategic partners for the further development and potential commercialization of our non-core and out-licensed programs, including OST-TDC. Any of these relationships may require us to incur non-recurring and other charges, increase our near and long-term expenditures, issue securities that dilute our existing stockholders or disrupt our management and business.

In addition, we face significant competition in seeking appropriate strategic partners and the negotiation process is time-consuming and complex. We may not be successful in our efforts to establish a strategic partnership or acquisition or other alternative arrangements for our current or future non-core product candidates because they may be deemed to be at too early of a stage of development for collaborative effort and third parties may not view our current or future product candidates as having the requisite potential to demonstrate safety, potency, purity and efficacy and obtain marketing approval.

As a result, we may not be able to realize the benefit of our existing collaboration and licensing arrangements or any future strategic partnerships or acquisitions, license arrangements we may enter, if we are unable to successfully integrate them with our existing operations and company culture, which could delay our timelines or otherwise adversely affect our business. We also cannot be certain that, following a strategic transaction, license, collaboration or other business development partnership, we will achieve the revenue or specific net income that justifies such transaction. Any delays in entering into new collaborations or strategic partnership agreements related to our current or future product candidates could delay the development and commercialization of our current or future product candidates in certain geographies for certain indications, which would harm our business prospects, financial condition and results of operations.

Our manufacturing process needs to comply with FDA regulations relating to the quality and reliability of such processes. Any failure to comply with relevant regulations could result in delays in or termination of our clinical programs and suspension or withdrawal of any regulatory approvals.

In order to produce our product candidates for clinical trials and our products, if any, for commercial purposes, either at our own facility or at a third-party's facility, we and our third party vendors will need to comply with the FDA's cGMP regulations and guidelines. As part of our ongoing quality and process improvement efforts, we conducted a gap analysis of our cGMP quality system and it identified certain key areas for necessary remediation, including with regard to documentation requirements. We may encounter difficulties in achieving compliance with quality control and quality assurance requirements and may experience shortages in qualified personnel. We are subject to inspections by the FDA and comparable foreign regulatory authorities to confirm compliance with applicable regulatory requirements. Any failure to follow cGMP or other regulatory requirements, including any failure to remedy the issues identified in the cGMP gap analysis, or delay, interruption or other issues that arise in the manufacture, fill-finish, packaging, or storage of our product candidate as a result of a failure of our facilities or the facilities or operations of third parties to comply with regulatory requirements or pass any regulatory authority inspection could significantly impair our ability to develop and commercialize our current or future product candidates, including leading to significant delays in the availability of our product candidates for our clinical trials or the termination of or suspension of a clinical trial, or the delay or prevention of a filing or approval of marketing applications for our current or future product candidates. Significant non-compliance could also result in the imposition of sanctions, including warning or untitled letters, fines, injunctions, civil penalties, failure of regulatory authorities to grant marketing approvals for our current or future product candidates, delays, suspension or withdrawal of approvals, license revocation, seizures or recalls of products, operating restrictions and criminal prosecutions, any of which could damage our reputation and our business.

If our third-party manufacturers use hazardous and biological materials in a manner that causes injury or violates applicable law, we may be liable for damages.

Our research and development activities involve the controlled use of potentially hazardous substances, including chemical materials, by our third-party manufacturers. Our manufacturers are subject to federal, state and local laws and regulations in the United States governing the use, manufacture, storage, handling and disposal of medical and hazardous materials. Although we believe that our manufacturers' procedures for using, handling, storing and disposing of these materials comply with legally prescribed standards, we cannot completely eliminate the risk of contamination or injury resulting from medical or hazardous materials. As a result of any such contamination or injury, we may incur liability or local, city, state or federal authorities may curtail the use of these materials and interrupt our business operations. In the event of an accident, we could be held liable for damages or penalized with fines, and the liability could exceed our

resources. We do not have any insurance for liabilities arising from medical or hazardous materials. Compliance with applicable laws and regulations is expensive, and current or future regulations may impair our research, development and production efforts, which could harm our business, prospects, financial condition or results of operations.

Risks Related to Intellectual Property

If we and those third parties from whom we in-license patents are unable to obtain and maintain patent and other intellectual property protection for our technology and product candidates or if the scope of the intellectual property protection obtained is not sufficiently broad, our competitors could develop and commercialize technology and drugs similar or identical to ours, and our ability to successfully commercialize our technology and drugs may be impaired.

The patent position of biotechnology and pharmaceutical companies generally is highly uncertain, involves complex legal and factual questions and has in recent years been the subject of much litigation. Our commercial success depends in part on our ability and the ability of those third parties from whom we in-license patents to obtain and maintain intellectual property protection in the United States and other countries for our current or future product candidates, including our lead core product candidate OST-HER2, our other core product candidate OST-TDC, our non-core product candidates, our proprietary compound library and other know-how. We seek to protect our proprietary and intellectual property position by, among other methods, in-licensing patents and patent applications in the United States and abroad related to our proprietary technology, inventions and improvements that are important to the development and implementation of our business.

We do not currently own any issued patents. We in-license patents and patent applications related to our lead core product candidate OST-HER2 and our other core product candidate OST-TDC. The OST-HER2 product candidate and methods of use are covered by three granted U.S. utility patents and one granted Japanese patent, which is directed to non-human indications. The patents are expected to expire between 2030 and 2031, not including any patent term extension. There are 37 pending foreign patent applications in various jurisdictions, including without limitation China, the European Union, India, Hong Kong, Mexico, New Zealand and South Korea, which are expected to expire in 2035 if granted, not including any patent term extension. The OST-TDC product candidate is covered by five granted U.S. utility patents, one granted Australian patent and one granted Japanese patent. Of these granted patents, one U.S. utility patent, the Australian patent and the Japanese patent are for methods of use of silicon based drug conjugates. The other four U.S. utility patents are for silanol based therapeutic payloads. The patents are expected to expire between 2036 and 2037, not including any patent term extension. There are 16 pending foreign patent applications in various jurisdictions, including without limitation Australia, Canada, China, the European Union and Japan, that are expected to expire between 2036 and 2037, if granted, not including any patent term extension. These foreign patent applications are a combination of composition of matter patents for novel products and method of use patents for new uses of known products. For additional information about our patents, see “Business — Our Intellectual Property.”

The degree of patent protection we require to successfully commercialize our current or future product candidates may be unavailable or severely limited in some cases and may not adequately protect our rights or permit us to gain or keep any competitive advantage. We cannot provide any assurances that any of the patents that we in-license have, or that any of such pending patent applications that mature into issued patents will include, claims with a scope sufficient to protect OST-HER2 and OST-TDC or our other current or future product candidates. In addition, if the breadth or strength of protection provided by such patent applications or any patents we may in-license is threatened, it could dissuade companies from collaborating with us to license, develop or commercialize current or future product candidates.

Other parties have developed technologies that may be related or competitive to our own or those covered by our in-licensed patents, and such parties may have filed or may file patent applications, or may have received or may receive patents, claiming inventions that may overlap or conflict with those claimed in such patent applications or issued patents, with respect to either the same compounds, methods, formulations or other subject matter. 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 at least 18 months after the earliest priority date of patent filing, or in some cases not at all. Therefore, we cannot know with certainty whether the holder of our in-licensed patents was the first to make the inventions claimed in such patents or pending patent applications. As a result, the issuance, scope, validity, enforceability and commercial value of these in-licensed patent rights cannot be predicted with any certainty.

The issuance of a patent is not conclusive as to its inventorship, scope, validity, or enforceability, and our in-licensed patents or patents we may own in the future may be challenged in the courts or patent offices in the United States and abroad. Such challenges may result in loss of patent or product exclusivity or freedom to operate or in patent claims being narrowed, invalidated or held unenforceable, in whole or in part, which could limit our ability to stop others from using or commercializing similar or identical technology and product candidates, or limit the duration of the patent protection of our technology and product candidates. In addition, given the amount of time required for the development, testing, and regulatory review of new product candidates, patents protecting such candidates might expire before or shortly after such candidates are commercialized. Any impairment of our intellectual property rights, or our failure to protect our intellectual property rights adequately, could give third parties access to our technology and product candidates and could materially and adversely impact our business, financial condition, results of operations, and prospects.

If our trademarks and trade names for our products or company name are not adequately protected in one or more countries where we intend to market our products, we may delay the launch of product brand names, use different trademarks or tradenames in different countries, or face other potentially adverse consequences to building our product brand recognition.

Our trademarks or trade names may be challenged, infringed, diluted, circumvented or declared generic or determined to be infringing on other marks. We intend to rely on both registration and common law protection for our trademarks. We may not be able to protect our rights to these trademarks and trade names or may be forced to stop using these names, which we need for name recognition by potential partners or customers in our markets of interest. During the trademark registration process, we may receive Office Actions from the USPTO or from comparable agencies in foreign jurisdictions objecting to the registration of our trademark. Although we would be given an opportunity to respond to those objections, we may be unable to overcome such rejections. In addition, in the USPTO and in comparable agencies in many foreign jurisdictions, third parties are given an opportunity to oppose pending trademark applications and/or to seek the cancellation of registered trademarks. Opposition or cancellation proceedings may be filed against our trademark applications or registrations, and our trademark applications or registrations may not survive such proceedings. If we are unable to obtain a registered trademark or establish name recognition based on our trademarks and trade names, we may not be able to compete effectively and our business may be adversely affected.

If we are unable to adequately protect and enforce our trade secrets, our business and competitive position would be harmed.

In addition to the protection afforded by patents we may own or in-license, we seek to rely on trade secret protection, confidentiality agreements, and license agreements to protect proprietary know-how that may not be patentable, processes for which patents are difficult to enforce and any other elements of our product discovery and development processes that involve proprietary know-how, information, or technology that may not be covered by patents. Although it is our policy to require 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 and assignment of inventions agreements, trade secrets can be difficult to protect and we have limited control over the protection of trade secrets used by our collaborators and suppliers. We cannot be certain that we have or will obtain these agreements in all circumstances and we cannot guarantee that we have entered into such agreements with each party that may have or have had access to our trade secrets or proprietary information.

Moreover, any of these parties might breach the agreements and intentionally or inadvertently disclose our trade secret information and we may not be able to obtain adequate remedies for such breaches. In addition, competitors may otherwise gain access to our trade secrets or independently develop substantially equivalent information and techniques. Further, the laws of some foreign countries do not protect proprietary rights and trade secrets to the same extent or in the same manner as the laws of the United States. As a result, we may encounter significant problems in protecting and defending our intellectual property both in the United States and abroad. If we are unable to prevent unauthorized material disclosure of our intellectual property to third parties, we will not be able to establish or maintain a competitive advantage in our market, which could materially adversely affect our business, financial condition, results of operations and future prospects.

Enforcing a claim that a party illegally disclosed or misappropriated a trade secret is difficult, expensive and time-consuming, and the outcome is unpredictable. If we choose to go to court to stop a third-party from using any of our trade secrets, we may incur substantial costs. These lawsuits may consume our time and other resources even if we are successful. Although we take steps to protect our proprietary information and trade secrets, including through

contractual means with our employees and consultants, third parties may independently develop substantially equivalent proprietary information and techniques or otherwise gain access to our trade secrets or disclose our technology. If any of our trade secrets were to be lawfully obtained or independently developed by a competitor or other third-party, we would have no right to prevent them from using that technology or information to compete with us.

We may initiate, become a defendant in, or otherwise become party to lawsuits to protect or enforce our intellectual property rights, which could be expensive, time-consuming and unsuccessful.

Competitors may infringe any patents we may own or in-license. In addition, any patents we may own or in-license also may become involved in inventorship, priority, validity or unenforceability disputes. To counter infringement or unauthorized use, we may be required to file infringement claims, which can be expensive and time-consuming. We may not prevail in any lawsuits that we initiate, and the damages or other remedies awarded, if any, may not be commercially meaningful. In addition, in an infringement proceeding, a court may decide that one or more of any patents we may own or in-license is not valid or is unenforceable or that the other party's use of our technology that may be patented falls under the safe harbor to patent infringement under 35 U.S.C. §271(e)(1). There is also the risk that, even if the validity of these patents is upheld, the court may refuse to stop the other party from using the technology at issue on the grounds that any patents we may own or in-license do not cover the technology in question or that such third-party's activities do not infringe the patent applications or any patents we in-license or may in the future own. An adverse result in any litigation or defense proceedings could put one or more of any patents we may own or in-license at risk of being invalidated, held unenforceable, or interpreted narrowly and could put those patent applications at risk of not issuing. Such litigation or proceedings could substantially increase our operating losses and reduce the resources available for development activities or any future sales, marketing, patient support or distribution activities. We may not have sufficient financial or other resources to conduct such litigation or proceedings adequately. Some of our competitors may be able to sustain the costs of such litigation or proceedings more effectively than we can because of their greater financial resources and more mature and developed intellectual property portfolios. Uncertainties resulting from the initiation and continuation of patent litigation or other proceedings could have a material adverse effect on our ability to compete in the marketplace.

Post-grant proceedings provoked by third parties or brought by the USPTO may be necessary to determine the validity or priority of inventions with respect to the patent applications or any patents we in-license or may in the future own. These proceedings are expensive and an unfavorable outcome could result in a loss of our current patent rights and 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. In addition to potential USPTO post-grant proceedings, we may become a party to patent opposition proceedings in the EPO, or similar proceedings in other foreign patent offices or courts where these patents may be challenged. The costs of these proceedings could be substantial, and may result in a loss of scope of some claims or a loss of the entire patent. An unfavorable result in a post-grant challenge proceeding may result in the loss of our right to exclude others from practicing one or more of our inventions in the relevant country or jurisdiction, which could have a material adverse effect on our business. Litigation or post-grant proceedings within patent offices may result in a decision adverse to our interests and, even if we are successful, may result in substantial costs and distract our management and other employees. We may not be able to prevent, misappropriation of our trade secrets or confidential information, particularly in countries where the laws may not protect those rights as fully as in the United States.

We may not be able to detect infringement against any patents we may own or in-license. Even if we detect infringement by a third-party of any patents we may own or in-license, we may choose not to pursue litigation against or settlement with the third-party. If we later sue such third-party for patent infringement, the third-party may have certain legal defenses available to it, which otherwise would not be available except for the delay between when the infringement was first detected and when the suit was brought. Such legal defenses may make it impossible for us to enforce any patents we may own or in-license against such third-party.

Intellectual property litigation and administrative patent office patent validity challenges in one or more countries could cause us to spend substantial resources and distract our personnel from their normal responsibilities.

Even if resolved in our favor, litigation or other legal proceedings relating to intellectual property claims may cause us to incur significant expenses, and could distract our technical and management personnel from their normal responsibilities. In addition, there could be public announcements of the results of hearings, motions or other interim proceedings or developments and if securities analysts or investors perceive these results to be negative, it could have a

substantial adverse effect on the price of our common stock. Such litigation or proceedings could substantially increase our operating losses and reduce the resources available for development activities or any future sales, marketing, patient support or distribution activities. We may not have sufficient financial or other resources to conduct such litigation or proceedings adequately. As noted above, some of our competitors may be able to sustain the costs of such litigation or proceedings more effectively than we can because of their greater financial resources. Uncertainties resulting from the initiation and continuation of patent litigation or other proceedings could compromise our ability to compete in the marketplace, including compromising 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 collaborations that would help us commercialize our current or future product candidates, if approved. Any of the foregoing events would harm our business, financial condition, results of operations and prospects.

We may be unable to obtain patent or other intellectual property protection for our current or future product candidates or our future products, if any, in all jurisdictions throughout the world, and we may not be able to adequately enforce our intellectual property rights even in the jurisdictions where we seek protection.

We may not be able to pursue patent coverage of our current or future product candidates in all countries. Filing, prosecuting and defending patents on current or future product candidates in all countries throughout the world would be prohibitively expensive, and intellectual property rights in some countries outside the United States can 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. Consequently, we may not be able to prevent third parties from practicing our inventions in all countries outside the United States, or from selling or importing products made using our inventions in and into the United States or other jurisdictions. Competitors may use our technologies in jurisdictions where we have not obtained patent protection to develop their own products and further, may export otherwise infringing products to territories where we have patent protection, but where enforcement is not as strong as that in the United States. These products may compete with our current or future product candidates and our current 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 pharmaceutical products, which could make it difficult for us to stop the infringement of any patents we may own or in-license or marketing of competing products in violation of our proprietary rights generally.

Many countries have compulsory licensing laws under which a patent owner may be compelled to grant licenses to third parties. In addition, many countries limit the enforceability of patents against government agencies or government contractors. In these countries, the patent owner may have limited remedies, which could materially diminish the value of such patent. If we are forced to grant a license to third parties with respect to any patents we may own or license that are relevant to our business, our competitive position may be impaired, and our business, financial condition, results of operations, and prospects may be adversely affected.

We may not obtain or grant licenses or sublicenses to intellectual property rights in all markets on equally or sufficiently favorable terms with third parties.

It may be necessary for us to use the patented or proprietary technology of third parties to commercialize our products, in which case we would be required to obtain a license from these third parties. The licensing of third-party intellectual property rights is a competitive area, and more established companies may pursue strategies to license or acquire third-party intellectual property rights that we may consider attractive or necessary. More established companies may have a competitive advantage over us due to their size, capital resources and greater clinical development and commercialization capabilities. In addition, companies that perceive us to be a competitor may be unwilling to assign or license rights to us. We also may be unable to license or acquire third-party intellectual property rights on terms that would allow us to make an appropriate return on our investment or at all. If we are unable to license such technology, or if we are forced to license such technology on unfavorable terms, our business could be materially harmed. If we are unable to obtain a necessary license, we may be unable to develop or commercialize the affected current or future product candidates, which could materially harm our business, and the third parties owning such intellectual property rights could seek either an injunction prohibiting our sales, or, with respect to our sales, an obligation on our part to

pay royalties or other forms of compensation. Even if we are able to obtain a license, it may be non-exclusive, thereby giving our competitors access to the same technologies licensed to us. Any of the foregoing could harm our competitive position, business, financial condition, results of operations and prospects.

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

We may from time to time be party to license and collaboration agreements with third parties to advance our research or allow commercialization of current or future product candidates. Such agreements may impose numerous obligations, such as development, diligence, payment, commercialization, funding, milestone, royalty, sublicensing, insurance, patent prosecution, enforcement and other obligations on us and may require us to meet development timelines, or to exercise commercially reasonable efforts to develop and commercialize licensed products, in order to maintain the licenses. In spite of our best efforts, our licensors might conclude that we have materially breached our license agreements and might therefore terminate the license agreements, thereby removing or limiting our ability to develop and commercialize products and technologies covered by these license agreements.

Any termination of these licenses, or if the underlying patents fail to provide the intended exclusivity, could result in the loss of significant rights and could harm our ability to commercialize our current or future product candidates, and competitors or other third parties would have the freedom to seek regulatory approval of, and to market, products identical to ours and we may be required to cease our development and commercialization of certain of our current or future product candidates. Any of the foregoing could have a material adverse effect on our competitive position, business, financial conditions, results of operations, and prospects.

In addition, the agreements under which we may license intellectual property or technology from third parties are likely to be complex, and certain provisions in such agreements may be susceptible to multiple interpretations. The resolution of any contract interpretation disagreement that may arise could narrow what we believe to be the scope of our rights to the relevant intellectual property or technology, or increase what we believe to be our financial or other obligations under the relevant agreement, either of which could have a material adverse effect on our business, financial condition, results of operations and prospects. Moreover, if disputes over intellectual property that we may license prevent or impair our ability to maintain future licensing arrangements on acceptable terms, we may be unable to successfully develop and commercialize the affected current or future product candidates, which could have a material adverse effect on our business, financial conditions, results of operations and prospects.

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

As is the case with other biopharmaceutical companies, our success is heavily dependent on intellectual property, particularly patents. Obtaining and enforcing patents in the biopharmaceutical industry involve both technological and legal complexity and is therefore costly, time consuming and inherently uncertain. Recent patent reform legislation in the United States and other countries, including the Leahy-Smith America Invents Act, or Leahy-Smith Act, signed into law on September 16, 2011, could increase those uncertainties and costs. The Leahy-Smith Act includes a number of significant changes to U.S. patent law. These include provisions that affect the way patent applications are prosecuted, redefine prior art and provide more efficient and cost-effective avenues for competitors to challenge the validity of patents. In addition, the Leahy-Smith Act has transformed the U.S. patent system into a “first inventor to file” system. The first-inventor-to-file provisions, however, only became effective on March 16, 2013. Accordingly, it is not yet clear what, if any, impact the Leahy -Smith Act will have on the operation of our business. However, the Leahy-Smith Act and its implementation could make it more difficult to obtain patent protection for our inventions and increase the uncertainties and costs surrounding the prosecution of the patent applications that we have in-licensed and the enforcement or defense of such issued patents, all of which could harm our business, results of operations and financial condition.

The U.S. Supreme Court has and other courts have ruled on several patent cases in recent years, either narrowing the scope of patent protection available in certain circumstances or weakening the rights of patent owners in certain situations. Additionally, there have been recent proposals for additional changes to the patent laws of the United States and other countries that, if adopted, could impact our ability to obtain patent protection for our proprietary technology or our ability to enforce our proprietary technology. Depending on future actions by the U.S. Congress,

the U.S. courts, the USPTO and the relevant law-making bodies in other countries, the laws and regulations governing patents could change in unpredictable ways that would weaken our ability to obtain new patents or to enforce our existing patents and patents that we might obtain in the future.

Intellectual property rights do not guarantee commercial success of current or future product candidates or other business activities. Numerous factors may limit any potential competitive advantage provided by our intellectual property rights.

The degree of future protection afforded by our intellectual property rights, whether owned or in-licensed, is uncertain because intellectual property rights have limitations, and may not adequately protect our business, provide a barrier to entry against our competitors or potential competitors, or permit us to maintain our competitive advantage. Moreover, if a third party has intellectual property rights that cover the practice of our technology, we may not be able to fully exercise or extract value from our intellectual property rights. The following examples are illustrative:

- patent applications that we own or may in-license may not lead to issued patents;
- patents, should they issue, that we may own or in-license, may not provide us with any competitive advantages, may be narrowed in scope, or may be challenged and held invalid or unenforceable;
- others may be able to develop and/or practice technology, including compounds that are similar to the chemical compositions of our current or future product candidates, that is similar to our technology or aspects of our technology but that is not covered by the claims of any patents we may own or in-license, should any patents issue;
- third parties may compete with us in jurisdictions where we do not pursue and obtain patent protection;
- we, or our future licensors or collaborators, might not have been the first to make the inventions covered by a patent application that we own or may in-license;
- we, or our future licensors or collaborators, might not have been the first to file patent applications covering a particular invention;
- others may independently develop similar or alternative technologies without infringing, misappropriating or otherwise violating our intellectual property rights;
- our competitors might conduct research and development activities in the United States and other countries that provide a safe harbor from patent infringement claims for certain research and development activities, as well as in countries where we do not have patent rights, and may then use the information learned from such activities to develop competitive products for sale in our major commercial markets;
- we may not be able to obtain and/or maintain necessary licenses on reasonable terms or at all;
- third parties may assert an ownership interest in our intellectual property and, if successful, such disputes may preclude us from exercising exclusive rights, or any rights at all, over that intellectual property;
- we may choose not to file a patent in order to maintain certain trade secrets or know-how, and a third-party may subsequently file a patent covering such trade secrets or know-how;
- we may not be able to maintain the confidentiality of our trade secrets or other proprietary information; and
- we may not develop or in-license additional proprietary technologies that are patentable.

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

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

Our current operations are located in Maryland; and we or the third parties upon whom we depend may be adversely affected by natural disasters and our business continuity and disaster recovery plans may not adequately protect us from a serious disaster.

Our current operations are located in Maryland. Any unplanned event, such as flood, fire, explosion, earthquake, extreme weather condition, medical epidemics, including any potential effects from the current global spread of Covid-19, power shortage, telecommunication failure or other natural or man-made accidents or incidents that result in us being unable to fully utilize our facilities, or the manufacturing facilities of our third-party contract manufacturers, may have a material and adverse effect on our ability to operate our business, particularly on a daily basis, and have significant negative consequences on our financial and operating conditions. Loss of access to these facilities may result in increased costs, delays in the development of our product candidates or interruption of our business operations. Natural disasters or pandemics such as the Covid-19 outbreak could further disrupt our operations, and have a material and adverse effect on our business, financial condition, results of operations and prospects. If a natural disaster, power outage or other event occurred that prevented us from using all or a significant portion of our headquarters, that damaged critical infrastructure, such as the manufacturing facilities of our third-party contract manufacturers, or that otherwise disrupted operations, it may be difficult or, in certain cases, impossible, for us to continue our business for a substantial period of time. The disaster recovery and business continuity plans we have in place may prove inadequate in the event of a serious disaster or similar event. We may incur substantial expenses as a result of the limited nature of our disaster recovery and business continuity plans, which could have a material adverse effect on our business. As part of our risk management policy, we maintain insurance coverage at levels that we believe are appropriate for our business. However, in the event of an accident or incident at these facilities, we cannot assure our investors that the amounts of insurance will be sufficient to satisfy any damages and losses. If the manufacturing facilities of our third-party contract manufacturers are unable to operate because of an accident or incident or for any other reason, even for a short period of time, any or all of our research and development programs may be harmed. Any business interruption may have a material and adverse effect on our business, financial condition, results of operations and prospects.

Our future success depends on our ability to retain key executives and to attract, retain and motivate qualified personnel.

We are highly dependent on the research and development, clinical and business development expertise of Paul A. Romness, MPH, our President and Chief Executive Officer, and Robert G. Petit, Ph.D., our Chief Medical Officer and Chief Scientific Officer, as well as the other principal members of our management, scientific and clinical teams. Although we have entered into employment agreements or arrangements with our executive officers, each of them may terminate their employment with us at any time. We do not maintain “key person” insurance for any of our executives or other employees. In addition, we rely on consultants and advisors, including scientific and clinical advisors, to assist us in formulating our research and development and commercialization strategy. Our consultants and advisors may be employed by employers other than us and may have commitments under consulting or advisory contracts with other entities that may limit their availability to us. If we are unable to continue to attract and retain high quality personnel, our ability to pursue our growth strategy will be limited.

Recruiting and retaining qualified scientific, clinical, manufacturing and sales and marketing personnel will also be critical to our success. The loss of the services of our executive officers or other key employees could impede the achievement of our research, development and commercialization objectives and seriously harm our ability to successfully implement our growth strategy. Further, replacing executive officers and key employees may be difficult and may take an extended period of time because of the limited number of individuals in our industry with the breadth of skills and experience required to successfully develop, gain regulatory approval of and commercialize drugs. Competition to hire from this limited pool is intense, and we may be unable to hire, train, retain or motivate these key personnel on acceptable terms given the competition among numerous pharmaceutical and biotechnology companies for similar personnel. We also experience competition for the hiring of scientific and clinical personnel from universities and research institutions. Failure to succeed in clinical trials may make it more challenging to recruit and retain qualified scientific personnel.

We will need to develop and expand our company, and we may encounter difficulties in managing this development and expansion, which could disrupt our operations.

As of April 24, 2023, we had three full-time employees, one part-time employee, an executive consultant and a limited number of regulatory and other consultants. In connection with becoming a public company, we expect to increase our number of employees and the scope of our operations. To manage our anticipated growth and expansion, we must continue to implement and improve our managerial, operational and financial systems, expand our facilities and continue to recruit and train additional qualified personnel. Also, our management may need to divert a disproportionate amount of its attention away from its day-to-day activities and devote a substantial amount of time to managing these growth-oriented activities. Due to our limited resources, we may not be able to effectively manage the expansion of our operations or recruit and train additional qualified personnel. This may result in weaknesses in our infrastructure, give rise to operational mistakes, loss of business opportunities, loss of employees and reduced productivity among remaining employees. The physical expansion of our operations may lead to significant costs and may divert financial resources from other projects, such as the development of our current or future product candidates. If our management is unable to effectively manage our expected growth and expansion, our expenses may increase more than expected, our ability to generate or increase our revenue could be reduced and we may not be able to implement our growth strategy. Our future financial performance and our ability to commercialize our current or future product candidates, if approved, and compete effectively will depend, in part, on our ability to effectively manage the future growth and expansion of our company.

Failure to maintain effective internal controls in accordance with Section 404 of theSarbanes-Oxley Act could have a material adverse effect on our business, results of operation or financial condition. In addition, current and potential shareholders could lose confidence in our financial reporting, which could have a material adverse effect on the price of the common stock.

Effective internal controls are necessary for us to provide reliable financial reports and effectively prevent fraud. We are required to document and test our internal control procedures in order to satisfy the requirements of Section 404 of the Sarbanes-Oxley Act, which requires annual management assessments of the effectiveness of our internal control over financial reporting. In addition, if we fail to maintain the adequacy of our internal controls, as such standards are modified, supplemented or amended from time to time, we may not be able to ensure that we can conclude on an ongoing basis that we have effective internal controls over financial reporting in accordance with Section 404. Disclosing deficiencies or weaknesses in our internal controls, failing to remediate these deficiencies or weaknesses in a timely fashion or failing to achieve and maintain an effective internal control environment may cause investors to lose confidence in our reported financial information, which could have a material adverse effect on the price of the common stock. If we cannot provide reliable financial reports or prevent fraud, our operating results could be harmed.

Unstable market and economic conditions may have serious adverse consequences on our business, financial condition and stock price.

Global financial markets have experienced extreme volatility and disruptions in the past several years, including severely diminished liquidity and credit availability, declines in consumer confidence, declines in economic growth, increases in inflation and unemployment rates and uncertainty about economic stability. There can be no assurance that further deterioration in financial markets and confidence in economic conditions will not occur. Our general growth strategy may be adversely affected by any such economic downturn, volatile business environment or continued unpredictable and unstable market conditions. If the current equity and credit markets deteriorate, or do not improve, it may make any necessary debt or equity financing more difficult, more costly and more dilutive. Failure to secure any necessary financing in a timely manner and on favorable terms could have a material adverse effect on our growth strategy, financial performance and stock price and could require us to delay, scale back or discontinue the development and commercialization of one or more of our product candidates or delay our pursuit of potential in-licenses or acquisitions. In addition, there is a risk that one or more of our current service providers, manufacturers and other partners may not survive these difficult economic times, which could directly affect our ability to attain our operating goals on schedule and on budget.

Our internal computer systems, or those of our third-party CROs or other contractors or consultants, may fail or suffer security breaches, which could result in a material disruption of our current or future product candidates' development programs.

Despite the implementation of security measures, our internal computer systems and those of our third-party CROs and other contractors and consultants are vulnerable to damage from computer viruses, unauthorized access, natural disasters, terrorism, war and telecommunication and electrical failures. While we have not experienced any such system failure, accident, or security breach to date, if such an event were to occur and cause interruptions in our operations, it could result in a material disruption of our programs. For example, the loss of clinical trial data for our current or future product candidates 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 results in a loss of or damage to our data or applications or other data or applications relating to our technology or current or future product candidates, or inappropriate disclosure of confidential or proprietary information, we could incur liabilities and the further development of our current or future product candidates could be delayed.

We may be unable to adequately protect our information systems from cyberattacks, which could result in the disclosure of confidential or proprietary information, including personal data, damage our reputation, and subject us to significant financial and legal exposure.

We rely on information technology systems that we or our third-party providers operate to process, transmit and store electronic information in our day-to-day operations. In connection with our product discovery efforts, we may collect and use a variety of personal data, such as name, mailing address, email addresses, phone number and clinical trial information. A successful cyberattack could result in the theft or destruction of intellectual property, data or other misappropriation of assets, or otherwise compromise our confidential or proprietary information and disrupt our operations. Cyberattacks are increasing in their frequency, sophistication and intensity, and have become increasingly difficult to detect. Cyberattacks could include wrongful conduct by hostile foreign governments, industrial espionage, wire fraud and other forms of cyber fraud, the deployment of harmful malware, denial-of-service, social engineering fraud or other means to threaten data security, confidentiality, integrity and availability. A successful cyberattack could cause serious negative consequences for us, including, without limitation, the disruption of operations, the misappropriation of confidential business information, including financial information, trade secrets, financial loss and the disclosure of corporate strategic plans. Although we devote resources to protect our information systems, we realize that cyberattacks are a threat, and there can be no assurance that our efforts will prevent information security breaches that would result in business, legal, financial or reputational harm to us, or would have a material adverse effect on our results of operations and financial condition. Any failure to prevent or mitigate security breaches or improper access to, use of, or disclosure of our clinical data or patients' personal data could result in significant liability under state (e.g., state breach notification laws), federal (e.g., HIPAA, as amended by HITECH), and international law (e.g., the EU General Data Protection Regulation, or GDPR) and may cause a material adverse impact to our reputation, affect our ability to use collected data, conduct new studies and potentially disrupt our business.

We rely on our third-party providers to implement effective security measures and identify and correct for any such failures, deficiencies or breaches. We also rely on our employees and consultants to safeguard their security credentials and follow our policies and procedures regarding use and access of computers and other devices that may contain our sensitive information. If we or our third-party providers fail to maintain or protect our information technology systems and data integrity effectively or fail to anticipate, plan for or manage significant disruptions to our information technology systems, we or our third-party providers could have difficulty preventing, detecting and controlling such cyber-attacks and any such attacks could result in losses described above as well as disputes with physicians, patients and our partners, regulatory sanctions or penalties, increases in operating expenses, expenses or lost revenues or other adverse consequences, any of which could have a material adverse effect on our business, results of operations, financial condition, prospects and cash flows. Any failure by such third parties to prevent or mitigate security breaches or improper access to or disclosure of such information could have similarly adverse consequences for us. If we are unable to prevent or mitigate the impact of such security or data privacy breaches, we could be exposed to litigation and governmental investigations, which could lead to a potential disruption to our business.

Our employees, principal investigators, CROs and consultants may engage in misconduct or other improper activities, including non-compliance with regulatory standards and requirements and insider trading.

We are exposed to the risk that our employees, principal investigators, CROs and consultants may engage in fraudulent conduct or other illegal activity. Misconduct by these parties could include intentional, reckless and/or negligent conduct or disclosure of unauthorized activities to us that violate the regulations of the FDA and other regulatory authorities, including those laws requiring the reporting of true, complete and accurate information to such authorities; healthcare fraud and abuse laws and regulations in the United States and abroad; or laws that require the reporting of financial information or data accurately. In particular, sales, marketing, patient support 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. Activities subject to these laws also involve the improper use of information obtained in the course of clinical trials or creating fraudulent data in our preclinical studies or clinical trials, which could result in regulatory sanctions and cause serious harm to our reputation. We intend to adopt, prior to the completion of this offering, a code of conduct applicable to all of our employees, but 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 comply with these laws or regulations. Additionally, we are subject to the risk that a person 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 civil, criminal and administrative penalties, damages, monetary fines, possible exclusion from participation in Medicare, Medicaid and other federal and state healthcare programs, debarment from participation in any FDA-related activities, contractual damages, reputational harm, diminished profits and future earnings, and curtailment of our operations, any of which could adversely affect our ability to operate our business and our results of operations.

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

Risks Related to Our Common Stock and This Offering

Paul A. Romness, MPH, and our other executive officers, directors and their affiliates will continue to exercise significant influence over our company after this offering, which will limit your ability to influence corporate matters and could delay or prevent a change in corporate control.

Paul A. Romness, MPH, our President and Chief Executive Officer, beneficially owns approximately 33% of the outstanding shares of common stock of our company, and other executive officers and directors beneficially own another approximately 8.4% of our outstanding shares. Immediately following completion of this offering, and disregarding any shares of common stock that they purchase in this offering, the existing holdings of Mr. Romness and other executive officers, directors and their affiliates will represent beneficial ownership in the aggregate of approximately 38% of our outstanding common stock, assuming no exercise of the underwriters' over-allotment option in this offering. As a result, these stockholders will be able to influence our management and affairs and the outcome of matters submitted to our stockholders for approval, including the election of directors and any sale, merger, consolidation or sale of all or substantially all of our assets. These stockholders acquired their shares of common stock for substantially less than the price of the shares of common stock being acquired in this offering, and these

stockholders may have interests, with respect to their common stock, that are different from those of investors in this offering and the concentration of voting power among these stockholders may have an adverse effect on the price of our common stock. In addition, this concentration of ownership might adversely affect the market price of our common stock by:

- delaying, deferring or preventing a change of control our company;
- impeding a merger, consolidation, takeover or other business combination involving our company; or
- discouraging a potential acquirer from making a tender offer or otherwise attempting to obtain control of our company.

We will incur increased costs as a result of operating as a public company, and our management will be required to devote substantial time to new compliance initiatives.

As a public company, we will incur significant legal, accounting and other expenses that we did not incur as a private company. We will be subject to the reporting requirements of the Securities Exchange Act of 1934, which will require, among other things, that we file with the SEC annual, quarterly and current reports with respect to our business and financial condition. In addition, the Sarbanes-Oxley Act of 2002, as well as rules subsequently adopted by the SEC and the NYSE American to implement provisions of the Sarbanes-Oxley Act, impose significant requirements on public companies, including requiring establishment and maintenance of effective disclosure and financial controls and changes in corporate governance practices. Further, in July 2010, the Dodd-Frank Wall Street Reform and Consumer Protection Act was enacted. There are significant corporate governance and executive compensation related provisions in the Dodd-Frank Act under which the SEC adopted additional rules and regulations in these areas, such as "say on pay" and proxy access. Recent legislation permits emerging growth companies to implement many of these requirements over a longer period and up to five years from the pricing of this offering. We intend to take advantage of this new legislation but cannot guarantee that we will not be required to implement these requirements sooner than budgeted or planned and thereby incur unexpected expenses. Stockholder activism, the current political environment and the current high level of government intervention and regulatory reform may lead to substantial new regulations and disclosure obligations, which may lead to additional compliance costs and impact the manner in which we operate our business in ways we cannot currently anticipate.

We expect the rules and regulations applicable to public companies to substantially increase our legal and financial compliance costs and to make some activities more time-consuming and costly. If these requirements divert the attention of our management and personnel from other business concerns, they could have a material adverse effect on our business, financial condition and results of operations. The increased costs will increase our net loss and may require us to reduce costs in other areas of our business or increase the prices of our products or services. For example, we expect these rules and regulations to make it more difficult and more expensive for us to obtain director and officer liability insurance and we may be required to incur substantial costs to maintain the same or similar coverage. We cannot predict or estimate the amount or timing of additional costs we may incur to respond to these requirements. The impact of these requirements could also make it more difficult for us to attract and retain qualified persons to serve on our board of directors, our board committees or as executive officers.

The price of our common stock may be volatile and fluctuate substantially, which could result in substantial losses for purchasers of our common stock in this offering.

Our stock price is likely to be volatile. The stock market in general and the market for biopharmaceutical companies in particular have experienced extreme volatility that has often been unrelated to the operating performance of particular companies. As a result of this volatility, you may not be able to sell your common stock at or above the initial public offering price. The market price for our common stock may be influenced by many factors, including:

- the success of competitive drugs or technologies;
- results of clinical trials of our current or future product candidates or those of our competitors;
- regulatory or legal developments in the United States and other countries;

- developments or disputes concerning patent applications, issued patents or other proprietary rights;
- the recruitment or departure of key personnel;
- the level of expenses related to any of our current or future product candidates or clinical development programs;
- the results of our efforts to discover, develop, acquire or in-license additional current or future product candidates or drugs;
- actual or anticipated changes in estimates as to financial results, development timelines or recommendations by securities analysts;
- changes in the structure of healthcare payment systems;
- market conditions in the pharmaceutical and biotechnology sectors;
- general economic, industry and market conditions; and
- the other factors described in this "Risk Factors" section.

An active trading market for our common stock may not develop, and you may not be able to resell your shares at or above the initial public offering price.

Prior to this offering, there has been no public market for shares of our common stock. Although we have applied to list our common stock for trading on the NYSE American, an active trading market for our common stock may never develop or be sustained following this offering. The initial public offering price of our common stock was determined through negotiations between us and the underwriters. This initial public offering price may not be indicative of the market price of our common stock after this offering. In the absence of an active trading market for our common stock, investors may not be able to sell their common stock at or above the initial public offering price or at the time that they would like to sell.

If you purchase our common stock in this offering, you will incur immediate and substantial dilution in the book value of your shares.

You will suffer immediate and substantial dilution in the net tangible book value of the common stock you purchase in this offering. Based on the initial public offering price of $5.00 per share, purchasers of common stock in this offering will experience immediate dilution of $4.68 per share in net tangible book value of the common stock. In addition, investors purchasing common stock in this offering will contribute approximately 29.1% of the total amount invested by stockholders since inception but will only own approximately 8.6% of the shares of common stock outstanding. In the past, we issued securities to acquire common stock at prices significantly below the initial public offering price. To the extent these outstanding securities are ultimately exercised, investors purchasing common stock in this offering will sustain further dilution. See the section of this prospectus titled "Dilution" for a more detailed description of the dilution to new investors in the offering.

Resales by the selling stockholders under our resale prospectus may have an adverse effect on the market price of our common stock.

The 544,421 shares of common stock being offered under the resale prospectus for the account of the selling stockholders equals approximately 5.0% of the 10,745,000 shares of our common stock outstanding as of April 24, 2023, and approximately 18.1% of the "public float," or the shares held by non-affiliates which are not subject to restrictions on sale, prior to this offering. Sales of the shares offered under the resale prospectus, or the potential of such sales, may have an adverse effect on the market price of our common stock and such sales could also affect our company's ability to raise additional capital in the equity markets in the future.

Raising additional capital may cause dilution to our stockholders, including purchasers of common stock in this offering, restrict our operations or require us to relinquish rights to our technologies or current or future product candidates.

Until such time, if ever, as we can generate substantial drug revenues, we expect to finance our cash needs through a combination of private and public equity offerings, debt financings, collaborations, strategic alliances and marketing, distribution or licensing arrangements. We do not currently have any committed external source of funds. To the extent that we raise additional capital through the sale of common stock or securities convertible, exercisable or exchangeable into common stock, your ownership interest will be diluted, and the terms of these securities may include liquidation or other preferences that materially adversely affect your rights as a common stockholder. Debt financing, if available, would increase our fixed payment obligations and may involve agreements that include covenants limiting or restricting our ability to take specific actions, such as incurring additional debt, making capital expenditures or declaring dividends.

If we raise funds through additional collaborations, strategic alliances or marketing, distribution or licensing arrangements with third parties, we may have to relinquish valuable rights to our intellectual property, future revenue streams, research programs or current or future product candidates or to grant licenses on terms that may not be favorable to us. If we are unable to raise additional funds through equity or debt financings when needed, we may be required to delay, scale back or discontinue the development and commercialization of one or more of our product candidates, delay our pursuit of potential in-licenses or acquisitions or grant rights to develop and market current or future product candidates that we would otherwise prefer to develop and market ourselves.

We have not paid, and do not intend to pay, dividends on our shares of common stock and, therefore, unless our common stock appreciates in value, our investors may not benefit from holding our shares.

We have not paid any cash dividends on our shares of common stock, and we do not anticipate paying any cash dividends on our common stock in the foreseeable future. As a result, investors in our common stock will not be able to benefit from owning these shares unless their market price becomes greater than the price paid by such investors and they are able to sell such shares. We cannot assure you that you will ever be able to resell our common stock at a price in excess of the price paid.

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

Information set forth in this prospectus may contain various "forward-looking statements." All information relative to future markets for our product candidates and trends in, and anticipated levels of, revenue, and expenses, as well as other statements containing words such as "anticipate," "believe," "estimate," "expect," "intend," "may," "plan," "project," "target," "should" and "will" and other similar expressions constitute forward-looking statements. These forward-looking statements are subject to business, economic and other risks and uncertainties, both known and unknown, and actual results may differ materially from those contained in the forward-looking statements. Examples of risks and uncertainties that could cause actual results to differ materially from historical performance and any forward-looking statements include, but are not limited to, the risks described under the section below titled "Risk Factors," as well as any subsequent filings with the Securities and Exchange Commission.

Given these risks, uncertainties and other factors, you should not place undue reliance on these forward-looking statements. Also, these forward-looking statements represent our estimates and assumptions only as of the date such forward-looking statements are made. You should read carefully this prospectus and any related free writing prospectuses that we have authorized for use in connection with this offering, together with the information incorporated herein or therein by reference as described under the heading "Where You Can Find More Information," completely and with the understanding that our actual future results may be materially different from what we expect. We hereby qualify all of our forward-looking statements by these cautionary statements. Except as required by U.S. federal law, we assume no obligation to update these forward-looking statements publicly or to update the reasons actual results could differ materially from those anticipated in these forward-looking statements, even if new information becomes available in the future.

USE OF PROCEEDS

We estimate that our net proceeds from the sale of 2,000,000shares of our common stock in this offering will be approximately $8,560,000, or $9,940,000 if the underwriters exercise in full their option to purchase additional shares, based on the initial public offering price of $5.00 per share, and after deducting underwriting discounts and commissions and estimated offering expenses payable by us.

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

- approximately $4,200,000 to advance the clinical development of OST-HER2 for Osteosarcoma;
- approximately $2,000,000 to advance development of OST-TDC for ovarian cancer; and
- the remainder of the net proceeds of approximately $2,360,000 for the discovery and development of new product candidates and for working capital and other general corporate purposes.

The net proceeds for the clinical development of OST 31-164 will be used to support the remainder of our current Phase IIb clinical trial in recurred, resected Osteosarcoma in eligible patients from ages 12 to 39 years, of which 36 of 45 patients have already been enrolled. These proceeds provide the funds to pay vendors for the trial, hire critical new employees to prepare for commercialization and cover professional fees for advancing regulatory discussions with the FDA. Funding should carry us through to completion of the Phase IIb clinical trial for OST-HER2, which is expected to be in late 2024. We plan to submit a new drug application (NDA) with the FDA for approval to market the drug candidate following the completion of the Phase IIb clinical trial if there is sufficiently positive endpoint data from such trial supporting the FDA's determination of safety and efficacy of the drug candidate. We expect that it will take six to eight months from the completion of the Phase IIb clinical trial, subject to the receipt of sufficiently positive endpoint data, to compile and file the NDA with the FDA for marketing approval. The FDA generally takes six to ten months to complete its review of an NDA, subject to any FDA request for additional information.

We believe that it remains uncertain whether a Phase III clinical trial will be necessary for the advancement of OST-HER2 through the regulatory approval process. We will not know whether a Phase III trial will be required until we receive a determination from the FDA following the filing of an NDA for marketing approval as to whether the results of our ongoing Phase IIb trial provided sufficiently positive endpoint data. We do, however, plan to conduct a master protocol in other HER2-positive adult cancers, such as breast and esophageal cancers, to evaluate the potential possibility for FDA approval of OST-HER2 in solid tumor indications other than Osteosarcoma. Net proceeds from this offering should carry us into (but not beyond) our proposed master protocol.

The net proceeds for the development of OST-TDC will be used to fund the continued development costs associated with our preclinical trials, including pharmacokinetics and pharmacodynamics, two-week dose finding toxicology studies *in vivo* (on living cell lines or in living animals), as well as GLP trials. Additionally, funds will be used for preparing and submitting an application for an investigational new drug application (IND) with the FDA following the completion of GLP trials, as well as development of a Phase I clinical trial of OST-TDC for ovarian cancer indications. In addition to the Phase I trial, we expect that post completion GLP will lead to licensing opportunities for our silicon SiLinkers and CAPs. Funding should carry us into (but not beyond) our proposed Phase I clinical trial.

The remaining net proceeds from this offering will be available for the discovery and development of new product candidates and for working capital and other general corporate purposes, including enhancing our corporate infrastructure and systems to assist in creating a more robust means of tracking data, automating back office functions, improving our financial reporting system and making improvements to our principal executive offices in Rockville, Maryland to accommodate our growth and expansion strategies. We may allocate funds from our existing cash and other sources to fund some of these activities.

Our expected use of the net proceeds from this offering represents our intentions based upon our current plans and business conditions. As of the date of this prospectus, we cannot predict with certainty all of the particular uses for the net proceeds to be received upon the completion of this offering or the amounts that we will actually spend on the uses set forth above. We believe that the net proceeds from this offering, together with our existing cash, will enable us to fund our operating expenses and capital expenditure requirements for the next 12 to 18 months. We expect that we will require additional funds in order to fully accomplish the specified uses of the proceeds of this offering. We may

also use a portion of the net proceeds to in-license, acquire or invest in complementary businesses or technologies to continue to build our pipeline, research and development capabilities and our intellectual property position, although we currently have no agreements, commitments or understandings with respect to any such transaction.

Due to the many inherent uncertainties in the development of our product candidates, the amounts and timing of our actual expenditures may vary significantly depending on numerous factors, including the progress of our research and development, the timing of patient enrollment and evolving regulatory requirements, the timing and success of preclinical studies, our ongoing clinical studies or clinical studies we may commence in the future, the timing of regulatory submissions, any strategic alliances that we may enter into with third parties for our product candidates or strategic opportunities that become available to us, and any unforeseen cash needs.

Pending our use of the net proceeds from this offering, we intend to invest the net proceeds in a variety of capital preservation instruments, including short-term and long-term interest-bearing instruments, investment-grade securities, and direct or guaranteed obligations of the U.S. government. We cannot predict whether the proceeds invested will yield a favorable return. Our management will retain broad discretion in the application of the net proceeds we receive from our initial public offering, and investors will be relying on the judgment of our management regarding the application of the net proceeds.

DIVIDEND POLICY

We currently intend to retain all available funds and any future earnings to fund the growth and development of our business. We do not intend to pay cash dividends to our stockholders in the foreseeable future. Any future determination to declare dividends will be made at the discretion of our board of directors and will depend on our financial condition, operating results, capital requirements, contractual restrictions, general business conditions, and other factors that our board of directors may deem relevant.

CAPITALIZATION

The following table sets forth our cash and our capitalization as of December 31, 2022:

- on an actual basis;
- on a pro forma basis to give effect to:
  - the elimination of our authorized shares of Class B common stock (none of which were outstanding), the renaming of our Class A common stock as "common stock" and the issuances of shares of our common stock in connection with the Recapitalization transactions;
  - the issuance of 740,000 shares of our common stock that we previously agreed to issue to certain directors, officers, key employees and key advisors in consideration for accrued services rendered to our company; and
  - the grant of 25,000 shares of our common stock to our Chief Financial Officer in March 2023; and
- on a pro forma, as adjusted basis to give further effect to:
  - the pro forma transactions listed above and our issuance and sale of 2,000,000shares of our common stock in this offering at the initial public offering price of $5.00 per share, after deducting underwriting discounts and commissions and estimated offering expenses payable by us.

The pro forma, as adjusted information below is illustrative only, and our capitalization following the completion of this offering will be adjusted based on the actual initial public offering price and other terms of this offering determined at pricing. You should read this table together with our financial statements and the related notes appearing elsewhere in this prospectus and the section of this prospectus titled "Management's Discussion and Analysis of Financial Condition and Results of Operations." We currently intend to retain all available funds and any future earnings to fund the growth and development of our business. We do not intend to pay cash dividends to our stockholders in the foreseeable future. Any future determination to declare dividends will be made at the discretion of our board of directors and will depend on our financial condition, operating results, capital requirements, contractual restrictions, general business conditions, and other factors that our board of directors may deem relevant.

	As of December 31, 2022		
(In thousands, except share and per share data)	**Actual**	**Pro forma**	**Pro forma, as adjusted**
Cash	$ 171	$ 866	$ 10,166
Group A Convertible Notes	$ 1,154	$ —	$ —
Group B Convertible Notes	5,154	—	—
Group C Convertible Notes	3,820	—	—
Group D Convertible Notes	2,000	—	—
Stockholders' equity (deficit):			
Series A preferred stock, par value $0.001, 1,400,000 shares authorized, 1,302,082 issued and outstanding, actual; no amounts issued and outstanding pro forma and pro forma, as adjusted	1	—	—
Common stock, par value $0.001, 50,000,000 shares authorized, 9,980,000 shares issued and outstanding, actual; 21,290,526 shares issued and outstanding, pro forma; 23,290,526 shares issued and outstanding, pro forma, as adjusted	10	21	23
Additional paid-in capital	4,033	22,967	32,265
Accumulated deficit	(21,602)	(24,784)	(24,784)
Total stockholders' equity (deficit)	(17,557)	(1,796)	7,504
Total capitalization	$ (5,429)	$ (1,796)	$ 7,504

DILUTION

If you invest in our common stock in this offering, your ownership interest will be diluted immediately to the extent of the difference between the initial public offering price per share of our common stock and the pro forma, as adjusted net tangible book value per share of our common stock immediately after this offering.

Our historical net tangible book value (deficit), as of December 31, 2022, was $(17.6) million, or $(1.76) per share of our common stock. Our historical net tangible book value (deficit) is the amount of our total tangible assets less our total liabilities and shares of Series A convertible preferred stock, which is not included within our stockholders' equity (deficit). Historical net tangible book value per share represents historical net tangible book value (deficit) divided by the shares of our common stock outstanding as of December 31, 2022.

Our pro forma net tangible book value, as of December 31, 2022, was $(1.8) million, or $(0.09) per share of our common stock. Pro forma net tangible book value represents the amount of our total tangible assets less our total liabilities, after giving effect to (i) the issuances of shares of our common stock in connection with the Recapitalization transactions, (ii) the issuance of 740,000 shares of our common stock that we previously agreed to issue to certain directors, officers, key employees and key advisors in consideration for accrued services rendered to our company and (iii) the grant of 25,000 shares of our common stock to our Chief Financial Officer in March 2023. Pro forma net tangible book value per share represents pro forma net tangible book value divided by the total number of shares outstanding, as of December 31, 2022, after giving effect to the pro forma adjustments described above.

Unless otherwise noted, all per share amounts include only common stock. After giving further effect to our issuance and sale of 2,000,000 shares of our common stock in this offering at the initial public offering price of $5.00 per share, after deducting underwriting discounts and commissions and estimated offering expenses payable by us, our pro forma, as adjusted net tangible book value as of December 31, 2022 would have been approximately $7.5 million, or approximately $0.32 per share. This represents an immediate increase in pro forma, as adjusted net tangible book value per share of $0.41 to existing stockholders and immediate dilution of $4.68 per share in pro forma, as adjusted net tangible book value per share to investors purchasing shares of common stock in this offering. Dilution per share to investors purchasing shares of common stock in this offering is determined by subtracting pro forma, as adjusted net tangible book value per share after this offering from the initial public offering price per share paid by investors purchasing shares of common stock in this offering. The following table illustrates this dilution on a per share basis (without giving effect to any exercise by the underwriters of their option to purchase up to 300,000 additional shares of common stock in this offering):

Initial public offering price per share of common stock		$ 5.00
Historical net tangible book value (deficit) per share as of December 31, 2022	$ (1.76)	
Increase per share attributable to the pro forma adjustments described above	$ 1.67	
Pro forma net tangible book value per share as of December 31, 2022		$ (0.09)
Increase in pro forma, as adjusted net tangible book value per share attributable to investors purchasing shares of common stock in this offering	$ 0.41	
Pro forma, as adjusted net tangible book value per share after this offering		$ 0.32
Dilution per share to investors purchasing shares of common stock in this offering		$ 4.68

If the underwriters fully exercise their option to purchase 300,000 additional shares of common stock in this offering, our pro forma, as adjusted, net tangible book value per share after this offering would be $0.38 and the dilution in pro forma, as adjusted net tangible book value per share to investors purchasing common stock in this offering would be $4.62, assuming no change in the initial public offering price per share and after deducting underwriting discounts and commissions and estimated offering expenses payable by us.

The following table summarizes, as of December 31, 2022, on the pro forma, as adjusted basis described above, the total number of shares of our common stock purchased from us on an as converted to common stock basis, the total consideration paid, or to be paid, and the average price per share paid or to be paid by existing stockholders and by investors in this offering at the initial public offering price of $5.00 per share of common stock, before deducting underwriting discounts and commissions and estimated offering expenses payable by us. As the table shows, investors purchasing shares of common stock in this offering will pay an average price per share substantially higher than our existing stockholders paid.

	Shares purchased		Total consideration		Average price per share
	Number	Percent	Amount	Percentage	
Existing stockholders	9,980,000	42.8%	$ 2,625,000	7.6%	$ 0.26
Recapitalization issuances	10,545,526	45.3%	$ 20,938,022	60.9%	$ 1.99
Make-whole issuances	740,000	3.2%	$ 780,000	2.3%	$ 1.05
Stock grant	25,000	0.1%	$ 50,000	0.1%	$ 2.00
Investors in this offering	2,000,000	8.6%	$ 10,000,000	29.1%	$ 5.00
Total	23,290,526	100.0%	$ 34,393,022	100.0%	$ 2.06

The table above is based on 9,980,000 shares of our common stock outstanding as of December 31, 2022 and gives effect to (i) the issuances of shares of our common stock in connection with the Recapitalization transactions, (ii) the issuance of 740,000 shares of our common stock that we previously agreed to issue to certain directors, officers, key employees and key advisors in consideration for accrued services rendered to our company and (iii) the grant of 25,000 shares of our common stock to our Chief Financial Officer in March 2023.

The table above does not include any shares issuable under our 2023 Incentive Compensation Plan (the "2023 Plan") that our board of directors and stockholders have adopted in connection with this offering.

If we issue additional shares of our common stock in the future, there will be further dilution to investors purchasing shares of common stock in this offering. In addition, we may choose to raise additional capital because of market conditions or strategic considerations, even if we believe that we have sufficient funds for our current or future operating plans. If we raise additional capital through the sale of equity or convertible debt securities, the issuance of these securities may result in further dilution to our stockholders.

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

You should read the following discussion and analysis of our financial condition and results of operations together with our financial statements and related notes appearing elsewhere in this prospectus. Some of the information contained in this discussion and analysis or set forth elsewhere in this prospectus, including information with respect to our plans and strategy for our business and related financing, includes forward-looking statements that involve risks and uncertainties. As a result of many factors, including those factors set forth in the "Risk Factors" section of this prospectus, our actual results could differ materially from the results described in or implied by the forward-looking statements contained in the following discussion and analysis.

Overview

We are a clinical stage biopharmaceutical company focused on the identification, development and commercialization of treatments for Osteosarcoma (OS) and other solid tumors. Our mission is to address the significant need for new treatments in cancers of the bone in children and young adults. Osteosarcoma is an extremely challenging and often aggressive cancer that has particular treatment challenges due to its location, changing genotypes and high recurrence rates. We are currently seeking to answer the call for new treatments with our lead core product candidate OST-HER2 (also known as OST31-164). We intend to expand our pipeline beyond Osteosarcoma with this product candidate into other solid tumors with the same recurrence mechanism of action, including breast, esophageal and lung cancers. With the addition of our OST-Tunable Drug Conjugate (OST-TDC) platform, which we consider to be a next generation antibody-drug conjugate (ADC) technology, we will be targeting ovarian, lung and pancreatic cancers. Furthering our founding mission, we also intend to investigate clinical indications for OST-TDC in Osteosarcoma.

We believe that there have not been any new treatments approved by the U.S. Food and Drug Administration (FDA) for Osteosarcoma for more than 40 years. In humans, Osteosarcoma is an extremely rare cancer that primarily affects children, teenagers and young adults generally under 40 years of age. We are not aware of any competing adjuvant therapy for Osteosarcoma to be tested in children that is further along in the development process than OST-HER2. This disease is difficult to diagnose. The standard of care following first line therapies is simply to screen and wait for possible recurrence/metastasis. Studies published in the Journal of Clinical Oncology, "Osteosarcoma Relapse After Combined Modality Therapy: An Analysis of Unselected Patients in the Cooperative Osteosarcoma Study Group (COSS)," by Kempf-Bielack B., et al. (January 2005), and "Second and Subsequent Recurrences of Osteosarcoma: Presentation, Treatment, and Outcomes of 249 Consecutive Cooperative Osteosarcoma Study Group Patients," by Bielack S., et al. (February 2009), reported that recurrence/metastasis happens in approximately half of all patients within 12 to 18 months following initial remittance. For those patients that experience recurrence, metastasis is typically to the lungs and brain, with survival rates of approximately 13% over the next year, according to these studies.

We have built a pipeline of product candidates targeting multiple indications for solid cancers. Our pipeline includes two drug technologies: (i) OST-HER2, an off-the-shelf immunotherapy, which is a type of cancer treatment that helps one's immune system fight cancer, comprised of a genetically weakened and modified strain of *Listeria monocytogenes*, or a species of bacteria that causes the infection listeriosis, that expresses HER2 peptides, and (ii) OST-TDC, a next generation tunable ADC with a plug-and-play platform that features tunable pH sensitive silicone linkers (SiLinkers). The payloads can include antibodies, chemotherapeutics, cytotoxins and potentially mRNA treatments directly into and in the vicinity of solid tumors.

Impact of the Covid-19 Pandemic on Our Business

The global Covid-19 pandemic continues to evolve. The extent of the impact of the Covid-19 on our business, operations and development timelines and plans remains uncertain, and will depend on certain developments, including the duration and spread of the outbreak and its impact on our development activities, planned clinical trial enrollment, future trial sites, CROs, third-party manufacturers, and other third parties with whom we do business, as well as its impact on regulatory authorities and our key scientific and management personnel. The ultimate impact of the Covid-19 pandemic or a similar health epidemic is highly uncertain and subject to change. To the extent possible, we are conducting business as usual, with necessary or advisable modifications to employee travel and with our employees working remotely. We will continue to actively monitor the rapidly evolving situation related to Covid-19 and may take further actions that alter our operations, including those that may be required by federal, state or local authorities, or

that we determine are in the best interests of our employees and other third parties with whom we do business. At this point, the extent to which the Covid-19 pandemic may affect our business, operations and development timelines and plans, including the resulting impact on our expenditures and capital needs, remains uncertain.

Critical Accounting Policies and Significant Judgments and Estimates

Our financial statements are prepared in accordance with generally accepted accounting principles in the United States ("GAAP"). The preparation of our financial statements and related disclosures requires us to make estimates and judgments that affect the reported amounts of assets, liabilities, costs and expenses, and the disclosure of contingent assets and liabilities in our financial statements. We base our estimates on historical experience, known trends and events and various other factors that we believe are reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. We evaluate our estimates and assumptions on an ongoing basis. Our actual results may differ from these estimates under different assumptions or conditions.

Critical accounting policies are those that, in management's view, are most important to the portrayal of a company's financial condition and results of operations and most demanding on their calls on judgment, often as a result of the need to make estimates about the effect of matters that are inherently uncertain and may change in subsequent periods. While our significant accounting policies are described in more detail in Note 2 to our financial statements appearing elsewhere in this prospectus, we believe that the following accounting policies are those most critical to the judgments and estimates used in the preparation of our financial statements.

Debt Discount and Redemption Premium

We evaluated the Group A Convertible Notes, the Group B Convertible Notes, the Group C Convertible Notes and the Group D Convertible Notes (collectively, the "Convertible Notes") in accordance with ASC 480, Distinguishing Liabilities from Equity ("ASC 480") and determined that the Convertible Notes are considered share-settled debt and should be recorded as a liability. This conclusion was determined based on the debt providing the holder with a variable number of shares at settlement with an aggregate fair value equal to the debt instrument's outstanding principal. The general measurement guidance in ASC 480 requires obligations that can be settled in shares with a fixed monetary value at settlement (e.g., share-settled debt) to be carried at fair value unless other accounting guidance specifies another measurement attribute. It has been determined that the appropriate guidance for share-settled debt is ASC 835. As a result, the Convertible Notes will be recorded at the amortized cost.

The initial fair value of the redemption value relating to the convertible debt instruments are capitalized and amortized over the term of the related debt using the straight-line method, which approximates the interest method. If a loan is paid in full, any unamortized financing costs will be removed from the related accounts and charged to operations. Amortization of debt discount is recorded as a component of interest expense. In accordance with ASU 2015-03, Interest — Imputation of Interest, the unamortized debt discount is presented in the accompanying balance sheet as a direct deduction from the carrying amount of the related debt.

The fair value of the redemption liability is calculated under Level 3 of the fair value hierarchy, is determined based upon a Probability-Weighted of Expected Returns Model ("PWERM"). This PWERM was determined to be the most appropriate method of estimating the value of possible redemption or conversion outcomes over time, since we have not entered into a priced equity round through December 31, 2022. The fair value of the redemption liability is calculated using the initial value of the Convertible Notes less the debt discount rate of 12.5% in Group A and 20% in Groups B and C. The redemption liability is then amortized over the remaining life of the Convertible Notes, utilizing the interest rates of 10% and 6% respectively for the groups. The life of each Convertible Note in Group A is for a set period of three years, and is variable in Groups B and C, with a range of 15 months to three years. The Company retains the option to negotiate an extended maturity date for Groups B and C.

The fees associated with the Convertible Notes raise are legal and investment fees associated with the issuance of the Convertible Notes for Groups A, B, and C. The fees are amortized over the life of the Convertible Note utilizing an interest rate of 10% for Group A and 6% for Groups B and C.

Components of Our Results of Operations

Revenue. We did not recognize revenues for the years ended December 31, 2021 and 2022.

Operating Expenses. Our operating expenses are comprised primarily of research and development expenses, general and administrative expenses and licensing costs.

Research and Development Expenses. Research and development expenses consist primarily of costs incurred for our research activities, including our drug discovery efforts, and the development of our product candidates, which include:

- personnel-related costs, including salaries, benefits and stock-based compensation expense, for employees engaged in research and development functions;
- expenses incurred in connection with our research programs, including under agreements with third parties, such as consultants and contractors and CROs;
- the cost of developing and scaling our manufacturing process and manufacturing drug substance and drug product for use in our research and preclinical and clinical studies, including under agreements with third parties, such as consultants and contractors and contract development and manufacturing organizations (CDMOs); and
- the cost of laboratory supplies and research materials.

We track our direct external research and development expenses on a program-by-program basis. These consist of costs that include fees, reimbursed materials, and other costs paid to consultants, contractors, CDMOs, and CROs in connection with our preclinical, clinical and manufacturing activities. We do not allocate employee costs, costs associated with our discovery efforts, and facilities expenses, including depreciation or other indirect costs, to specific product development programs because these costs are deployed across multiple programs and, as such, are not separately classified.

We expect that our research and development expenses will increase substantially as we advance OST-HER2 and OST-TDC into clinical development and expand our discovery, research and preclinical activities in the near term and in the future.

General and Administrative Expenses. General and administrative expenses consist primarily of salaries and related costs, including stock-based compensation, for personnel in executive, finance and administrative functions. General and administrative expenses also include professional fees for legal, patent, consulting, investor and public relations and accounting and audit services.

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

Licensing Costs. Costs incurred in obtaining technology licenses and asset purchases are charged to licensing costs if the technology licensed has not reached technological feasibility which includes manufacturing, clinical, intellectual property and/or regulatory success which has no alternative future use. The licenses purchased by us require substantial completion of research and development and regulatory and marketing approval efforts in order to reach technological feasibility.

Interest Expense. We evaluated the Group D Convertible Notes in accordance with ASC 480, Distinguishing Liabilities from Equity ("ASC 480"), and determined the Group D Convertible Notes are considered share-settled debt and should be recorded as a liability. This conclusion was determined based on the debt providing the holder with a variable number of shares at settlement with an aggregate fair value equal to the debt instrument's outstanding principal. The general measurement guidance in ASC 480 requires obligations that can be settled in shares with a fixed monetary value at settlement (e.g., share-settled debt) to be carried at fair value unless other accounting guidance specifies another measurement attribute. It has been determined that the appropriate guidance for share-settled debt is ASC 835. As a result, the Group D Convertible Notes were recorded at the amortized cost.

Cumulative Series A Preferred Stock Dividend. The Series A preferred stock dividend requirement represents the coupon dividends on our preferred stock and is identified as a separate component of our statement of operations to compute net income (loss) available to common shareholders. The coupon dividends are computed at 5% of the principal per annum and are recorded monthly. The cumulative accrued dividend at December 31, 2022 and 2021 was $218,750 and $93,750, respectively.

Income Taxes. Since our inception, we have not recorded income tax benefits for the net operating losses incurred or the research and development tax credits generated in each year, due to the uncertainty of realizing a benefit from those items.

As of December 31, 2022 and 2021, we had U.S. federal net operating loss carry forwards of approximately $16 million and $12 million, respectively, which may be available to offset future taxable income. The federal net operating loss carry forward indefinitely but may only be used to offset 80% of annual taxable income. As of December 31, 2022 and 2021, we also had federal and state general business tax credit carry forwards of $0.7 million and $0.3 million, respectively, available to offset future tax liabilities and expire at various dates beginning in January 1, 2022. We have R&D credits that we opted to convert and use toward payroll taxes in amounts equal to $0.5 million and $0.3 million as of December 31, 2022 and 2021, respectively. As of December 31, 2022 and 2021, we also had a federal and state research and development tax credit carry forwards of approximately $0.7 million and $0.3 million, respectively, which may be available to offset future tax liabilities and expire at various dates beginning January 1, 2023 and January 1, 2022, respectively.

Deferred Offering Costs. Deferred offering costs consisted of legal, accounting, printing and filing fees that we capitalized, which will be offset against the gross proceeds from our initial public offering.

Results of Operations

Year Ended December 31, 2022 Compared to Year Ended December 31, 2021

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

	December 31,	
(In thousands)	**2022**	**2021**
Expenses:		
Research and development expenses	$ 3,292	$ 2,174
General and administrative	1,154	1,503
Licensing	1	1,160
Total operating expenses	4,447	4,837
Loss from operations	(4,447)	(4,837)
Other income (expenses):		
Interest (expense)	(1,808)	(2,583)
Total other income (expense)	(1,808)	(2,583)
Net loss	(6,255)	(7,420)
Cumulative Series A preferred stock dividend requirement	(125)	(94)
Net loss available to common shareholders	$ (6,380)	$ (7,514)

Research and Development Expenses. Research and development expenses were approximately $3.3 million for the year ended December 31, 2022 compared to approximately $2.2 million for the year ended December 31, 2021. This increase was primarily due to an increase in vendor expenses associated with our Phase IIb clinical trial. The following table summarizes our research and development expenses for the years ended December 31, 2022 and 2021:

	As of December 31,	
(In thousands)	**2022**	**2021**
Direct research and development expenses by program:		
OST-HER2	$ 2,187	$ 1,059
OST TDC	682	751
Unallocated research and development expenses:		
Personnel-related	422	364
Total research and development expenses	$ 3,291	$ 2,174

In 2022, the direct research and development expenses related to OST-HER2 were primarily lab fees, vendor expenses and payroll. In 2021, such expenses were primarily lab fees of approximately $0.8 million primarily attributed to Phase II trial preparation and CRO costs as we completed IND-enabling studies. Additionally, in 2022 and 2021, we incurred expenses for our Phase IIb clinical trial. TDC related direct research and development expenses was approximately $0.7 million and $0.8 million for the years ended December 31, 2022 and 2021, respectively.

General and Administrative Expenses. General and administrative expenses for the year ended December 31, 2022 were approximately $1.2 million compared to $1.5 million for the year ended December 31, 2021. This decrease was primarily attributed to decreased payments to consultants, along with staff related payroll and legal fees.

Licensing Costs. Licensing costs for the year ended December 31, 2022 were approximately $0.0 million compared to $1.2 million for the year ended December 31, 2021. The lower licensing costs in 2022 was primarily due to making a milestone payment to Advaxis in 2021 of approximately $1.2 million that was due.

Interest Expense. Interest expense for the year ended December 31, 2022 was approximately $0.0 million compared to $2.6 million for the year ended December 31, 2021. This decrease was primarily due to accretion of debt discount being amortized in 2021 from associated discounts related to convertible notes and placement agent warrants.

The Series A preferred stock coupon dividend requirement of $125,000 for the year ended December 31, 2022 represents a 12-month expense. The Series A preferred stock coupon dividend requirement of $93,750 for the year ended December 31, 2021 was recorded and the stock was issued in March 2022. This amount represents a nine-month expense.

Liquidity and Capital Resources

Operating Losses

Since our inception, we have incurred significant operating losses. Our ability to generate product revenue sufficient to achieve profitability will depend heavily on the successful development and eventual commercialization of our product candidates. For the years ended December 31, 2022 and 2021, we reported a net loss of approximately $6.3 million and $7.4 million, respectively, and had an accumulated deficit of approximately $21.6 million and $15.2 million, respectively. We expect to incur significant expenses at an increasing rate and increasing operating losses for the foreseeable future.

During the years ended December 31, 2022 and 2021, we had cash of approximately $0.2 million and $0.08 million, respectively. From the sale of our convertible notes in our private placements, we received gross proceeds of $4.1 million and $3.3 million during the 12 months of 2022 and 2021, respectively. We believe that the net proceeds from these private placements, together with our existing cash, will enable us to fund our operating expenses and capital expenditure requirements for the next six to nine months.

Cash Flows

The following table summarizes our sources and uses of cash for each of the periods presented:

	December 31,	
(In thousands)	**2022**	**2021**
Cash used in operating activities	$ (3,792)	$ (4,402)
Cash provided by investing activities	231	200
Cash provided by financing activities	3,652	3,050
Net increase (decrease) in cash	$ 91	$ (1,152)

Operating Activities

During the years ended December 31, 2022 and 2021, operating activities used approximately $3.8 million $4.4 million, respectively, of cash, resulting from our net loss of approximately $6.3 million and $7.4 million, respectively, against net non-cash charges of approximately $1.5 million and $2.4 million, respectively, partially offset by net cash provided by changes in our operating assets and liabilities of approximately $1.0 million and $0.6 million, respectively.

Net cash provided by changes in our operating assets and liabilities for the years ended December 31, 2022 and 2021 consisted primarily of an increase in accounts payable of approximately $0.2 million and $0.9 million, respectively, a change in accrued expenses of approximately $0.0 million and $0.6 million, respectively, an increase in accrued interest of approximately $0.7 million and $0.4 million, respectively, and a change in accrued payroll of approximately $0.1 million and $0.1 million, respectively.

Non-cash charges for the years ended December 31, 2022 and 2021 were primarily the result of the amortization of debt discount on our convertible debt for an increase in accrued interest of approximately $1.2 million and $2.1 million, respectively. In addition we recognized non-cash interest expense that was converted to preferred stock and recognized stock owed to Noble Life Science Partners, a division of Noble Capital Markets, Inc., for an anti-dilution clause in their advisory agreement. Changes in accounts payable, accrued expenses and other current liabilities and prepaid expenses and other current assets in all periods were generally due to growth in our business, the advancement of our research programs and the timing of vendor invoicing and payments.

Investing Activities

During the years ended December 31, 2022 and 2021, net cash provided by investing activities was approximately $0.2 million and $0.2 million, respectively. This was primarily due to a repayment of shareholder advances.

Financing Activities

During the years ended December 31, 2022 and 2021, net cash provided by financing activities was approximately $3.7 million and $3.1 million, respectively. The net cash provided by financing activities in 2022 consisted primarily of net proceeds of approximately $3.8 million from the sale of convertible notes. The net cash provided by financing activities in 2021 consisted primarily of net proceeds from the sale of convertible notes of approximately $3.0 million. We also received grants in the aggregate amount of $0.1 million from TEDCO.

Convertible Notes

We have completed five separate private financing transactions from July 2018 to March 2023 in which we issued the Convertible Notes and raised total gross proceeds of $15,253,020 from accredited investors.

Information with respect to the five separate private financings of convertible notes — A, B, C, D and BlinkBio — are indicated in the table below.

Group	Dates of issuance	Rate	Maturity	Collateral	Conversion rate	Dec. 31, 2022 carrying amount	Dec. 31, 2022 face amount	Convertible Note ceiling range on note valuation
								(in millions)
A	2018 – 2021	10%	3/31/2024	None	87.5% – 100%	$ 1.1	$ 1.2	$ 5 to 25 – varies per note
B	2020 – 2021	6%	3/31/2024	None	80%	$ 5.2	$ 5.2	$ 19
C	2021 – 2022	6%	5/31/2024	None	80%	$ 3.2	$ 3.8	$ 50
D	2022 – 2023	6%	11/15/2023	None	50%	$ 0.8	$ 2.0	$ 50
BlinkBio	2020	10%	3/15/2022	None	100%	$ —	$ —	$ 19.2

The total accrued interest on the convertible notes listed in the table above was approximately $0.6 million and $1.2 million as of December 31, 2021 and 2022, respectively. The carrying amount and face amount of such convertible notes differ because of the unamortized debt issuance costs and the debt discount (which are amortized over the original term of the instrument) — see accounting policy discussion below. The material terms of each group of Convertible Notes are described below.

Group A Convertible Notes. From July 2018 through November 2021, we issued convertible notes with an aggregate principal amount of $1,154,000 (the "Group A Convertible Notes") to accredited investors, including related parties. Interest on the unpaid principal balance on the Group A Convertible Notes accrues at a rate of 10% per annum, computed on the basis of the actual number of days elapsed and a year of 365 days. Unless earlier converted into shares of Equity Securities, the principal and accrued interest on the Group A Convertible Notes are due and payable by us on demand by the holders of such convertible notes at any time after the earlier of (i) the Maturity Date and (ii) the closing of the Next Equity Financing (which is this initial public offering). In general, the stated Maturity Date varies from the date of issuance of 2 to 4 years and was extended in April 2022, under the same terms, until March 31, 2024.

The Group A Convertible Notes will automatically convert into shares of our common stock before the effectiveness of this offering. The number of shares of our common stock that to be issued upon the automatic conversion will be equal to the quotient obtained by dividing the outstanding principal and unpaid accrued interest due on the Group A Convertible Note on the date of conversion by a percentage between 80% to 87.5%, as applicable, of the initial public offering price per share in this offering. The Group A Convertible Notes have conversion capitalization ceilings that range from $5 million to $25 million, which limits the price a noteholder must pay in a convertible note-to-common stock conversion occurrence. The Group A Convertible Notes will have a conversion price that ranges from $0.40 to $1.98 per share, depending on the applicable valuation ceiling of each note (based on the initial public offering price of $5.00 per share).

Group B Convertible Notes. From April 2020 through June 2021, we issued convertible notes with an aggregate principal amount of $5,154,000 (the "Group B Convertible Notes") to accredited investors. Interest on the unpaid principal balance of the Group B Convertible Notes accrues at a rate of 6% per annum, computed on the basis of the actual number of days elapsed and a year of 365 days. Unless earlier converted into shares of Equity Securities, the principal and accrued interest are due and payable by us on demand by the convertible holders of such notes at any time after the earlier of (i) the Maturity Date and (ii) the closing of the Next Equity Financing (which is this initial public offering). In general, the stated Maturity Date was March 31, 2022 but was extended in April 2022, under the same terms, until March 31, 2024.

The Group B Convertible Notes will automatically convert into shares of our common stock before the effectiveness of this offering. The number of shares of our common stock that to be issued upon the automatic conversion will be equal to the quotient obtained by dividing the outstanding principal and unpaid accrued interest due on the Group B Convertible Note on the date of conversion by 80% of the initial public offering price per share in this offering. The Group B Convertible Notes have a Conversion Capitalization ceiling of $19 million, which limits the price a noteholder must pay in a convertible note-to-common stock conversion occurrence. As a result of the valuation ceiling, the Group B Convertible Notes will have a conversion price of $1.33 per share (based on the initial public offering price of $5.00 per share).

In connection with the private placement of the Group B Convertible Notes, we issued to Noble Life Science Partners, a division of Noble Capital Markets, Inc., the placement agent for the offering, warrants to purchase 425,113 shares of common stock at an exercise price of $1.33 per share (the "Group B Warrants"), based on the initial public offering price of $5.00 per share. The Group B Warrants may, at the option of the holder, be exercised in whole or part on a cashless basis. The Group B Warrants expire five years after the effective date of this offering.

Group C Convertible Notes. From June 2021 through January 2023, we issued convertible notes with an aggregate principal amount of $3,945,020 (the "Group C Convertible Notes") to accredited investors. Interest on the unpaid principal balance of the Group C Convertible Notes accrues at a rate of 6% per annum, computed on the basis of the actual number of days elapsed and a year of 365 days. Unless earlier converted into shares of Equity Securities, the principal and accrued interest are due and payable by us on demand by the holders of such convertible notes at any time after the earlier of (i) the Maturity Date and (ii) the closing of the Next Equity Financing (which is this initial public offering). In general, the stated Maturity Date is May 31, 2024.

The Group C Convertible Notes will automatically convert into shares of our common stock before the effectiveness of this offering. The number of shares of our common stock that to be issued upon the automatic conversion will be equal to the quotient obtained by dividing the outstanding principal and unpaid accrued interest due on the Group C Convertible Note on the date of conversion of this offering by 80% of the initial public offering price per share in this offering. The Group C Convertible Notes have a conversion capitalization ceiling of $50 million, which limits the price a noteholder must pay in a convertible note-to-common stock conversion occurrence. As a result of the valuation ceiling, the Group C Convertible Notes will have a conversion price of $2.68 per share (based on the initial public offering price of $5.00 per share).

In connection with the private placement of the Group C Convertible Notes, we issued to Noble Life Science Partners, a division of Noble Capital Markets, Inc., the placement agent for the offering, warrants to purchase 91,231 shares of common stock at an exercise price of $2.68 per share (the "Group C Warrants"), based on the initial public offering price of $5.00 per share. The Group C Warrants may, at the option of the holder, be exercised in whole or part on a cashless basis. The Group C Warrants expire five years after the effective date of this offering.

Group D Convertible Notes. In November 2022, we issued convertible notes with an aggregate principal amount of $2,000,000 (the "November 2022 Convertible Notes") to accredited investors. In March 2023, we issued two convertible notes in the aggregate principal amount of $600,000 on the same terms as the November 2022 Convertible Notes (the "March 2023 Convertible Notes" and, together with the November 2022 Convertible Notes, the "Group D Convertible Notes") to two accredited investor who participated in the November 2022 and the Group C private placements. Interest on the unpaid principal balance of the Group D Convertible Notes accrues at a rate of 6% per annum, computed on the basis of the actual number of days elapsed and a year of 365 days. Unless earlier converted into shares of Equity Securities, the principal and accrued interest are due and payable by us on demand by the holders of such convertible notes at any time after the earlier of (i) November 15, 2023 and (ii) the closing of the Next Equity Financing (which is this initial public offering).

The Group D Convertible Notes will automatically convert into shares of our common stock before the effectiveness of this offering. The number of shares of our common stock that to be issued upon the automatic conversion will be equal to the quotient obtained by dividing the outstanding principal and unpaid accrued interest due on the Group D Convertible Note on the date of conversion of this offering by 50% of the initial public offering price per share in this offering. The Group D Convertible Notes have a conversion capitalization ceiling of $50 million, which limits the price a noteholder must pay in a convertible note-to-common stock conversion occurrence. As a result of the valuation ceiling, the Group D Convertible Notes will have a conversion price of $2.44 per share (based on the initial public offering price of $5.00 per share).

In connection with the private placement of the Group D Convertible Notes, we issued to Noble Life Science Partners, a division of Noble Capital Markets, Inc., the placement agent for the offering, warrants to purchase 81,967 shares of common stock at an exercise price of $2.44 per share (the "Group D Warrants"), based on the initial public offering price of $5.00 per share. The Group D Warrants may, at the option of the holder, be exercised in whole or part on a cashless basis. The Group D Warrants expire five years after the effective date of this offering.

BlinkBio. On August 19, 2020, we issued a convertible note with a principal amount of $2,400,000 (the "BlinkBio Convertible Note") to BlinkBio, Inc., which is a related party based on Dr. Goddard being our Chairman and as the Chairman and Chief Executive Officer of BlinkBio, in exchange for the entry into the license agreement. On March 15, 2021, the principal and unpaid accrued interest of $100,000 of the BlinkBio Convertible Note converted into 1,302,082 shares of our Series A preferred stock and then distributed to BlinkBio stockholders. The BlinkBio Convertible Note had a conversion capitalization ceiling of $19.2 million, which limited the price a noteholder must pay in a convertible note-to-common stock conversion occurrence.

TEDCO Grant. In May 2021, we received the first of two tranches from TEDCO's Rural & Underserved Business Recovery from Impact of Covid-19 (RUBRIC) Grant in the amount of $50,000. In October 2021, we received the second tranche of $50,000, which brought the total reimbursable grant amount to $100,000. We are obligated to report on and pay to TEDCO 3% of their quarterly revenues for a five-year period following the reward date. Income from grants and investments are not considered revenues. Royalties due to TEDCO are capped at 150% of the amount of the award, or $150,000. We have the option to eliminate the quarterly royalty obligation by making an advance payment prior to the end of the five-year period, in which case, we will receive a 10% reduction of the royalty cap percentage for each year prior to the expiration of the five-year reimbursement period that the grant is repaid in full. If we cease to meet eligibility requirements at any time, the reimbursement obligation will become due to TEDCO immediately; however, the discount for meeting the obligation will still apply.

Cumulative Preferred Stock Dividend

In 2022, 5,000,000 shares of our preferred stock were authorized, of which 1,400,000 shares were designated as Series A preferred stock, with 1,302,082 shares issued and outstanding. Our preferred stock has a 5% cumulative coupon and liquidation priority above all shares of our common stock. The coupon dividends are computed at 5% of the principal per annum and are recorded monthly. The cumulative accrued dividend at December 31, 2022 and 2021 was $218,750 and $93,750, respectively. Our Series A preferred stock can be converted to common stock on a one-for-one basis.

Contractual Obligations and Other Commitments

We enter into contracts in the normal course of business with our CDMOs, CROs and other third parties to support preclinical research studies and testing and other development activities. These contracts are generally cancellable by us. Payments due upon cancellation consist only of payments for services provided or expenses incurred, including non-cancellable obligations of our service providers, up to the date of cancellation.

License Obligations and Research Services

Advaxis. In November 2020, we entered into an amended and restated development, license and supply agreement with Advaxis, Inc. (now Ayala Pharmaceuticals, Inc.) ("Advaxis"), a clinical -stage biotechnology company focused on the development and commercialization of proprietary *Lm* (*Listeria monocytogenes*)-LLO (Listeriolysin O) cancer immunotherapies. Pursuant to this agreement, Advaxis granted a license to us that allows us to utilize Advaxis' ADXS -HER2 construct patents to develop and commercialize ADXS-HER2, our lead product candidate (OST-HER2). The agreement was subsequently amended in April 2021 to modify the payment amounts for Milestones 2 and 3 listed in the table below. Under the terms of the amended agreement, we are required to pay to Advaxis (i) a one-time, non-refundable payment of $1,550,000 (the "License Commencement Payment") and (ii) certain amounts based on the achievement of the milestones described in the payment schedule below. As of December 31, 2022, we paid to Advaxis a total of $2,925,000, consisting of (i) the License Commencement Payment for Milestone 1 and (ii) $1,375,000 for Milestone 2. Payments towards the License Commencement Payment have been recorded as licensing expenses in our Statement of Operations and Comprehensive Loss for the year ended December 31, 2021. We expect to achieve Milestone 3 in June 2024. The payment schedule for milestones and corresponding payment amounts is set forth below.

Milestone	Milestone Payment
1. OST has secured funding of at least $2,337,500, in the aggregate (paid)	License commencement payment: $ 1,550,000
2. The earlier to occur of: (A) OST having secured at least $8,000,000, in the aggregate, or (B) completion of the first Clinical Trial (paid)	$ 1,375,000
3. The earlier to occur of: (A) receipt of Regulatory Approval from the FDA for the First Indication of the first Licensed Product or (B) initiation of the first Registrational Trial of the first Licensed Product in the Field	$ 5,000,000
4. Cumulative Net Sales of all Licensed Products in excess of $20,000,000	$ 1,500,000
5. Cumulative Net Sales of all Licensed Products in excess of $50,000,000 Cumulative Net Sales of all Licensed Products in ex	$ 5,000,000
6. Cumulative Net Sales of all Licensed Products in excess of $100,000,000	$ 10,000,000

All milestone payments are non-creditable and non-refundable and are due and payable upon the achievement of the milestone, regardless of any failure by us to provide notice to Advaxis of such achievement.

In addition to the payments upon achievement of the milestones listed in the above payment schedule, we are required to pay to Advaxis (i) a percentage in the high single digits to low double digits of (a) upfront sublicense fees or (b) clinical or regulatory milestone payment amounts, paid by a sublicensee to us in consideration of a sublicense grant to such sublicensee, and (ii) a quarterly royalty of a percentage in the high single digits to low double digits of net sales of our products containing the ADXS-HER2 constructs.

BlinkBio. In August 2020, we entered into a licensing agreement with BlinkBio, Inc., a privately-held developer of drug conjugate therapies designed to facilitate the treatment of cancer. Pursuant to this agreement, BlinkBio granted a license to us that allows us to utilize BlinkBio's proprietary technology to develop, manufacture and commercialize certain of our products. BlinkBio granted us an exclusive license for tunable drug conjugates that are directed towards, binds to or modifies the folate receptor alpha and a co-exclusive license for tunable drug conjugates that are directed towards, binds to or modifies any target other than the folate receptor alpha, such as HER2.

Under the terms of the agreement, we are required to pay to BlinkBio (i) an upfront, non-refundable, non-creditable license fee of $300,000 (the "Up-Front Fee"), (ii) a royalty of 6% of net sales of our products that were made using BlinkBio's proprietary technology, subject to potential reductions on such royalty, and (iii) certain amounts based on the achievement of the milestones described in the payment schedule below.

As of December 31, 2022, we have paid the Up-Front Fee. This payment has been recorded as licensing expenses in our Statement of Operations and Comprehensive Loss for the year ended December 31, 2021. The payment schedule for milestones and corresponding payment amounts is set forth below.

Milestone Bearing Event	Milestone Payment
1. License Fee to utilize proprietary technology (paid)	Up-front fee + $2.4 million Convertible Note
2. Commencement of a toxicology study commented pursuant to Good Laboratory Practices (under 21 CFR Part 58), such that any resulting positive data would be admissible to applicable Regulatory Authorities to support an IND (commonly referred to as "GLP-Tox")	$ 375,000
3. Completion of a Phase I Clinical Trial	$ 1,500,000
4. Completion of a Phase IIb Clinical Trial	$ 2,500,000
5. Filing of an NDA, BLA or MAA registration (or the equivalent in any other territory around the world)	$ 6,000,000
6. Regulatory Approval in the first of the United States, within the European Union or within the United Kingdom	$ 12,000,000

We are required to make the above cash payments to BlinkBio within 30 days of the achievement of each milestone with respect to the first product to attain each such milestone, except that the first milestone only applies to our first product candidate. The aggregate amount of payments relating to milestones 2 through 6 payable thereunder cannot exceed $22,375,000.

In connection with the license agreement, we also agreed to issue the BlinkBio Convertible Note. See "— Convertible Notes" above for more information on the BlinkBio Convertible Note.

George Clinical. In June 2020, we entered into a services agreement, as amended, with George Clinical, Inc., a clinical contract research organization. Pursuant to this agreement, we engaged George Clinical to use its clinical research services for our study entitled "An Open Label, Phase 2 Study of Maintenance Therapy with OST-HER2 after Resection of Recurrent Osteosarcoma." Under the terms of the agreement, we are required to pay to George Clinical certain fees described in the fee schedule below. The total budget under the agreement is approximately $2,436,604. As of December 31, 2022, we have paid the first two payments listed in the payment schedule below. These payments have been recorded as research and development expenses in our Statement of Operations and Comprehensive Loss for the year ended December 31, 2021. The fee schedule for certain fees and corresponding payment amounts is set forth below.

George Clinical Payment Schedule	Payment Amount
1. Service Fee Advance (paid)	$ 49,989
2. Service Fee Advance of $212,335 minus the amount already paid, plus PTC Fee Advance of $31,325 (paid)	$ 193,671
3. Statistics Fees – 35% on Electronic Data Capture (EDC) Go Live Date	$ 47,740
4. Statistics Fees – 35% on Development of SAP tables	$ 47,740
5. Statistics Fees – 30% on Final Analysis	$ 40,920
6. Service Fees – Remainder Due	Split monthly over course of study

George Clinical tracks and invoices us for the number of task units completed and passthrough costs are invoiced each month in arrears based on actual costs without mark-up. The PTC Fee Advance will be used to offset the first few months of invoices payable. As of December 2022, the balance due to George Clinical is $170,990.

Quantitative and Qualitative Disclosures 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, results of operations or cash flows due to adverse changes in financial market prices and rates, including interest rates and foreign exchange rates, of financial instruments. However, our exposure to market risk for changes in interest rates as our outstanding interest-bearing debt instruments have a fixed rate, and we do not hold any interest-generating securities. See “Liquidity and Capital Resources” above.

Off-Balance Sheet Arrangements

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

Recent Accounting Pronouncements

A description of recently issued accounting pronouncements that may potentially impact our financial position and results of operations is disclosed in Note 2 to Notes to the Financial Statements appearing at the end of this prospectus.

The JOBS Act

The JOBS Act permits an emerging growth company such as us to take advantage of an extended transition period to comply with new or revised accounting standards applicable to public companies until those standards would otherwise apply to private companies. We have elected to avail ourselves of the extended transition period for complying with new or revised financial accounting standards.

We will remain an emerging growth company until the earliest of (i) the last day of our first fiscal year in which we have total annual gross revenues of $1.235 billion or more; (ii) the date on which we are deemed to be a “large accelerated filer” under the rules of the SEC with at least $700.0 million of outstanding equity securities held by non-affiliates; (iii) the date on which we have issued more than $1.0 billion in non-convertible debt securities during the previous three years; or (iv) the last day of our fiscal year following the fifth anniversary of the date of the completion of this offering.

BUSINESS

Overview and Mission

OS Therapies Incorporated is a clinical stage biopharmaceutical company focused on the identification, development and commercialization of treatments for Osteosarcoma (OS) and other solid tumors. Our mission is to address the significant need for new treatments in cancers of the bone in children and young adults. Osteosarcoma is an extremely challenging and often aggressive cancer that has particular treatment challenges due to its location, changing genotypes and high recurrence rates. We are currently seeking to answer the call for new treatments with our lead core product candidate OST-HER2 (also known as OST31-164). We intend to expand our pipeline beyond Osteosarcoma with this product candidate into other solid tumors with the same recurrence mechanism of action, including breast, esophageal and lung cancers. With the addition of our OST-Tunable Drug Conjugate (OST-TDC) platform, which we consider to be a next generation antibody-drug conjugate (ADC) technology, we will be targeting ovarian, lung and pancreatic cancers. "Tunable" is a term used in drug development that refers to the properties that can be influenced by chemical modifications, and "antibody-drug conjugate" or ADC is a term used to describe a drug made up of a monoclonal antibody attached to a cytotoxic payload, or a highly active and toxic pharmaceutical molecule, through chemical linkers. The ADC links an antibody that can home in on a targeted tumor like and deploy the cytotoxic payload or toxic agent against the tumor. Furthering our founding mission, we also intend to investigate clinical indications for OST-TDC in Osteosarcoma.

We believe that there have not been any new treatments approved by the U.S. Food and Drug Administration (FDA) for Osteosarcoma for more than 40 years. In humans, Osteosarcoma is an extremely rare cancer that primarily affects children, teenagers and young adults generally under 40 years of age. We are not aware of any competing adjuvant therapy for Osteosarcoma to be tested in children that is further along in the development process than OST-HER2. This disease is difficult to diagnose. The standard of care following first line therapies is simply to screen and wait for possible recurrence/metastasis, or the development of secondary malignant growths at a distance from a primary site of cancer. Studies published in the Journal of Clinical Oncology, "Osteosarcoma Relapse After Combined Modality Therapy: An Analysis of Unselected Patients in the Cooperative Osteosarcoma Study Group (COSS)," by Kempf-Bielack B., et al. (January 2005), and "Second and Subsequent Recurrences of Osteosarcoma: Presentation, Treatment, and Outcomes of 249 Consecutive Cooperative Osteosarcoma Study Group Patients," by Bielack S., et al. (February 2009), reported that recurrence/metastasis happens in approximately half of all patients within 12 to 18 months following initial remittance. For those patients that experience recurrence, metastasis is typically to the lungs and brain, with survival rates of approximately 13% over the next year, according to these studies.

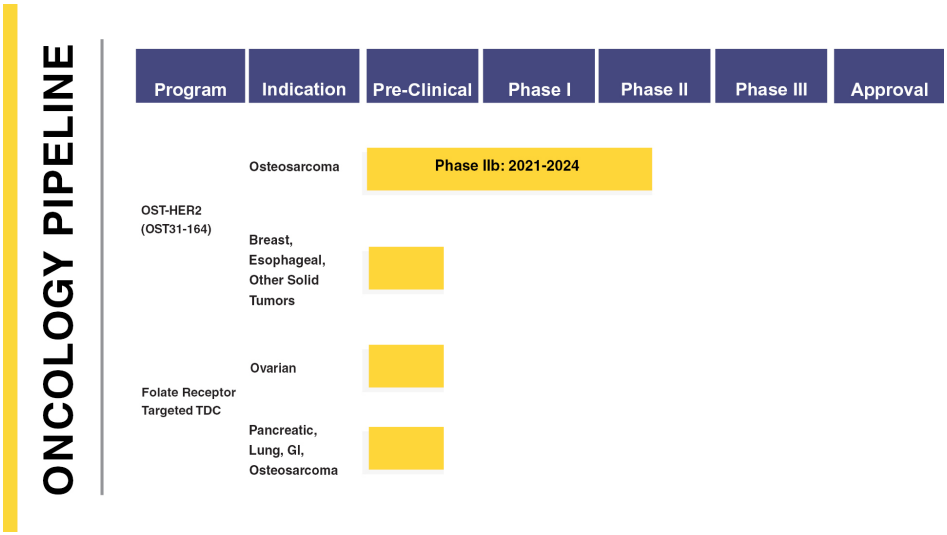
Pipeline of Our Product Candidates

We have built a pipeline of product candidates targeting multiple indications for solid cancers. Our pipeline includes two drug technologies: (i) OST-HER2, an off-the-shelf immunotherapy, which is a type of cancer treatment that helps one's immune system fight cancer, comprised of a genetically weakened and modified strain of *Listeria monocytogenes*, or a species of bacteria that causes the infection listeriosis, that expresses HER2 peptides, and (ii) OST-TDC, a next generation tunable ADC with a plug-and-play platform that features tunable pH sensitive silicone linkers (SiLinkers). The payloads can include antibodies, chemotherapeutics, cytotoxins and potentially mRNA treatments directly into and in the vicinity of solid tumors.

OST-HER2 (OST31-164) **.** Our most advanced product candidate, OST-HER2, is a genetically engineered strain of *Listeria monocytogenes*, attenuated for reduced virulence, increased antibiotic susceptibility and the expression of three HER2 protein epitopes fused to immune-enhancing peptides on the membrane of the bacteria. OST-HER2 has received an orphan drug designation in the United States. The FDA may designate a biologic product as an orphan product if it is intended to treat a rare disease or condition, which generally is defined as having a patient population of fewer than 200,000 individuals in the United States. Osteosarcoma has an incidence rate of new cases of approximately 1,000 individuals affected per year in the United States. Orphan product designation, subject to limited exceptions, can provide a period of market exclusivity for a product that is the first to receive marketing approval for the designated indication. Other potential indications may include breast, esophageal, lung and other solid tumors. In August 2021, OST-HER2 was awarded rare pediatric disease designation and previously received fast track designation by the FDA. Such designations by the FDA do not convey any advantages or shorten the duration of the regulatory review or approval process.

OST-TDC. Our tunable drug conjugate (TDC) platform is currently in preclinical development. Each TDC contains four main components: ligand, payload cassette adaptor, linker and payload. In addition, TDCs contain units to optimize physicochemical properties. The ligands are selected to bind to receptors overexpressed on cancer cells. Upon binding, the TDC construct gets internalized into the cancer cell, where the payload is released, to cause cell death. The payload cassette adaptors enable the stoichiometrical attachments of linkers and payloads. The SiLinkers represent a novel and pH-sensitive linker system. The SiLinker release profile can be tuned with proximal functional groups, resulting in payload release in the endosome, lysosome or the slightly acidic tumor microenvironment. The SiLinker system is compatible with a variety of payloads and not limited to the employment of cytotoxic drug delivery. The first set of internal programs focus on the use of SiLinker and conditionally active payloads (CAPs™) drug products. CAPs are cytotoxic drugs which on their own, due to their functional groups, cannot readily permeate cells at physiological pH; however, at the slightly acidic pH of the tumor-microenvironment, after some linker cleavage, these payloads readily permeate into cancer cells, resulting in an enhanced bystander effect. Our lead program targets folate receptor alpha, a protein expressed on the surface of cells that participates in cell signaling, as well as cellular replication and division, and is overexpressed in multiple cancers such as ovarian and endometrial cancers. The lead compound employs folic acid, a small molecule, as the targeting ligands and contains six exatecan-silanols, which is a type of silanol-based cytotoxic payload, as payloads. This discovery work is being carried out at Syngene International Limited, an integrated contract research organization (CRO) based in Bangalore, India.

From time to time, we may evaluate collaboration opportunities for our product candidates. We expect to work opportunistically with pharmaceutical and biotechnology companies, as we have done with BlinkBio, Inc. by in-licensing the OST-TDC technology, seeking to utilize our technology and know-how for developing additional oncologic drug products. The following table summarizes information regarding our product candidates and development programs.



In addition to our development of OST-HER2 for multiple indications of solid cancers in humans, OST-HER2 is a product candidate for veterinary use in canines. We hold a conditional license for OST-HER2 granted by the U.S. Department of Agriculture (USDA), which allows OST-HER2 to be commercialized but its use is limited to the treatment of dogs diagnosed with Osteosarcoma that are one year of age or older. As part of our growth strategies following this offering, we intend to consider potentially out-licensing OST-HER2 to animal health companies for such use. See "OS-Focused Clinical Trials and Studies — Preclinical Animal Study" for more information.

Our OS-Focused Clinical Trials and Studies

We and our licensors have conducted a number of clinical trials and studies in the field of Osteosarcoma and Tunable Drug Conjugates to date.

Phase IIb Clinical Trial. In July 2021, a Phase IIb clinical trial to treat Osteosarcoma in humans was commenced and sponsored by us and conducted by George Clinical, Inc., our clinical research services provider, utilizing our OST-HER2 product candidate. The course of the trial involves a regimen of 16 infusions of OST-HER2 administered over 48 weeks to eligible patients from ages 12 to 39 years, of which 36 of 45 patients have already been enrolled. Enrollment remains ongoing and the Phase IIb trial is being conducted at major hospitals across 21 sites in 18 states. The primary outcome measures are the relative proportion of patients experiencing event-free (recurrence-free) survival at 12 months compared to historical controls by evaluating the patients for recurrence every 3 months, consistent with the standard of care. The secondary outcome measures are overall survival of patients for three years compared to the three-year overall survival of historical controls, which will be evaluated by assessing patients every three months over the course of three years, and the incidence of treatment-emergent adverse events as assessed by Common Terminology Criteria for Adverse Events (CTCAE) Grade 5, the safety of which will be assessed throughout the treatment period of 48 weeks with assessments of potential persistence of the vector every three months and continuing for three years after treatment. CTCAE is a method to categorize adverse events across all clinical trials of five grades, with Grade 5 being death. No CTCAE Grade 5 (death) treatment emergent results have been observed to date. The expected completion date of OST-HER2's Phase IIb clinical trial is late 2024. Our present statistical action plan does not anticipate an announcement of preliminary or topline data prior to our expected trial completion date in late 2024. Announcement of any data prior to trial completion is at the discretion of the independent lead principal investigator of the trial, in consultation with the Data Safety and Monitoring Committee, which is responsible for monitoring the trial's progress and ensuring that participant safety is maintained.

We plan to submit a new drug application (NDA) with the FDA for approval to market the drug candidate following the completion of the Phase IIb clinical trial if there is sufficiently positive endpoint data from such trial supporting the safety and efficacy of the drug candidate. We expect that it will take six to eight months from the completion of the Phase IIb clinical trial, subject to the receipt of sufficiently positive endpoint data, to compile and file the NDA with the FDA for marketing approval. The FDA generally takes six to ten months to complete its review of an NDA, subject to any FDA request for additional information. We believe that it remains uncertain whether a Phase III clinical trial will be necessary for the advancement of OST-HER2 through the regulatory approval process. We will not know whether a Phase III trial will be required until we receive a determination from the FDA following the filing of an NDA for marketing approval as to whether the results of our ongoing Phase IIb trial provided sufficiently positive endpoint data.

Phase Ib Clinical Trial. From September 2015 to May 2017, a Phase Ib trial to treat Osteosarcoma in humans was sponsored and conducted by Advaxis, Inc. (now Ayala Pharmaceuticals, Inc.) ("Advaxis") utilizing ADXS-HER2 (also known as ADXS31-164), the patents of which we in-license to develop and commercialize our lead core product candidate, OST-HER2. The Phase Ib was a multicenter, open-label, dose-escalation study designed to estimate the maximum tolerated dose (MTD) and determine the recommended Phase II dose of ADXS-HER2. The trial was conducted at hospitals in Colorado, Michigan, North Carolina, Pennsylvania and Texas. The course of the trial involved injecting 12 adult patients with HER2 expressing solid tumors with escalating doses of ADXS-HER2 every three weeks during a 12-week treatment cycle. Following the last dose of study treatment, all 12 patients participated in a three-year *Listeria monocytogenes* surveillance period. The primary outcome measures were the number of patients with dose-limiting toxicities for each dose level as assessed by the CTCAE Grade 4 (time frame: four months), with Grade 4 being life threatening, and the frequency and severity of adverse effects as assessed by CTCAE Grade 4 (time frame: three years). The secondary outcome measures were proportion of patients who have objective tumor response (complete or partial) evaluated by the Response Evaluation Criteria in Solid Tumors (RECIST) 1.1 and RECIST-based immune criteria (ir-RECIST), as well as changes in clinical immunology based upon serum, which were measured and evaluated by collection of peripheral blood for preparation of peripheral blood mononuclear cells and serum at baseline, prior to each treatment and post-treatment in the first treatment cycle only. The results of this study were primarily intended to describe the safety and tolerability of ADXS-HER2. This study was not intended to contribute to the evaluation of the effectiveness of ADXS-HER2 for the treatment of patients with a history of HER2 expressing tumors. Overall, the data presented from this Phase Ib trial demonstrated that ADXS-HER2 IV infusion at the dose of 1×10^9 CFU appeared to be well tolerated in 12 subjects treated and evaluable with no evidence of dose-limiting toxicities. No objective tumor responses (complete or partial) were observed in this late stage, heavily pre-treated patient cohort. Based on the data presented, the recommended Phase II dose of ADXS-HER2 was determined to be $1x10^9$ CFU as it was well tolerated.

Preclinical Animal Study. From July 2012 to September 2015, a preclinical study to treat Osteosarcoma in 18 companion canines (sometimes referred to as a Phase I animal trial) was sponsored and conducted by a previous licensee of Advaxis utilizing ADXS-HER2, the product candidate of Advaxis, from whom we in-license patents for ADXS-HER2 constructs that enable us to develop OST-HER2. The results showed, in the setting of minimal residual disease where there is a very small number of cancer cells remaining in the body during or after initial treatment, significant improvements in overall survival and metastatic disease progression when compared to an historical control group with Human Epidermal Growth Factor Receptor 2-positive (HER2) appendicular Osteosarcoma, a well-recognized spontaneous model for pediatric Osteosarcoma, treated with amputation and chemotherapy alone. In September 2016, the study results, published in the journal, Clinical Cancer Research, "Immunotherapy with a HER2-Targeting Listeria Induces HER2-Specific Immunity and Demonstrates Potential Therapeutic Effects in a Phase I Trial in Canine Osteosarcoma," by Mason, N. et al. (*https://pubmed.ncbi.nlm.nih.gov/26994144/*), indicated that ADXS-HER2 significantly increased the duration of survival time and one-, two- and three-year survival rates and significantly reduced the incidence of metastatic disease (the spread of cancer cells from an initial or primary site to a different or secondary site within the host's body) when compared with the historical control group. The overall survival rates at one, two and three years for dogs treated with ADXS-HER2 were 77.8%, 67% and 56%, respectively, compared to 55%, 28% and 22%, respectively, for the historical control group. The median survival time (MST) for the historical control group was 423 days, which was significantly shorter than the 956 days for ADXS-HER2–treated dogs (p=0.014, HR 0.33; 95% confidence intervals; CI, 0.136–0.802). The study also noted the important translational relevance of the findings for children with Osteosarcoma. This study for canine Osteosarcoma indications constituted preclinical work as it relates to our development of OST-HER2 to treat Osteosarcoma in humans.

In analyzing preclinical study results, a p-value is used to determine the probability as to whether the difference between two data sets is due to chance. The smaller the p-value, the more likely the differences are not due to chance alone. In general, if the p-value is less than or equal to 0.05, the outcome is considered statistically significant. The FDA's evidentiary standard of efficacy generally relies on a p-value of less than or equal to 0.05. A p-value greater than 0.05 is considered statistically non-significant. As shown above, the results of this preclinical study were statistically significant compared to the historical control group.

Following the study, an application for the use of ADXS-HER2, our OST-HER2, in the treatment of canine Osteosarcoma was submitted to the USDA. In December 2017, ADXS-HER2 was granted a conditional license by the USDA. Because we are the current licensee of ADXS-HER2 constructs, we hold the conditional license previously granted to ADXS-HER2 for OST-HER2. The conditional license allows for commercialization but limits the use of OST-HER2 to treat dogs, one year of age and older, diagnosed with Osteosarcoma. To receive full licensure, the USDA requires the submission of additional data that further describes the effects of OST-HER2 on metabolism and shedding in canines and provides substantial evidence of the safety, purity, potency and effectiveness of OST-HER2. We do not intend to pursue full licensure from the USDA at this time. We are considering potentially out-licensing OST-HER2 to animal health companies for the treatment of dogs diagnosed with Osteosarcoma, one year of age and older. In the event that we determine to out-license OST-HER2 to animal health companies, the animal health companies will be responsible for obtaining full licensure from the USDA for OST-HER2 in order to market and sell the product candidate for use in dogs with Osteosarcoma without any limitation.

Preclinical Development. Our OST-HER2 product candidate for breast, esophageal, lung and other solid tumor indications is currently in preclinical development. Whether additional preclinical trials will be required will depend on several factors, including the outcome of our ongoing Phase IIb clinical trial, the inclusion or exclusion of breast, esophageal, lung or other solid tumor indications in any follow-on study, or master protocol, to the Phase IIb clinical trial and the FDA's determination of whether the preclinical data is sufficient to support the safety and efficacy of the drug. Although we cannot be certain, we believe that OST-HER2 may not require additional preclinical development before progressing to human clinical trials for breast, esophageal, lung and other solid tumor indications if the results of our ongoing Phase IIb clinical trial have sufficiently positive endpoint data as determined by the FDA.

Our OST-TDC product candidate for all indications is also currently in preclinical development. We will need to conduct further preclinical trials for OST-TDC prior to the submission of an investigational new drug application (IND) in order to pursue clinical trials with these candidates. Such preclinical trials are expected to include pharmacokinetics and pharmacodynamics, two-week dose finding toxicology studies in vivo (on living cell lines or in living animals), as well as good laboratory practice (GLP) trials ensuring stability, potency and purity of the IND product candidate.

Our Technology Platform

We are in the process of building a fully integrated platform technology to accelerate the development of a range of product candidates across multiple therapeutic areas. Our platform technology is intended to leverage our management's in-depth experience in immunotherapy research, development and manufacturing to enable us to pursue multiple therapeutic targets. Our scientists and scientific advisors have accumulated decades of collective experience in the field of immunotherapy, oncology and small-molecule drug production, contributing key insights and significant achievement in our clinical development process.

Our Core Values

Our company's three core values are:

- ***Patient Impact.*** We care deeply about what we are building to change the future for patients. We are developing therapies for significant unmet medical need.
- ***Empowerment.*** We are all responsible for delivering on our mission to develop new medicines for patients: listen, speak up and engage.
- ***Collaboration.*** We know that we are better together and thrive when we challenge each other to find a better way for patients.

Our Growth Strategies

Our goal is to enrich and lengthen the lives of patients by being a leading, fully integrated biotechnology company. We are seeking to develop, manufacture and commercialize multiple product candidates targeting orphan and non-orphan oncologic diseases across multiple tissue types and therapeutic areas. To achieve our goal, we are pursuing the following growth strategies:

- Consider potentially out-licensing OST-HER2 to animal health companies for veterinary use to treat dogs diagnosed with Osteosarcoma, one year of age or older.
- Obtain marketing approval for OST-HER2 in Osteosarcoma, then quickly pivot to a master protocol within breast, esophageal, lung and other solid tumors where metastases express HER2 that could be targeted by immune cells.
- Conclude pre-clinical and toxicology trials with the lead drug candidate for OST-TDC (OST-TDC-A, Exatecan-silanol-FRa), and file for an investigational new drug application (IND) to initiate a Phase I trial in ovarian cancer and other folate receptor alpha overexpressing cancers like endometrial cancer and some osteosarcomas. We believe that positive results from preclinical two-week and good laboratory practice (GLP) toxicology studies may also stimulate potential out-licensing activity of SiLinker and CAPs drug products, while not limiting therapeutic development.
- Establish global commercial and medical affairs capabilities for OST-HER2 based therapies.

Expansion Opportunities

We believe opportunities may exist from time to time to expand our current business through acquisitions or in-licenses of complementary products or technologies or acquisitions of companies with complementary products or technologies. While we have current collaborative agreements in place, we believe in an opportunistic approach to collaboration and licensing; thus, we expect to operate in a manner that is customary in the pharmaceutical industry, including potential acquisitions and partnerships.

We are also aware of increased acquisition and licensing interest from large pharmaceutical firms in biotechnology companies developing antibody-drug conjugate, or ADC, technology as a relatively new kind of cancer therapy. In the article, "Seagen Cancer Therapy Draws Suitors" (March 7, 2023), The Wall Street Journal reported that driving this interest, according to analysts, is the potential for ADCs to capture a chunk of the worldwide cancer market. Technical advances by combining the ADCs with widely used cancer agents like immunotherapies have also opened up exploring various potential cancer applications, according to the article.

The expected use of the net proceeds from this offering for development of our current product candidates represents our intentions based upon our current plans and business conditions, which could change in the future as our plans and business conditions evolve. The amounts and timing of our actual expenditures may vary significantly depending on numerous factors, including the progress of our development, the status of, and results from, clinical trials and the potential need to conduct additional clinical trials to obtain approval of our product candidates for all intended indications, as well as any additional collaborations that we may enter into with third parties for our product candidates and any unforeseen cash needs. As a result, our management will retain broad discretion over the allocation of the net proceeds from this offering.

Based on our planned use of the net proceeds from this offering and our existing cash, we estimate that such funds will be sufficient to enable us to fund our operating expenses and capital expenditure requirements over the next 12 to 18 months. We have based this estimate on assumptions that may prove to be wrong, and we could use our available capital resources sooner than we currently expect.

Our Scientific Collaborations

Scientific Collaborators. We collaborate with experts and physicians to help advance our programs and, together, we are focused on translational strategies to support the clinical study of our new therapy candidates. These collaborations support our goals to translate deep expertise in structure-based drug design into a novel portfolio of precisely targeted therapies. We strive to address medical needs for patients with cancer harboring resistance mutations in driver kinases using technology originally developed at the University of Pennsylvania under the guidance of Dr. Robert G. Petit, our Chief Medical and Scientific Officer. Our partnering approach with physician-scientists allows us to understand the limitations of existing therapies, which we believe will lead to product candidates that address the dual needs of treatment resistance and kinase selectivity. OST-HER2's compositions and methods of use are covered by three granted U.S. utility patents and one granted Japanese patent that we in-license through our development license and supply agreement with Advaxis and were developed at the University of Pennsylvania and are owned by the University of Pennsylvania, either jointly with Advaxis or solely by the University. See "Our Licensing Agreements — Advaxis" and "Our Intellectual Property" below.

Scientific Advisory Board. We have established a scientific advisory board comprised of seven members with extensive experience in the field of oncology. Our scientific advisors include researchers who publish widely cited research on topics relevant to the study and treatment of cancer, lead clinical units at experienced precision medicine cancer centers in the United States and are actively involved in our drug development process and programs. Our scientific advisory board meets periodically with our board of directors and management to discuss matters relating to our business activities and to establish commercial business alliances. Members of our scientific advisory board are reimbursed by us for out-of-pocket expenses incurred in connection with serving on our advisory board.

Some of the members of our advisory board may serve as consultants under consulting agreements for which they will receive compensation. To date, however, none of our advisory board members have served as consultants to us and we have not entered into any consulting agreements with any of them. To our knowledge, none of our advisory board members has any conflict of interest between their obligations to us and their obligations to others. Hospitals and medical centers with which advisory board members are involved may in the future have commercial relationships with us.

Our scientific advisory board currently includes the following physicians and their professional affiliations:

- Nabil M. Ahmed, MD — Texas Children's Hospital
- Peter M. Anderson, MD — Cleveland Clinic
- Doug S. Hawkins, MD — Seattle Children's Hospital
- Meenakshi Hedge, MD — Texas Children's Hospital
- Alejandro Sweet-Cordero, MD — University of California San Francisco
- Brenda Weigel, MD — Masonic Cancer Center — University of Minnesota
- Felasfa M. Wodajo, MD — Inova Fairfax Hospital, Virginia

We have also established collaborations through service agreements with global CROs to provide scale and expertise in research chemistry, chemical manufacturing, biology, pharmacology and toxicology, and clinical studies.

Our Licensing Agreements

Advaxis. In November 2020, we entered into an amended and restated development, license and supply agreement with Advaxis, pursuant to which Advaxis granted a license to us that allows us to utilize Advaxis' ADXS-HER2 construct patents to develop and commercialize ADXS-HER2, our lead product candidate (OST-HER2). The agreement was subsequently amended in April 2021 to modify the payment amounts for Milestones 2 and 3 listed in the table below. Under the terms of the amended agreement, we are required to pay to Advaxis (i) a one-time, non-refundable payment of $1,550,000 (the "License Commencement Payment") and (ii) certain amounts based on the achievement of the milestones described in the payment schedule below. As of December 31, 2022, we paid to Advaxis a total of $2,925,000, consisting of (i) the License Commencement Payment for Milestone 1 and (ii) $1,375,000 for Milestone 2. Payments towards the License Commencement Payment have been recorded as licensing expenses in our Statement of Operations and Comprehensive Loss for the year ended December 31, 2021. We expect to achieve Milestone 3 in June 2024. The payment schedule for milestones and corresponding payment amounts is set forth below.

Milestone		Milestone Payment
1. OST has secured funding of at least $2,337,500, in the aggregate (paid)		License commencement payment:
	$	1,550,000
2. The earlier to occur of: (A) OST having secured at least $8,000,000, in the aggregate, or (B) completion of the first Clinical Trial (paid)	$	1,375,000
3. The earlier to occur of: (A) receipt of Regulatory Approval from the FDA for the First Indication of the first Licensed Product or (B) initiation of the first Registrational Trial of the first Licensed Product in the Field	$	5,000,000
4. Cumulative Net Sales of all Licensed Products in excess of $20,000,000	$	1,500,000
5. Cumulative Net Sales of all Licensed Products in excess of $50,000,000 Cumulative Net Sales of all Licensed Products	$	5,000,000
6. Cumulative Net Sales of all Licensed Products in excess of $100,000,000	$	10,000,000

All milestone payments are non-creditable and non-refundable and are due and payable upon the achievement of the milestone, regardless of any failure by us to provide notice to Advaxis of such achievement.

In addition to the payments upon achievement of the milestones listed in the above payment schedule, we are required to pay to Advaxis (i) a percentage in the high single digits to low double digits of (a) upfront sublicense fees or (b) clinical or regulatory milestone payment amounts, paid by a sublicensee to us in consideration of a sublicense grant to such sublicensee, and (ii) a quarterly royalty of a percentage in the high single digits to low double digits of net sales of our products containing the ADXS-HER2 constructs.

BlinkBio. In August 2020, we entered into a licensing agreement with BlinkBio, Inc., pursuant to which BlinkBio granted a license to us that allows us to utilize BlinkBio's proprietary technology to develop, manufacture and commercialize certain of our products. BlinkBio granted us an exclusive license for TDC's that are directed towards, binds to or modifies the folate receptor alpha and a co-exclusive license for TDC's that are directed towards, binds to or modifies any target other than the folate receptor alpha, such as HER2.

Under the terms of the agreement, we are required to pay to BlinkBio (i) an upfront, non-refundable, non-creditable license fee of $300,000 (the "Up-Front Fee"), (ii) a royalty of 6% of net sales of our products that were made using BlinkBio's proprietary technology, subject to potential reductions on such royalty, and (iii) certain amounts

based on the achievement of the milestones described in the payment schedule below. As of December 31, 2022, we have paid the Up-Front Fee. This payment has been recorded as licensing expenses in our Statement of Operations and Comprehensive Loss for the year ended December 31, 2021. The payment schedule for milestones and corresponding payment amounts is set forth below.

Milestone Bearing Event	Milestone Payment
1. License Fee to utilize proprietary technology (paid)	Up-front fee + $2.4 million Convertible Note
2. Commencement of a toxicology study commented pursuant to Good Laboratory Practices (under 21 CFR Part 58), such that any resulting positive data would be admissible to applicable Regulatory Authorities to support an IND (commonly referred to as "GLP-Tox")	$ 375,000
3. Completion of a Phase I Clinical Trial	$ 1,500,000
4. Completion of a Phase IIb Clinical Trial	$ 2,500,000
5. Filing of an NDA, BLA or MAA registration (or the equivalent in any other territory around the world)	$ 6,000,000
6. Regulatory Approval in the first of the United States, within the European Union or within the United Kingdom	$ 12,000,000

We are required to make the above cash payments to BlinkBio within 30 days of the achievement of each milestone with respect to the first product to attain each such milestone, except that the first milestone only applies to our first product candidate. The aggregate amount of payments relating to milestones 2 through 6 payable thereunder cannot exceed $22,375,000.

In connection with the license agreement, we also agreed to issue the BlinkBio Convertible Note. See "Management's Discussion and Analysis of Financial Condition and Results of Operations — Convertible Notes" for more information on the BlinkBio Convertible Note.

Our Research Services Agreement

George Clinical. In June 2020, we entered into a services agreement, as amended, with George Clinical, Inc., a clinical contract research organization. Pursuant to this agreement, we engaged George Clinical to use its clinical research services for our study entitled "An Open Label, Phase 2 Study of Maintenance Therapy with OST-HER2 after Resection of Recurrent Osteosarcoma." Under the terms of the agreement, we are required to pay to George Clinical certain fees described in the fee schedule below. The total budget under the agreement is approximately $2,436,604. As of December 31, 2022, we have paid the first two payments listed in the payment schedule below. These payments have been recorded as research and development expenses in our Statement of Operations and Comprehensive Loss for the year ended December 31, 2021. The fee schedule for certain fees and corresponding payment amounts is set forth below.

George Clinical Payment Schedule	Payment Amount
1. Service Fee Advance (paid)	$ 49,989
2. Service Fee Advance of $212,335 minus the amount already paid, plus PTC Fee Advance of $31,325 (paid)	$ 193,671
3. Statistics Fees – 35% on Electronic Data Capture (EDC) Go Live Date	$ 47,740
4. Statistics Fees – 35% on Development of SAP tables	$ 47,740
5. Statistics Fees – 30% on Final Analysis	$ 40,920
6. Service Fees – Remainder Due	Split monthly over course of study

Our Intellectual Property

Our commercial success depends in part on our ability and the ability of those third parties from whom we in-license patents to obtain and maintain intellectual property protection in the United States and other countries for our current or future product candidates, including our lead core product candidate OST-HER2, our other core product candidate OST-TDC, our non-core product candidates, our proprietary compound library and other know-how. We seek to protect our proprietary and intellectual property position by, among other methods, in-licensing patents and

patent applications in the United States and abroad related to our proprietary technology, inventions and improvements that are important to the development and implementation of our business. We also rely on trade secrets, know-how and continuing technological innovation to develop and maintain our proprietary and intellectual property position.

We do not currently own any issued patents. We in-license patents and patent applications related to our lead core product candidate OST-HER2 and our other core product candidate OST-TDC. The OST-HER2 product candidate and methods of use are covered by three granted U.S. utility patents and one granted Japanese patent, which is directed to non-human indications. The patents are expected to expire between 2030 and 2031, not including any patent term extension. There are 37 pending foreign patent applications in various jurisdictions, including without limitation China, the European Union, India, Hong Kong, Mexico, New Zealand and South Korea, which are expected to expire in 2035 if granted, not including any patent term extension. The OST-TDC product candidate is covered by five granted U.S. utility patents, one granted Australian patent and one granted Japanese patent. Of these granted patents, one U.S. utility patent, the Australian patent and the Japanese patent are for methods of use of silicon based drug conjugates. The other four U.S. utility patents are for silanol based therapeutic payloads. The patents are expected to expire between 2036 and 2037, not including any patent term extension. There are 16 pending foreign patent applications in various jurisdictions, including without limitation Australia, Canada, China, the European Union and Japan, that are expected to expire between 2036 and 2037, if granted, not including any patent term extension. These foreign patent applications are a combination of composition of matter patents for novel products and method of use patents for new uses of known products.

We also rely on trade secrets and know-how relating to our proprietary technology and product candidates and continuing innovation to develop, strengthen and maintain our proprietary position in the field of oncology. Our future plans also include reliance on data exclusivity, market exclusivity and patent term extensions when available.

The degree of patent protection we require to successfully commercialize our current or future product candidates may be unavailable or severely limited in some cases and may not adequately protect our rights or permit us to gain or keep any competitive advantage. We cannot provide any assurances that any of the patents that we in-license have, or that any of such pending patent applications that mature into issued patents will include, claims with a scope sufficient to protect OST-HER2 and OST-TDC or our other current or future product candidates. In addition, if the breadth or strength of protection provided by such patent applications or any patents we may in-license is threatened, it could dissuade companies from collaborating with us to license, develop or commercialize current or future product candidates.

Our ability to stop third parties from making, using, selling, offering to sell or importing products identical or similar to ours will depend on the extent to which we have rights under valid and enforceable patents, trade secrets or other intellectual property rights that cover these activities. The patent rights of biotechnology and pharmaceutical companies like ours are generally uncertain and can involve complex legal, scientific and factual issues. Our and any future licensor's current and future patent applications may not result in the issuance of any patent in any particular jurisdiction, and the claims of any current or future issued patents, even if those claims are valid and enforceable, may not provide sufficient protection from competitors. Any owned or in-licensed patent rights we may obtain may not enable us to prevent others from replicating, manufacturing, using or administering our product candidates for any indication. Moreover, the coverage initially claimed in a patent application may be significantly reduced before a patent is issued, and a patent's scope can be reinterpreted after issuance. In addition, any patent we may own or in-license may be challenged, circumvented or invalidated by third parties. As a result, we cannot ensure that any of our product candidates will be protected by valid and enforceable patents. See "Risk Factors — Risks Related to Our Intellectual Property" for a more comprehensive description of risks related to our intellectual property.

Our Commercialization Strategy

We intend to retain significant development and commercial rights to our product candidates and, if marketing approval is obtained, to commercialize our product candidates on our own, or potentially with a partner, in the United States and other regions. We currently have no sales, marketing or commercial product distribution capabilities. We intend to build the necessary infrastructure and capabilities over time for the United States, and potentially other regions, following further advancement of our product candidates. We believe that such a focused sales and marketing organization will be able to address the community of oncologists who are the key specialists in treating the patient populations for which our product candidates are being developed. Clinical data, the size of the addressable patient population and the size of the commercial infrastructure and manufacturing needs may all influence or alter our commercialization plans. The responsibilities of the marketing organization would include developing educational initiatives with respect to approved products and establishing relationships with researchers and practitioners in relevant fields of medicine.

Our Future Manufacturing

We do not own or operate, and currently have no plans to establish, any manufacturing facilities. We rely, and expect to continue to rely, on third parties for the manufacture of our product candidates for preclinical and clinical testing, as well as for commercial manufacturing if any of our product candidates obtain marketing approval. We also rely, and expect to continue to rely, on third parties to package, label, store and distribute our investigational product candidates, as well as our commercial products if marketing approval is obtained.

We believe that this strategy allows us to maintain a more efficient infrastructure by eliminating the need for us to invest in our own manufacturing facilities, equipment, and personnel while also enabling us to focus our expertise and resources on the development of our product candidates.

All of our product candidates are small molecules and are manufactured in synthetic processes from available starting materials. The chemistry appears amenable to scale-up and does not currently require unusual equipment in the manufacturing process. We expect to continue to develop product candidates that can be produced cost-effectively at contract manufacturing facilities.

Currently, the OST-HER2 active pharmaceutical ingredients (API) (e.g., clinical drug substance) are manufactured in accordance with GMPs. The drug product formulation is being developed with the goal of producing lyophilized therapeutics with consistent and immediate release dissolution profiles that can be reproducibly manufactured using automated equipment. All manufacturing activities for the OST-HER2 drug product are performed in accordance with GMPs. We currently rely on these vendors as single-source contract manufacturing organizations.

We are in the process of developing our supply chain for each of our product candidates and intend to put in place framework agreements under which third party Wacker Chemie AG, a chemical manufacturer, will generally provide us with necessary quantities of API and drug product on a project-by-project basis based on our development needs.

As we advance our product candidates through development, we will explore adding backup suppliers for the OST-TDC and drug product for each of our product candidates to protect against any potential supply disruptions.

We generally expect to rely on third parties for the manufacture of any companion diagnostics that we may develop.

Government Regulation

Our current or future product candidates and the activities associated with their development and commercialization, including their design, testing, manufacture, safety, efficacy, recordkeeping, labeling, storage, approval, advertising, promotion, sale, distribution, import and export are subject to comprehensive regulation by the FDA and other regulatory agencies in the United States and by comparable authorities in other countries.

Preclinical Studies and IND

The preclinical developmental stage generally involves laboratory evaluations of drug chemistry, formulation and stability, as well as studies to evaluate toxicity in animals, which support subsequent clinical testing. The sponsor must submit the results of the preclinical studies, together with manufacturing information, analytical data, any available clinical data or literature and a proposed clinical protocol, to the FDA as part of the IND. An IND is a request for authorization from the FDA to administer an investigational product to humans, and must become effective before human clinical trials may begin.

Preclinical studies include laboratory evaluation of product chemistry and formulation, as well as*in vitro* and animal studies to assess the potential for adverse events and in some cases to establish a rationale for therapeutic use. The conduct of preclinical studies is subject to federal regulations and requirements, including GLP regulations for safety/toxicology studies. An IND sponsor must submit the results of the preclinical tests, together with manufacturing information, analytical data, any available clinical data or literature, and plans for clinical trials, among other things, to the FDA as part of an IND. Some long-term preclinical testing, such as animal tests of reproductive adverse events and carcinogenicity, may continue after the IND is submitted. An IND automatically becomes effective 30 days after receipt by the FDA, unless before that time the FDA raises concerns or questions related to one or more proposed clinical trials and places the trial on clinical hold. In such a case, the IND sponsor and the FDA must resolve any outstanding concerns before the clinical trial can begin. As a result, submission of an IND may not result in the FDA allowing clinical trials to commence.

Clinical Trials

Clinical trials must be conducted: (i) in compliance with federal regulations; (ii) in compliance with good clinical practice ("GCP") an international standard intended to protect the rights and health of patients and to define the roles of clinical trial sponsors, investigators, and monitors; and (iii) under protocols detailing the objectives of the trial, the parameters to be used in monitoring safety, and the effectiveness criteria to be evaluated. Clinical trials are typically conducted at geographically diverse clinical trial sites and are designed to permit the FDA to evaluate the overall benefit-risk relationship of the drug and to provide adequate information for the labeling of the drug when considering whether a drug satisfies the statutory standard for commercialized. Clinical trials must be approved in the United States by an Institutional Review Board ("IRB"), an appropriately constituted group that has been formally designated to review and monitor biomedical research involving human subjects and which has the authority to approve, require modifications in, or disapprove research to protect the rights, safety and welfare of the human research subject. In other countries, clinical trials may be subject to review and approval by ethics boards similar to IRBs.

The FDA may order the temporary, or permanent, discontinuation of a clinical trial at any time, or impose other sanctions, if it believes that the clinical trial either is not being conducted in accordance with the FDA requirements or presents an unacceptable risk to the clinical trial patients. An IRB may also require the clinical trial it has approved to be halted, either temporarily or permanently, for failure to comply with the IRB's requirements, or may impose other conditions or sanctions.

The FDA's current good manufacturing practices (cGMPs) apply to drug product candidates in Phase II and Phase III clinical trials; thus, the product candidates in those trials must be manufactured in compliance with cGMPs.

Marketing Approval

Before we can commercialize any of our current or future product candidates, we must obtain marketing approval. We have not received approval to market any of our current product candidates. We expect to rely on third-party CROs and/or regulatory consultants to assist us in this process. Securing regulatory approval requires the submission of extensive preclinical and clinical data and supporting information to the various regulatory authorities for each therapeutic indication and line of treatment to establish the product candidate's safety and efficacy. Securing regulatory approval also requires the submission of information about the drug manufacturing process to, and further requires inspection of manufacturing facilities by, the relevant regulatory authority.

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

- nonclinical laboratory and, at times, animal tests;
- adequate and well-controlled human clinical trials to establish the safety and efficacy of the proposed drug for its intended use or uses;
- pre-approval inspection of manufacturing facilities and some clinical trial sites; and
- FDA approval of a new drug application ("NDA"), which must occur before a drug or biologic product can be marketed or sold.

We are not permitted to market our current or future product candidates until we receive approval of an NDA from the FDA in the United States or a marketing authorization application from the European Medicines Agency in the European Economic Area or until we receive approval of comparable agencies in other foreign countries.

Post-Market Requirements

If the FDA or a comparable foreign regulatory authority approves any of our current or future product candidates, the manufacturing processes, labeling, packaging, distribution, adverse event reporting, storage, advertising, promotion and recordkeeping for the drug will be subject to extensive and ongoing regulatory requirements. These requirements include submissions of safety and other post-marketing information and reports, registration, as well as continued compliance with cGMPs and Good Clinical Practices ("GCPs") for any clinical trials that we conduct post-approval. Any regulatory approvals that we receive for our current or future product candidates may also be subject to limitations on the approved indicated uses for which the drug may be marketed or to the conditions of approval, or contain requirements for potentially costly post-marketing testing, including Phase IV clinical trials,

and surveillance to monitor the safety and efficacy of the drug. Later discovery of previously unknown problems with a drug, including adverse events of unanticipated severity or frequency, or with our third-party manufacturers or manufacturing processes, or failure to comply with regulatory requirements, may result in, among other things:

- restrictions on the marketing or manufacturing of the drug, withdrawal of the drug from the market, or drug recalls;
- fines, warning or other letters or holds on clinical trials;
- refusal by the FDA to approve pending applications or supplements to approved applications filed by us, or suspension or revocation of drug license approvals;
- drug seizure or detention, or refusal to permit the import or export of drugs; and
- injunctions or the imposition of civil or criminal penalties.

In order to produce our product candidates for clinical trials and our products, if any, for commercial purposes, either at our own facility or at a third-party's facility, we and our third party vendors will need to comply with the FDA's cGMP regulations and guidelines. As part of our ongoing quality and process improvement efforts, we conducted a gap analysis of our cGMP quality system and it identified certain key areas for necessary remediation, including with regard to documentation requirements. We are subject to inspections by the FDA and comparable foreign regulatory authorities to confirm compliance with applicable regulatory requirements.

Animal Health Products

Certain U.S. federal regulatory agencies are charged with oversight and regulatory authority of animal health products in the United States. These agencies, depending on the product and its intended use, may include the FDA, the U.S. Department of Agriculture ("USDA") and the U.S. Environmental Protection Agency ("EPA"). The FDA Center for Veterinary Medicine ("CVM") regulates animal pharmaceuticals under the Food, Drug and Cosmetics Act. The EPA is responsible for regulating pesticides, which include some products used for controlling pests and diseases in animals.

U.S. Department of Agriculture. The regulation of veterinary biologics is overseen by the USDA, specifically the USDA Animal and Plant Health Inspection Service ("APHIS") and the USDA Center for Veterinary Biologics ("CVB"). The APHIS and CVB are responsible for regulating veterinary vaccines and some biologics pursuant to the Virus-Serum-Toxin Act. The APHIS is responsible for protecting animal health by regulating the importation, interstate movement and environmental release of veterinary biologics. This includes overseeing the importation and exportation of veterinary biologics, issuing permits for the movement of these products across state lines, and regulating the release of genetically engineered veterinary biologics into the environment. The CVB is responsible for ensuring the safety, purity, potency and efficacy of veterinary biologics, including vaccines, diagnostics, and other biologics used in animals. The CVB evaluates the safety and efficacy of these products before granting them approval for use in animals. The CVB also oversees the manufacturing, testing, labeling and distribution of veterinary biologics and monitors their ongoing safety and effectiveness.

USDA Center for Veterinary Biologics. The CVB reviews and approves applications for veterinary biologics, including vaccines, immunomodulators, diagnostic kits and other biologic products. The CVB evaluates the safety, efficacy and quality of each product and grants licenses for products that meet the necessary regulatory requirements. The licensure process for veterinary biologics involves several key steps, including:

- Pre-License Evaluation. Before a veterinary biologic can be licensed, the manufacturer must submit an application to the CVB. The CVB reviews the application and evaluates the data on the product's safety, efficacy and quality. This evaluation may include laboratory studies, field studies and other relevant information.
- Licensing Decision. Based on its evaluation, the CVB may grant a license for the product or require additional data or studies before making a final decision. If the CVB determines that the product meets all necessary regulatory requirements, it grants a license for the product.
- Labeling. Once a product is licensed, the manufacturer must submit labeling for the product to the CVB for approval. The labeling must include specific information on the product's indications, dosage, administration, contraindications and warnings.

- Manufacturing Standards. The CVB establishes and enforces manufacturing standards for veterinary biologics, including requirements for facilities, equipment and procedures. The CVB conducts inspections of manufacturing facilities to ensure compliance with these standards and may revoke licenses for manufacturers that fail to comply.
- Post-Licensure Surveillance. The CVB monitors veterinary biologics after they are licensed to detect and respond to any safety or efficacy issues that may arise. The CVB may require manufacturers to conduct post-licensure surveillance studies or to report adverse events associated with their products.

Conditional licenses are used to meet an emergency condition, limited market, local situation or other special circumstance. A product may be granted a conditional license if it has demonstrated a reasonable expectation of efficacy and safety, but additional data is needed to fully evaluate its efficacy and safety. To be eligible for conditional licensure, a veterinary biologic must meet certain regulatory criteria, including:

- the product must be intended for use in a target species for which there is a significant need;
- the product must have demonstrated a reasonable expectation of efficacy and safety based on preclinical and/or field studies;
- the product must have an acceptable safety profile; and
- the manufacturer must submit a plan for follow-up studies to address the data gaps or uncertainties identified during the evaluation process.

A product with conditional licensure can be marketed and sold, but it must be labeled with specific conditions, such as limitations on use, required follow-up studies and other specific instructions for use. The product label must also clearly state that the product has been conditionally licensed and that additional data is required to fully evaluate its efficacy and safety. The manufacturer must continue to collect data on the safety and efficacy of the product and submit it to the CVB for review. The CVB may require additional studies or data to be submitted before granting full licensure. To obtain full licensure for a veterinary biologic product that has been granted conditional licensure by the CVB, the manufacturer must meet the follow-up study requirements specified in the conditional license and submit additional data to the CVB demonstrating the safety and efficacy of the product, which may include results from additional studies, post-marketing surveillance data and other relevant information.

In addition to granting licenses, the CVB is responsible for establishing and enforcing manufacturing standards for veterinary biologics, including requirements for facilities, equipment, and procedures. The CVB conducts inspections of manufacturing facilities to ensure compliance with these standards and may revoke licenses for manufacturers that fail to comply. The CVB also monitors veterinary biologics after they are marketed to detect and respond to any safety or efficacy issues that may arise. The CVB may require manufacturers to conduct post-marketing surveillance studies or to report adverse events associated with their products.

Other Healthcare Laws

Although we do not currently have any drugs on the market, if we begin commercializing our current or future product candidates, we will be subject to additional healthcare statutory and regulatory requirements and enforcement by the federal government and the states and foreign governments in which we conduct our business. Healthcare providers, including physicians, play a primary role in the recommendation and prescription of any current or future product candidates for which we obtain marketing approval. Our future arrangements with healthcare providers, as well as third-party payors and other customers, may expose us to broadly applicable fraud and abuse and other healthcare laws and regulations that may constrain the business or financial arrangements and relationships through which we market, sell and distribute our current or future product candidates for which we obtain marketing approval. Restrictions under applicable federal and state healthcare laws and regulations, include the following:

Anti-Kickback Statute. The Anti-Kickback Statute prohibits, among other things, persons from knowingly and willfully soliciting, offering, receiving or providing remuneration, directly or indirectly, in cash or in kind, to induce or reward either the referral of an individual for, or the purchase, order or recommendation of, any good or service, for which payment may be made under federal and state healthcare programs such as Medicare, Medicaid and TRICARE.

False Claims Act. The False Claims Act imposes criminal and civil penalties, including through civil whistleblower or qui tam actions, against individuals or entities for knowingly presenting, or causing to be presented, to the federal government, claims for payment that are false or fraudulent or making a false statement to avoid, decrease or conceal an obligation to pay money to the federal government. In addition, manufacturers can be held liable under the False Claims Act even when they do not submit claims directly to government payors if they are deemed to "cause" the submission of false or fraudulent claims. The government may assert that a claim including items and services resulting from a violation of the federal Anti-Kickback Statute constitutes a false of fraudulent claim for purposes of the False Claims Act.

Analogous State Laws. Analogous state laws and regulations, such as state anti-kickback and false claims laws that may apply to sales or marketing arrangements and claims involving healthcare items or services reimbursed by non-governmental third-party payors, including private insurers; and some state laws require pharmaceutical companies to comply with the pharmaceutical industry's voluntary compliance guidelines and the relevant compliance guidance promulgated by the federal government in addition to requiring drug manufacturers to report information related to payments to physicians and other health care providers or marketing expenditures.

Healthcare Reform

The United States and many foreign jurisdictions have enacted or proposed legislative and regulatory changes affecting the healthcare system. Changes in regulations, statutes or the interpretation of existing regulations could impact our business in the future by requiring, for example, (i) changes to our manufacturing arrangements, (ii) additions or modifications to product labeling, (iii) the recall or discontinuation of our products or (iv) additional record-keeping requirements. If any such changes were to be imposed, they could adversely affect the operation of our business.

In the United States, there have been and continue to be a number of legislative initiatives to contain healthcare costs. For example, in March 2010, the Affordable Care Act, or the ACA, was passed, which substantially changed the way healthcare is financed by both governmental and private insurers, and significantly impacted the U.S. pharmaceutical industry. The ACA, among other things, subjects biological products to potential competition by lower-cost biosimilars, addresses a new methodology by which rebates owed by manufacturers under the Medicaid Drug Rebate Program are calculated for drugs that are inhaled, infused, instilled, implanted or injected, increases the minimum Medicaid rebates owed by manufacturers under the Medicaid Drug Rebate Program and extends the rebate program to individuals enrolled in Medicaid managed care organizations, establishes annual fees and taxes on manufacturers of certain branded prescription drugs, and creates a new Medicare Part D coverage gap discount program, in which manufacturers must agree to offer 70% (increased pursuant to the Bipartisan Budget Act of 2018, effective as of 2019) point-of-sale discounts off negotiated prices of applicable brand drugs to eligible beneficiaries during their coverage gap period, as a condition for the manufacturer's outpatient drugs to be covered under Medicare Part D.

There has been increasing legislative and enforcement interest in the United States with respect to specialty drug pricing practices. Specifically, there have been several recent U.S. Congressional inquiries and proposed federal and state legislation 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. In May 2019, CMS issued a final rule to allow Medicare Advantage Plans the option of using step therapy, a type of prior authorization, for Part B drugs beginning January 1, 2020. This final rule codified CMS's policy change that was effective January 1, 2019.

On September 24, 2020, the FDA released a final rule effective November 30, 2020, providing guidance for states to build and submit importation plans for drugs from Canada.

The Inflation Reduction Act ("IRA") was passed into law on August 16, 2022. The drug pricing reform section of the IRA represents a sweeping change with respect to how the Medicare program will pay for prescription drugs in the future. The IRA drug pricing provisions will be phased in by 2029. Medicare will negotiate a "maximum fair price" directly with manufacturers for the most expensive drugs covered under Medicare Part B and Medicare Part D. In addition, additional rebates will be imposed on manufacturers related to certain Medicare Part B and D covered drugs to the extent their costs are rising faster than inflation. In addition, the Part D benefit will be restructured and in 2025 the existing coverage gap discount program, in which manufacturers must agree to offer 70% (increased pursuant to the Bipartisan Budget Act of 2018, effective as of 2019) point-of-sale discounts off negotiated prices of applicable brand drugs to eligible beneficiaries during their coverage gap period, as a condition for the manufacturer's outpatient drugs to be covered under Medicare Part D will sunset. The program will be replaced by a new Part D rebate program pursuant to which manufacturers of

certain drugs will pay a rebate of 10 percent off the negotiated price for applicable drugs (branded drugs and biologics manufactured by companies that have Part D discount agreements) after the deductible is satisfied through the catastrophic phase of the benefit. In the catastrophic phase, manufacturers will provide a 20 percent discount off negotiated price.

At the state level, individual states are increasingly aggressive in passing legislation and implementing regulations designed to designed to create prescription drug price transparency and in some instances control pharmaceutical and biological product pricing or set maximum reimbursement for certain drug products, and, in some cases, designed to encourage importation from other countries and bulk purchasing. In addition, regional health care authorities and individual hospitals are increasingly using bidding procedures to determine what pharmaceutical products and which suppliers will be included in their prescription drug and other health care programs. These measures could reduce the ultimate demand for our products, once approved, or put pressure on our product pricing.

There have been, and likely will continue to be, legislative and regulatory proposals at the foreign, federal and state levels directed at broadening the availability of healthcare and containing or lowering the cost of healthcare.

Privacy and Data Protection Laws

HIPAA. The federal Health Insurance Portability and Accountability Act of 1996 ("HIPPA") imposes criminal and civil liability for executing a scheme to defraud any healthcare benefit program, or knowingly and willfully falsifying, concealing or covering up a material fact or making any materially false statement in connection with the delivery of or payment for healthcare benefits, items or services; similar to the federal Anti-Kickback Statute, a person or entity does not need to have actual knowledge of the statute or specific intent to violate it in order to have committed a violation.

HITECH. HIPAA, as amended by the Health Information Technology for Economic and Clinical Health Act of 2009 ("HITECH") and its implementing regulations, which also imposes obligations on certain covered entity healthcare providers, health plans, and healthcare clearinghouses as well as their business associates that perform certain services involving the use or disclosure of individually identifiable health information, including mandatory contractual terms, with respect to safeguarding the privacy, security and transmission of individually identifiable health information. 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.

GDPR. The EU General Data Protection Regulation ("GDPR") also confers a private right of action on data subjects and consumer associations to lodge complaints with supervisory authorities, seek judicial remedies, and obtain compensation for damages resulting from violations of the GDPR. In addition, the GDPR includes restrictions on cross-border data transfers. The GDPR may increase our responsibility and liability in relation to personal data that we process where such processing is subject to the GDPR, and we may be required to put in place additional mechanisms to ensure compliance with the GDPR, including as implemented by individual countries. Compliance with the GDPR is a rigorous and time-intensive process that may increase our cost of doing business or require us to change our business practices, and despite those efforts, there is a risk that we may be subject to fines and penalties, litigation, and reputational harm in connection with our European activities. Further, the United Kingdom's decision to leave the European Union, referred to as Brexit, has created uncertainty with regard to data protection regulation in the United Kingdom. In particular, it is unclear how data transfers to and from the United Kingdom will be regulated now that the United Kingdom has left the European Union.

CCPA. California recently enacted and has proposed companion regulations to the California Consumer Privacy Act ("CCPA") which went into effect January 1, 2020. The CCPA creates new individual privacy rights for California consumers (as defined in the law) and places increased privacy and security obligations on entities handling personal data of consumers or households. The CCPA requires covered companies to provide certain disclosures to consumers about its data collection, use and sharing practices, and to provide affected California residents with ways to opt-out of certain sales or transfers of personal information. As of March 28, 2020, the California State Attorney General has proposed varying versions of companion draft regulations which are not yet finalized. Despite the delay in adopting regulations, the California State Attorney General will commence enforcement actions against violators beginning July 1, 2020. While there is currently an exception for protected health information that is subject to HIPAA and clinical trial regulations, other records and information we maintain on our customers may be subject to the CCPA. Where state laws are more protective than HIPAA, we must comply with the state laws we are subject to, in addition to HIPAA. In certain cases, it may be

necessary to modify our planned operations and procedures to comply with these more stringent state laws. Not only may some of these state laws impose fines and penalties upon violators, but also some, unlike HIPAA, may afford private rights of action to individuals who believe their personal information has been misused. In addition, state laws are changing rapidly, and there is discussion of a new federal privacy law or federal breach notification law, to which we may be subject.

Environmental Regulations

Our operations, properties and products are subject to a variety of U.S. and foreign environmental laws and regulations governing, among other things, use of manufacturing components containing substances below established threshold, air emissions, wastewater discharges, management and disposal of hazardous and non-hazardous materials and waste and remediation of releases of hazardous materials. Our operations involve the use of hazardous and flammable materials, including chemicals and biological and radioactive materials. Our operations also produce hazardous waste products. We generally contract with third parties for the disposal of these materials and wastes.

The use of hazardous substances is regulated and monitored by various environmental regulatory authorities such as the EPA. As such, we are subject to national, state and local laws, regulations and directives pertaining to hazardous substances, pollution and protection of the environment, health and safety, which govern, among other things, emissions to the air, discharges onto land or waters, the maintenance of safe conditions in the workplace, and the generation, handling, storage, transportation, treatment and disposal of waste materials. These laws include, without limitation, the Comprehensive Environmental Response, Compensation, and Liability Act, the Federal Facilities Compliance Act, the Hazardous Materials Transportation Act, and the Resource Conservation and Recovery Act.

Pricing Regulations and Third-Party Coverage and Reimbursement

The regulations that govern regulatory approvals, pricing and reimbursement for new drugs vary widely from country to country. Some countries require approval of the sale price of a drug before it can be marketed. In many countries, the pricing review period begins after marketing approval is granted. In some foreign markets, prescription pharmaceutical pricing remains subject to continuing governmental control even after initial approval is granted. As a result, we might obtain marketing approval for a product candidate in a particular country, but then be subject to price regulations that delay our commercial launch of the product candidate, possibly for lengthy time periods.

Our ability to commercialize any current or future product candidates successfully also will depend in part on the extent to which coverage and reimbursement for these current or future product candidates and related treatments will be available from government authorities, private health insurers and other organizations. Government authorities and other third-party payors, such as private health insurers and health maintenance organizations, decide which medications they will pay for and establish reimbursement levels. Factors payors consider in determining reimbursement are based on whether the product is:

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

A primary trend in the U.S. healthcare industry and elsewhere is cost containment. Government authorities and other third-party payors have attempted to control costs by limiting coverage and the amount of reimbursement for particular drugs. Increasingly, third-party payors are requiring that drug companies provide them with predetermined discounts from list prices and are challenging the prices charged for drugs. Reimbursement may impact the demand for, or the price of, any product candidate for which we obtain marketing approval.

There may be significant delays in obtaining reimbursement for newly approved drugs, and coverage may be more limited than the purposes for which the drug is approved by the FDA or similar regulatory authorities outside the United States. Moreover, eligibility for reimbursement does not imply that any drug will be paid for in all cases or at a rate that covers our costs, including research, development, manufacture, sale and distribution. Interim reimbursement levels for new drugs, if applicable, may also not be sufficient to cover our costs and may not be made permanent. Reimbursement rates may vary according to the use of the drug and the clinical setting in which it is used, may be based on

reimbursement levels already set for lower cost drugs and may be incorporated into existing payments for other services. Net prices for drugs may be reduced by mandatory discounts or rebates required by government healthcare programs or private payors and by any future relaxation of laws that presently restrict imports of drugs from countries where they may be sold at lower prices than in the United States. In the United States, the principal decisions about coverage and reimbursement of new medicines under the Medicare program are typically made by the Centers for Medicare & Medicaid Services ("CMS") an agency within the U.S. Department of Health and Human Services, or HHS. CMS decides whether and to what extent a new medicine will be covered and reimbursed under Medicare Third-party payors often rely upon Medicare coverage policy and payment limitations in setting their own reimbursement policies.

Trade Laws

Among other matters, U.S. and foreign anti-corruption, anti-money laundering, export control, sanctions, and other trade laws and regulations, which are collectively referred to as Trade Laws, prohibit companies and their employees, agents, clinical research organizations, legal counsel, accountants, consultants, contractors, and other partners from authorizing, promising, offering, providing, soliciting, or receiving directly or indirectly, corrupt or improper payments or anything else of value to or from recipients in the public or private sector. Violations of Trade Laws can result in substantial criminal fines and civil penalties, imprisonment, the loss of trade privileges, debarment, tax reassessments, breach of contract and fraud litigation, reputational harm, and other consequences. We have, or may have in the future, direct or indirect interactions with officials and employees of government agencies or government-affiliated hospitals, universities, and other organizations. We plan to engage third parties for clinical trials and/or to obtain necessary permits, licenses, patent registrations, and other regulatory approvals and we can be held liable for the corrupt or other illegal activities of our personnel, agents, or partners, even if we do not explicitly authorize or have prior knowledge of such activities.

Our Competition

While we are not aware of any competing adjuvant therapy for Osteosarcoma to be tested in children that is further along in the development process than OST-HER2, there are a large number of companies developing or marketing treatments for rare diseases and cancers, including many major pharmaceutical and biotechnology companies. We may face competition from other product candidates in development for these indications, including product candidates in development from AstraZeneca, Y-mAbs Therapeutics and MD Anderson Cancer Center, among others.

Human Capital and Employees

As of April 24, 2023, we had three full-time employees, one part-time employee and an executive consultant. We also utilize the services of a limited number of consultants as needed to perform specialized regulatory and medical-related services. Our employees are not represented by labor unions or covered by collective bargaining agreements. We consider our relationship with our employees to be good. All of our employees have entered into agreements with our company requiring them not to disclose our proprietary information and assigning to us all rights to inventions made during their employment.

Facilities

We lease approximately 8,115 square feet of office space for our principal executive office located in Rockville, Maryland. We currently pay $1,000 per month in rent and the lease expires in December 2023. We believe our present office space is adequate for our current operations and for near-term planned expansion.

Legal Proceedings

We are not currently a party to any pending or threatened legal proceedings.

MANAGEMENT

Our Directors and Executive Officers

The following table sets forth the name, age and position of each of our executive officers and directors as of April 24, 2023.

Name	Age	Position
Executive Officers:		
Paul A. Romness, MPH	57	Founder, President, Chief Executive Officer and Director
Robert G. Petit, Ph.D.	63	Chief Medical Officer and Chief Scientific Officer
Alan A. Musso	61	Chief Financial Officer
Non-Executive Directors:		
Colin Goddard, Ph.D.	63	Chairman of the Board
Joacim Borg	32	Director
John Ciccio	43	Director
Theodore F. Search, Pharm.D.	41	Director

The principal occupations for the past five years of each of our executive officers and non-executive directors are as follows:

Executive Officers

Paul A. Romness, MPH. Mr. Romness has served as our President, Chief Executive Officer and a member of our Board since he founded our company in April 2018. Through his research, Mr. Romness has grown OS Therapies into a clinical research and development biotechnology company with two platform technologies, including the initial OST-HER2 *Listeria monocytogenes*, as well as OST-TDC, a next generation tunable drug conjugate delivery system. Prior to founding our company, Mr. Romness served as a Principal for PR Strategies from 2014 to March 2018. Prior to PR Strategies, Mr. Romness served as the Vice President of Government Affairs and Public Policy at Boehringer Ingelheim from 2008 to 2014, and the Director of State Government Affairs at Amgen Inc. from March 2005 to March 2008. Earlier in his career, Mr. Romness served in several roles at Johnson & Johnson from March 1990 to March 2003. Mr. Romness holds a Masters of Public Health from the Milken Institute School of Public Health of George Washington University and a B.S. degree in Finance from American University. As our founder, President, Chief Executive Officer, a director and largest stockholder, Mr. Romness leads our company. His more than 25 years of experience in the biopharmaceutical industry, day-to-day operational leadership of our company and in-depth knowledge of our product candidates and platform technologies make him well qualified as a member of our Board.

Robert G. Petit, Ph.D. Dr. Petit has served as our Chief Medical Officer and Chief Scientific Officer since September 2019. Dr. Petit has also served as Principal for RGP Biotech, LLC, where he advises clients on non-clinical and clinical development programs, since June 2019, and Senior Vice President, Head of Early Clinical Development for Orionis Biosciences Inc., an early stage drug discovery and development biotech company, since March 2022. Dr. Petit currently serves as the Chairman of the Scientific Advisory Board of Advaxis, Inc. (now Ayala Pharmaceuticals, Inc.), where he previously served as the Chief Scientific Officer and Executive Vice President from March 2013 to June 2019. He is also a member of the scientific advisory boards of Systems Oncology, LLC, a cancer therapy discovery and development company, and Saros Therapeutics, an early-stage biotech company committed to re-engineering innate immune activation to improve cancer immunotherapy. From June 2019 to December 2019, Dr. Petit served as the Chief Scientific Officer of Carisma Therapeutics, Inc., a biotechnology company that develops novel chimeric antigen receptor macrophage technology to treat solid tumors. Prior to joining Advaxis as Chief Scientific Officer, Dr. Petit served in various roles for Bristol-Myers Squibb, including U.S. Medical Strategy Lead, Director of Medical Strategy for New Oncology Products and Director of Global Clinical Research, from 2005 to 2010. Prior to joining Bristol-Myers Squibb, Dr. Petit served as Vice President of Clinical Development at MGI Pharma Inc. and Aesgen Inc. Dr. Petit is an accomplished biopharmaceutical executive and medical scientist who has been instrumental in securing FDA approvals for six new drug applications and biologic license applications for oncology and immunotherapy product candidates and is named in more than 100 patents. His scientific focus has been to develop immunologic based therapies with a particular emphasis on immunologic oncology treatment. Dr. Petit has provided expert guidance and

counsel to a multitude of emerging biotech companies in the fields of immunology and oncology as a member of their respective scientific advisory boards. He earned his Ph.D. from the Ohio State University College of Medicine and B.S. degree from Indiana State University.

Alan A. Musso. Mr. Musso has served as our Chief Financial Officer since March 1, 2023. Mr. Musso has more than 30 years of experience as a financial executive with biopharma and life sciences companies. Prior to being an independent consultant in the biotech industry from October 2022 through February 2023, Mr. Musso served as the Chief Financial Officer of ReViral, a privately held, clinical-stage biopharmaceutical company that was acquired in June 2022 by Pfizer Inc., from October 2019 to September 2022. He served as the Chief Financial Officer and Treasurer of Peloton Therapeutics, an oncology drug discovery and development company, from September 2018 to September 2019, and Chief Financial Officer and Treasurer of Bellicum Pharmaceuticals, Inc., a developer of controllable cellular immunotherapies for cancers, from November 2014 to August 2018. He previously acted as Senior Vice President — Finance and Administration, Chief Financial Officer and Treasurer of Targacept, Inc., a developer of therapeutics for diseases of the nervous system, from February 2002 to November 2014, Vice President and Chief Financial Officer of Osiris Therapeutics, Inc., a stem cell technology company, from February 2001 to February 2002, Chief Financial Officer of Cato Holding Company, doing business as Cato Research Ltd., a holding company providing contract research services, from April 1997 to February 2001, and Chief Financial Officer of Vascular Genetics Inc., a gene therapy company co-founded by Cato Holding Company, from October 1997 to February 2000, Director of Finance and Accounting of Duramed Pharmaceuticals, Inc., a manufacturer of pharmaceutical products, from January 1995 to March 1997, General Accounting Manager of Pfizer Pharmaceuticals Inc. from September 1992 to December 1994, and Senior Auditor, Corporate Internal Audit of Pfizer Inc. from April 1989 to August 1992. Mr. Musso holds certifications as a certified public accountant and certified management accountant. He received a B.S. degree from St. Mary's College of California and a Master of International Management degree from Thunderbird School of Global Management.

Non-Executive Directors

Colin Goddard, Ph.D. Dr. Goddard has served as our Chairman of the Board since December 2020. Dr. Goddard is currently the Chairman and Chief Executive of BlinkBio, Inc., a privately-held developer of drug conjugate therapies designed to facilitate the treatment of cancer. Prior to joining our Board, Dr. Goddard also served, and continues to serve, on the board of directors of other cancer research focused companies such as Mission Therapeutics, FoRx Therapeutics AG, HiberCell and Ryvu Therapeutics since July 2010. Prior to July 2010, Dr. Goddard served as the Chief Executive Officer and a director of OSI Pharmaceuticals, Inc., a developer of molecular targeted therapies, from January 1989 to July 2010, when it was acquired by Astellas Pharma for $4.0 billion. Dr. Goddard has more than ten publications and was an inductee of the Long Island Technology Hall of Fame in 2013. Dr. Goddard has a Ph.D. in Cancer Pharmacology from the University of Aston and a BSc. degree in Biochemistry from the University of York, in England. Dr. Goddard's in-depth knowledge of the biotechnology market, the broad range of companies in the industry and his service as a board member in many early-stage and growth biotech companies makes him well qualified as a member of our Board. His experience with OSI Pharmaceuticals in particular, makes his input invaluable to our Board's discussions of our company's capital markets activities, mergers and acquisitions, and technology licensing.

Joacim Borg. Mr. Borg has served as a member of our Board since July 2022. Mr. Borg has worked at Index Investment Group, serving as the Chief Marketing Officer, where he strategizes and spearheads companies' marketing and branding, as well as their development projects and subsidiary investments, since 2013. Additionally, Mr. Borg is the Founder and Chief Executive Officer of Wavelength, a commercial marketing and media company, since 2016. Mr. Borg holds a B.S. degree in Managerial Economics and Liberal Studies in Global Perspectives from Bentley University. Mr. Borg's experience in marketing, promotion and social media makes him well qualified to be a member of our Board.

John Ciccio. Mr. Ciccio has served as a member of our Board since December 2020. Mr. Ciccio has served as the Chief Operating Officer of Syneos Health, Inc. (Nasdaq: SYNH), a leading fully integrated biopharmaceutical solutions organization built to accelerate customer success, since July 2022. Prior to joining Syneos Health, Mr. Ciccio served as the President and Chief Executive Officer of Adheris Health from 2019 to July 2022 and the President and a member of the board of managers of Skipta LLC from 2014 to 2018, where he played a critical role in Skipta's sale to Informa PLLC. Mr. Ciccio has also served as a member of the board of directors of Full Code Medical Simulation since March 2022. In 2018, Mr. Ciccio was awarded the PharmaVOICE 100 — Commanders & Chiefs and the PM360 ELITE 100 as a Transformational Leader. Mr. Ciccio holds a B.A. degree in Government from Harvard University. Mr. Ciccio is well qualified to serve as a director of our company due to his substantial knowledge and years of working experience in the biotechnology and pharmaceutical industry and with growth-stage companies.

Theodore F. Search, Pharm.D., R.Ph. Dr. Search has served as a member of our Board since December 2020. Dr. Search is the Founder of Skipta, an Informa Pharma Intelligence Company, and served as the Chief Executive Officer and Chairman of Skipta from 2009 to 2017, when Skipta was sold to Informa Health. Since the completion of the sale in 2017, Dr. Search has served as the Chief Executive Officer — RWD Intelligence of Norstella, a provider of pharmaceutical consultancy services and solutions. Dr. Search has been invited to speak at various conferences around the globe and was named among the Top 100 Most Inspiring People in the Life Sciences Industry in 2015 and among the Top 100 Elite Entrepreneurs in the pharmaceutical and healthcare industry in 2016. Dr. Search holds a Doctor of Pharmacy degree from the University of Pittsburgh and is a board licensed Pharmacist in the Commonwealth of Pennsylvania. Dr. Search provides decades of experience in leading and managing technology and product development operations in the pharmaceutical industry and with early-stage companies, making him well qualified to be a member of our Board.

Composition of Our Board of Directors

Our board consists of five members, each of whom are members pursuant to the board composition provisions of our certificate of incorporation and agreements with our stockholders. Our third amended and restated certificate of incorporation will become effective prior to the effectiveness of this offering. Such agreements with our stockholders will terminate upon the effectiveness of this offering. Thus, upon closing of this offering, there will be no further contractual obligations regarding the election of our directors. Our Nominating and Corporate Governance Committee and our board may therefore consider a broad range of factors relating to the qualifications and background of nominees.

Our Nominating and Corporate Governance Committee's and our board's priority in selecting board members is identification of persons who will further the interests of our stockholders through their established record of professional accomplishment, the ability to contribute positively to the collaborative culture among board members, knowledge of our business, understanding of the competitive landscape, professional and personal experiences, and expertise relevant to our growth strategy. Our directors hold office until their successors have been elected and qualified or until the earlier of their resignation or removal. Our third amended and restated certificate of incorporation and our amended and restated bylaws that will become effective prior to the effectiveness of this offering also provide that our directors may be removed with or without cause by the affirmative vote of the holders of at least two-thirds of the votes that all our stockholders would be entitled to cast in an annual election of directors, and that any vacancy on our board of directors, including a vacancy resulting from an enlargement of our board of directors, may be filled only by vote of a majority of our directors then in office.

Director Independence

Our board of directors has determined that all members of the board of directors, except Paul A. Romness and Colin Goddard, Ph.D., are independent directors, including for purposes of the rules of the NYSE American and the SEC. In making such independence determination, our board of directors considered the relationships that each non-executive director has with us and all other facts and circumstances that our board of directors deemed relevant in determining their independence, including the beneficial ownership of our capital stock by each non-executive director. In considering the independence of the directors listed above, our board of directors considered the association of our directors with the holders of more than 5% of our outstanding common stock. Upon the completion of this offering, we expect that the composition and functioning of our board of directors and each of our committees will comply with all applicable requirements of the NYSE American exchange, as applicable and the rules and regulations of the SEC. There are no family relationships among any of our directors or executive officers. Mr. Romness is not an independent director under these rules because he is the current President and Chief Executive Officer of our company and largest stockholder. Dr. Goddard is not an independent director under these rules because he is the Chairman and Chief Executive Officer of BlinkBio, Inc., the company from whom we in-license proprietary technology to develop, manufacture and commercialize certain of our products.

Board Leadership Structure and Board's Role in Risk Oversight

Currently, the role of Chairman of the Board of Directors is separated from the role of Chief Executive Officer. Our Chief Executive Officer is responsible for recommending strategic decisions and capital allocation to the board of directors and to ensure the execution of the recommended plans. The Chairman is responsible for leading our board in its fundamental role of providing advice to and independent oversight of management. Our board of directors recognizes the time, effort, and energy that the Chief Executive Officer is required to devote to his position in the current business environment, as well as the commitment required to serve as our chairman, particularly as the

board of directors' oversight responsibilities continue to grow. While our amended and restated bylaws and corporate governance guidelines will not require that our Chairman and Chief Executive Officer positions be separate, our board of directors believes that having separate positions is the appropriate leadership structure for us at this time and demonstrates our commitment to good corporate governance.

Risk is inherent with every business, and how well a business manages risk can ultimately determine its success. We face a number of risks, including the four risks more fully discussed in the section entitled "Business" appearing elsewhere in this prospectus. Management is responsible for the day-to-day management of risks we face, while our board of directors, as a whole and through its committees, has responsibility for the oversight of risk management. In its risk oversight role, our board of directors has the responsibility to satisfy itself that the risk management processes designed and implemented by management are adequate and functioning as designed.

The role of the board of directors in overseeing the management of our risks is conducted primarily through committees of the board of directors, as disclosed in the descriptions of each of the committees below and in the charters of each of the committees. The full board of directors (or the appropriate board committee in the case of risks that are under the purview of a particular committee) discusses with management our major risk exposures, their potential impact on us, and the steps we take to manage them. When a board committee is responsible for evaluating and overseeing the management of a particular risk or risks, the chairman of the relevant committee reports on the discussion to the full board of directors during the committee reports portion of the next board meeting. This enables the board of directors and its committees to coordinate the risk oversight role, particularly with respect to risk interrelationships.

Committees of Our Board of Directors

Our board of directors has established an Audit Committee, a Compensation Committee and a Nominating and Corporate Governance Committee, each of which will operate pursuant to a charter to be adopted by our board of directors and will be effective upon the effectiveness of the registration statement of which this prospectus is a part. The board of directors may also establish other committees from time to time to assist the Company and the board of directors. Upon the effectiveness of the registration statement of which this prospectus is a part, the composition and functioning of all of our committees will comply with all applicable requirements of the Sarbanes-Oxley Act of 2002, NYSE American and SEC rules and regulations, if applicable. Upon our listing on NYSE American, each committee's charter will be available on our website at *www.ostherapies.com*. The reference to our website address does not constitute incorporation by reference of the information contained at or available through our website, and you should not consider it to be part of this prospectus.

Audit Committee. John Ciccio (chair), Joacim Borg and Theodore F. Search, Pharm.D., serve on our Audit Committee. Our board has determined that each member of the Audit Committee is "independent" for Audit Committee purposes as that term is defined by the rules of the SEC and NYSE American, and that each has sufficient knowledge in financial and auditing matters to serve on the Audit Committee. Our board of directors has designated Mr. Ciccio as an "Audit Committee financial expert," as defined under the applicable rules of the SEC. Under Rule 10A-3 under the Exchange Act, we are permitted to phase in our compliance with the independent Audit Committee requirements set forth in NYSE American Rule 5605(c) and Rule 10A -3 under the Exchange Act as follows: (1) one independent member at the time of listing, (2) a majority of independent members within 90 days of listing and (3) all independent members within one year of listing. Our board of directors intends to cause our Audit Committee to comply with the transition rules within the applicable time periods.

The Audit Committee's responsibilities include:

- appointing, approving the compensation of, and assessing the independence of our independent registered public accounting firm;
- pre-approving auditing and permissible non-audit services, and the terms of such services, to be provided by our independent registered public accounting firm;
- reviewing the overall audit plan with our independent registered public accounting firm and members of management responsible for preparing our financial statements;

- reviewing and discussing with management and our independent registered public accounting firm our annual and quarterly financial statements and related disclosures as well as critical accounting policies and practices used by us;
- coordinating the oversight and reviewing the adequacy of our internal control over financial reporting;
- establishing policies and procedures for the receipt and retention of accounting-related complaints and concerns;
- recommending, based upon the Audit Committee's review and discussions with management and our independent registered public accounting firm, whether our audited financial statements will be included in our annual report on Form 10-K;
- monitoring the integrity of our financial statements and our compliance with legal and regulatory requirements as they relate to our financial statements and accounting matters;
- preparing the Audit Committee report required by SEC rules to be included in our annual proxy statement;
- reviewing all related person transactions for potential conflict of interest situations and approving all such transactions; and
- reviewing quarterly earnings releases.

Compensation Committee. Theodore F. Search, Pharm. D. (chair), Joacim Borg and John Ciccio serve on our Compensation Committee. Our board has determined that each member of the Compensation Committee is "independent" as defined in the applicable NYSE American rules. We are permitted to phase in our compliance with the independent Compensation Committee requirements set forth by NYSE American listing standards as follows: (1) one independent member at the time of listing, (2) a majority of independent members within 90 days of listing and (3) all independent members within one year of listing. Our board of directors intends to cause our Compensation Committee to comply with the transition rules within the applicable time periods. The Compensation Committee's responsibilities include:

- reviewing and approving the corporate goals and objectives relevant to the compensation of our Chief Executive Officer and other Section 16 officers;
- evaluating the performance of our Chief Executive Officer and other Section 16 officers in light of such corporate goals and objectives and based on such evaluation, recommending to the board of directors the compensation of our Chief Executive Officer and other Section 16 officers;
- reviewing and approving the compensation of our other officers;
- reviewing and establishing our overall management compensation, philosophy and policy;
- overseeing and administering our compensation and similar plans;
- reviewing and approving the retention or termination of any consulting firm or outside advisor to assist in the evaluation of compensation matters and evaluating and assessing potential and current compensation advisors in accordance with the independence standards identified in the applicable NYSE American rules;
- retaining and approving the compensation of any compensation advisors;
- reviewing and recommending to the board of directors the policies and procedures for the grant of equity-based awards;
- reviewing and recommending to the board of directors the compensation of our directors; and
- preparing the Compensation Committee report required by SEC rules, if and when required, to be included in our annual proxy statement.

Nominating and Corporate Governance Committee. Joacim Borg (chair), John Ciccio and Theodore F. Search, Pharm.D. serve on our Nominating and Corporate Governance Committee. Our board of directors has determined that each member of the Nominating and Corporate Governance Committee is "independent" as defined in the applicable NYSE American rules. We are permitted to phase in our compliance with the independent Compensation Committee requirements set forth by NYSE American listing standards as follows: (1) one independent member at the time of listing, (2) a majority of independent members within 90 days of listing and (3) all independent members within one year of listing. Our board of directors intends to cause our Nominating and Corporate Governance Committee to comply with the transition rules within the applicable time periods. The Nominating and Corporate Governance Committee's responsibilities include:

- developing and recommending to the board of directors criteria for board and committee membership;
- establishing procedures for identifying and evaluating board of director candidates, including nominees recommended by stockholders;
- reviewing the composition of the board of directors to ensure that it is composed of members containing the appropriate skills and expertise to advise us;
- identifying individuals qualified to become members of the board of directors;
- recommending to the board of directors the persons to be nominated for election as directors and to each of the board's committees;
- developing and recommending to the board of directors appropriate corporate governance guidelines; and
- overseeing the evaluation of our board of directors.

Compensation Committee Interlocks and Insider Participation

None of the members of our Compensation Committee has at any time during the prior three years been one of our officers or employees. None of our executive officers currently serves, or in the past fiscal year has served, as a member of the board of directors or Compensation Committee of any entity that has one or more executive officers serving on our board of directors or Compensation Committee.

Code of Business Conduct and Ethics

Our board of directors has adopted a written code of business conduct and ethics that applies to our directors, officers and employees, including our principal executive officer, principal financial officer, principal accounting officer, or controller, or persons performing similar functions. Following the effectiveness of the registration statement of which this prospectus is a part, a current copy of this code will be posted on the Corporate Governance section of our website, which is located at *www.ostherapies.com*. The information on our website is deemed not to be incorporated in this prospectus or to be a part of this prospectus. If we make any substantive amendments to, or grant any waivers from, the code of business conduct and ethics for any officer or director, we will disclose the nature of such amendment or waiver on our website or in a current report on Form 8-K.

Limitation of Liability and Indemnification

Our third amended and restated certificate of incorporation and our amended and restated bylaws, each of which will be in effect prior to effectiveness of this offering, will provide that we will indemnify our directors and officers, and may indemnify our employees and other agents, to the fullest extent permitted by Delaware law. The indemnification agreements that we intend to enter into with each of our directors and executive officers may, in some cases, be broader than the specific indemnification provisions contained under Delaware law.

In addition, as permitted by Delaware law, our third amended and restated certificate of incorporation that will be in effect prior to effectiveness of this offering will include provisions that eliminate the personal liability of our directors and officers for monetary damages resulting from breaches of certain fiduciary duties as a director or officer, as applicable, except to the extent such an exemption from liability thereof is not permitted under the Delaware General Corporation Law. The effect of these provisions is to restrict our rights and the rights of our stockholders in derivative suits to recover monetary damages against a director or officer for breach of fiduciary duties as a director or officer,

subject to certain exceptions in which case the director or officer would be personally liable. An officer may not be exculpated for any action brought by or in the right of the corporation. A director may not be exculpated for improper distributions to stockholders. Further, pursuant to Delaware law a director or officer may not be exculpated for:

- any breach of his or her duty of loyalty to us or to our stockholders;
- acts or omissions not in good faith or that involve intentional misconduct or a knowing violation of law; and
- any transaction from which the director or officer derived an improper personal benefit.

If Delaware law is amended to authorize corporate action further eliminating or limiting the personal liability of a director or officer, then the liability of our directors and/or officers will be eliminated or limited to the fullest extent permitted by Delaware law, as so amended. Our third amended and restated certificate of incorporation will not eliminate a director's or officer's duty of care and, in appropriate circumstances, equitable remedies, such as injunctive or other forms of non-monetary relief, remain available under Delaware law. This provision also does not affect a director's or officer's responsibilities under any other laws, such as the federal securities laws or other state or federal laws. Under our amended and restated bylaws, we will also be empowered to purchase insurance on behalf of any person whom we are required or permitted to indemnify.

In the case of an action or proceeding by or in the right of our company or any of our subsidiaries, no indemnification will be provided for any claim where a court determines that the indemnified party is prohibited from receiving indemnification. We believe that these charter and bylaw provisions are necessary to attract and retain qualified persons as directors and officers.

The limitation of liability and indemnification provisions in our third amended and restated certificate of incorporation and amended and restated bylaws may discourage stockholders from bringing a lawsuit against directors for breach of their fiduciary duties. They may also reduce the likelihood of derivative litigation against directors and officers, even though an action, if successful, might benefit us and our stockholders. A stockholder's investment may be harmed to the extent we pay the costs of settlement and damage awards against directors and officers pursuant to these indemnification provisions.

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to our directors, officers and controlling persons pursuant to the foregoing provisions, or otherwise, we have been advised that, in the opinion of the SEC, such indemnification is against public policy as expressed in the Securities Act, and is, therefore, unenforceable. There is no pending litigation or proceeding naming any of our directors or officers as to which indemnification is being sought, nor are we aware of any pending or threatened litigation that may result in claims for indemnification by any director or officer.

We intend to enter into separate indemnification agreements with each of our directors and executive officers in addition to the indemnification that will be provided for in our third amended and restated certificate of incorporation and amended and restated bylaws. The indemnification agreements and our third amended and restated certificate of incorporation and amended and restated bylaws will require us to indemnify our directors, executive officers and certain controlling persons to the fullest extent permitted by Delaware law. See the section titled "Description of Securities — Limitations on Liability and Indemnification of Officers and Directors" for additional information.

EXECUTIVE COMPENSATION

As an emerging growth company, we have opted to comply with the executive compensation disclosure rules applicable to "smaller reporting companies," as such term is defined in the rules promulgated under the Securities Act.

The compensation provided to our named executive officers for the years ended December 31, 2022 and 2021 is detailed in the Summary Compensation Table and accompanying footnotes and narrative that follow. Our named executive officers for the year ended December 31, 2022, are:

- Paul A. Romness, MPH, our President and Chief Executive Officer;
- Robert G. Petit, Ph.D., our Chief Medical Officer and Chief Scientific Officer; and
- Jutta Wanner, Ph.D., our former Chief Technology Officer.

On February 14, 2023, Dr. Wanner resigned as our Chief Technology Officer. Although she is no longer an employee or officer of our company, Dr. Wanner may continue to provide limited scientific and technical advice to us when requested as a consultant.

Through December 31, 2022, the compensation of our named executive officers has only consisted of annual base salaries. Our named executive officers, like all full-time employees, are eligible to participate in our health and welfare benefit plans. As we transition from a private company to a publicly traded company, we intend to evaluate our compensation values and philosophy and compensation plans and arrangements as circumstances require.

Summary Compensation Table

The following table shows the total compensation earned by, or paid to, our named executive officers for services rendered to us in all capacities during the years ended December 31, 2022 and 2021.

Name and principal position	Year	Salary ($)	Option awards ($)	Non-Equity incentive plan compensation ($)	All other compensation ($)	Total ($)
Paul A. Romness, MPH	2022	360,000	—	—	—	360,000
President and Chief Executive Officer	2021	360,000	—	—	—	360,000
Robert G. Petit, Ph.D.	2022	300,000	—	—	—	300,000
Chief Medical and Scientific Officer	2021	300,000	—	—	—	300,000
Jutta Wanner, Ph.D.	2022	180,000	—	—	—	180,000
Former Chief Technology Officer	2021	180,000	—	—	—	180,000

Narrative Disclosure to Summary Compensation Table

Annual Base Salaries. Our named executive officers each receive a base salary to compensate them for services rendered to our company. The base salary payable to each named executive officer is intended to provide a fixed component of compensation reflecting the executive's skill set, experience, role and responsibilities. Base salaries are reviewed annually, typically in connection with our annual performance review process, approved by our board of directors, and may be adjusted from time to time to realign salaries with market levels after taking into account individual responsibilities, performance and experience.

For the year ended December 31, 2022 and 2021, the annual base salary for each of Mr. Romness, Dr. Petit and Dr. Wanner was $360,000, $300,000 and $180,000, respectively.

Employment Agreements and Arrangements

Paul A. Romness Employment Agreement

On February 21, 2023, Paul A. Romness, MPH entered into an employment agreement with us. The employment agreement with Mr. Romness extends for a term expiring on February 21, 2026. Pursuant to the employment agreement, Mr. Romness has agreed to devote substantially all of his time, attention and ability to our business as our Chief Executive Officer. The employment agreement provides that Mr. Romness will receive a base salary during the first year of his employment at an annual rate of $360,000 for services rendered in such position. During the second year of his employment under the employment agreement, Mr. Romness' annual base salary will be determined by our board of directors, but will not be less than $360,000. In addition, Mr. Romness may be entitled to receive, as determined by our board of directors, a cash bonus in respect of each fiscal year. Mr. Romness is entitled to participate in our regular employee fringe benefit programs, including our medical and hospitalization insurance and life insurance, as well as the 2023 Plan.

The employment agreement provides for termination by us upon (i) the death or disability of Mr. Romness (defined as a period of more than 60 consecutive days or more than a total of 90 days in the aggregate during any period of 12 consecutive months), (ii) his willful and material malfeasance, dishonesty or substance abuse, (iii) his material and continuing breach, non-performance or non-observance of any of the terms of his employment agreement (or confidentiality agreement and non-competition agreement referenced below), but only after notice to him and his failure to timely cure any such default, or (iv) his conviction of a crime involving moral turpitude. In the event the employment agreement is terminated by us for any other reason, Mr. Romness will be entitled to compensation for the balance of the term. The employment agreement with Mr. Romness does not have any change of control provisions.

Together with his employment agreement, Mr. Romness entered into our standard form of confidentiality and non-competition agreement. This agreement contains covenants restricting Mr. Romness from engaging in any activities competitive with our business during the term of his employment agreement and one year thereafter, and prohibiting him from disclosure of confidential information regarding our company at any time.

Robert G. Petit Employment Letter

On June 23, 2020, Robert G. Petit, Ph.D. entered into an employment letter with us. Pursuant to the employment letter, Dr. Petit has agreed to devote his business time, best efforts, skill, knowledge, attention and energies to the advancement of our business and interests and to the performance of his duties and responsibilities, on a full-time, "at-will" basis, as our Chief Medical and Scientific Officer. The employment letter provides that Dr. Petit will receive a base salary at a rate of $20,000 per monthly pay period for services rendered in such position. In addition, Dr. Petit will be eligible to receive a performance bonus of up to 50% of the base salary paid to him based on his personal performance and our company's performance during the calendar year, as determined by our board of directors in its sole discretion. Dr. Petit is entitled to participate in all of our bonus and benefit programs that we establish and make available to our employees, including the 2023 Plan.

The employment letter provides that if we terminate Dr. Petit's employment without "Cause" or he terminates his employment for "Good Reason," we will provide him with severance pay in the form of continuation of his base salary for a total of 12 months and a prorated bonus payment equivalent to 35% of his annualized base salary. For these purposes, "Cause" means, among others, (a) his engagement in any conduct that materially and adversely affects the business interests or reputation of our company, (b) any breach by him of his employment letter or of the restrictive covenants contained in his invention and non-disclosure agreement and non-competition and non-solicitation agreement with us, (c) his failure to perform, or negligence in his performance of, any material duties required of or assigned to him, (d) his fraud or embezzlement or (e) his conviction of any crime involving dishonesty or moral turpitude, or any felony, in the cases of (a), (b) and (c), following written notice and an opportunity for Dr. Petit to timely cure any such conduct, breach or deficiency; and "Good Reason" means, among others, (i) a material reduction in Dr. Petit's authority, duties or responsibilities, (ii) a material reduction of his base salary or (iii) a material breach by our company of our obligations under his employment letter, in all cases, following written notice and an opportunity for our company to timely cure the circumstances. The employment letter with Dr. Petit does not have any change of control provisions.

Together with his employment letter, Dr. Petit entered into an invention and non-disclosure agreement and a non-competition and non-solicitation agreement, which contained covenants (a) restricting him from engaging in any activities competitive with our business during the term of his employment letter and for a period of one year thereafter, (b) prohibiting him from disclosing confidential information regarding our company at any time, (c) confirming that all intellectual property developed by him and relating to our business constitutes our sole and exclusive property, and (d) preventing him from recruiting, soliciting or hiring away employees of our company for a period of one year after his employment with us.

Alan A. Musso Consulting Agreement

On March 1, 2023, we entered into a consulting agreement with Alan A. Musso, which provides for certain financial, accounting and operations related consulting services to be provided by Mr. Musso in connection with and following our initial public offering and to serve as our Chief Financial Officer for an initial term extending for one year, unless the consulting agreement is terminated by either party upon 30 days' notice. The consulting agreement provides that Mr. Musso will be paid a retainer starting at $10,000 per month and for Mr. Musso to receive equity compensation in an amount equal to 25,000 shares of our common stock, of which 25% of such shares vested upon signing of the consulting agreement, 25% vest upon completion of our initial public offering, and 25% vest upon each of the three and six month anniversaries of the public offering closing date. The agreement with Mr. Musso contains covenants restricting him from engaging in any activities competitive with our business during the term of the consulting agreement and prohibiting him from disclosure of our confidential information during the term of the consulting agreement and thereafter for a period of three years.

Outstanding Equity Awards at Fiscal Year End

As of December 31, 2022, we had no outstanding stock option awards for our named executive officers.

	Option awards					Stock awards			
Name	Number of securities underlying unexercised options (#) exercisable	Number of securities underlying unexercised options (#) unexercisable	Equity incentive plan awards: number of securities underlying unexercised unearned options (#)	Option exercise price ($)	Option expiration date	Number of shares or units of stock that have not vested (#)	Market value of shares or units of stock that have not vested (#)	Equity incentive plan awards: number of unearned shares, units or other rights that have not vested (#)	Equity incentive plan awards: market or payout value of unearned shares, units or other rights that have not vested ($)
Paul A. Romness, MPH	—	—	—	—	—	—	—	—	—
Robert G. Petit, Ph.D.	—	—	—	—	—	—	—	—	—
Jutta Wanner, Ph.D.	—	—	—	—	—	—	—	—	—

2023 Incentive Compensation Plan

Our Board of Directors and stockholders have adopted the OS Therapies Incorporated 2023 Incentive Compensation Plan in connection with this offering and reserved 2,000,000 shares of our common stock for issuance under the plan. As of December 31, 2022, we have not previously granted any stock options or other equity awards under this or any other incentive compensation plan. The purpose of the 2023 Incentive Compensation Plan is to assist us in attracting, motivating, retaining and rewarding high-quality executives and other employees, officers, directors, consultants and other persons who provide services to us by enabling such persons to acquire or increase a proprietary interest in our company in order to strengthen the mutuality of interests between such persons and our shareholders, and providing such persons with performance incentives to expend their maximum efforts in the creation of shareholder value.

Director Compensation

The following table presents the total compensation for each person who served as a non-executive member of our board of directors during the year ended December 31, 2022. Other than as set forth in the table and described more fully below, we did not pay any compensation, make any equity awards or non-equity awards to, or pay any other compensation to any of the non-executive members of our board of directors in 2022.

Name	Fees earned or paid in cash ($)	Option awards ($)	All other compensation ($)	Total ($)
Colin Goddard, Ph.D. Chairman	10,000	—	40	10,040
Joacim Borg	—	—	40	40
John Ciccio	—	—	40	40
Theordore F. Search, Pharm.D.	—	—	40	40

Non-Executive Director Compensation Policy

Our board of directors intends to adopt a non-executive director compensation policy that will become effective upon the closing of this offering and is designed to enable us to attract and retain, on a long-term basis, highly qualified non-executive directors. Under the policy, each director who is not an employee will be paid cash compensation from and after the completion of this offering, as set forth below:

	Annual retainer
Board of Directors:	
Members	$ —
Annual retainer for Chairman	$ —
Additional retainer for Audit Committee chair	$ —
Additional retainer for Compensation Committee chair	$ —
Additional retainer for Nominating and Corporate Governance Committee chair	$ —

We will reimburse all reasonable out-of-pocket expenses incurred by non-executive directors in attending meetings of the board of directors and committees thereof.

SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

The following table sets forth information known to us regarding the beneficial ownership of shares of our Class A common stock as of April 24, 2023 by (i) each person known by us to be the beneficial owner of more than 5% of our common stock, (ii) each of our named executive officers and directors and (iii) all of our executive officers and directors as a group.

Beneficial ownership is determined in accordance with the applicable rules and regulations of the SEC and includes voting or investment power with respect to our capital stock. Unless otherwise indicated, we believe that all persons named in the table below have sole voting and investment power with respect to all shares of common stock beneficially owned by them. Unless otherwise indicated, the address of each beneficial owner listed in the table below is c/o OS Therapies Incorporated, 15825 Shady Grove Road, Rockville, Maryland 20850.

As of April 24, 2023, we had outstanding 10,745,000 shares of Class A common stock, no shares of Class B common stock and 1,302,082 shares of Series A preferred stock (convertible into an equal number of shares of Class A common stock).

Unless otherwise indicated, the address of each beneficial owner is c/o OS Therapies Incorporated, 15825 Shady Grove Road, Suite 135, Rockville, Maryland 20850.

Beneficial Owner	Number of Shares of Common Stock Before this Offering[1]	%	Number of Shares of Common Stock After this Offering[2]	%[3]
Executive Officers and Directors				
Paul A. Romness, MPH	7,046,000	33.1%	7,046,000	30.3%
Robert G. Petit, Ph.D.	400,000	1.9%	400,000	1.7%
Alan A. Musso[3]	25,000	*	25,000	*
Colin Goddard, Ph.D.[4]	450,358	2.1%	450,358	1.9%
Joacim Borg	40,000	*	40,000	*
John Ciccio[5]	434,348	2.0%	434,348	1.9%
Theodore F. Search, Pharm.D.[5]	434,348	2.0%	434,348	1.9%
All directors and executive officers as a group (7 persons)	**8,830,054**	**41.5%**	**8,830,054**	**37.9%**

* Represents less than 1% of outstanding shares.

(1) Gives effect to the renaming of our Class A common stock as "common stock" and the issuances of shares of our common stock in connection with the Recapitalization transactions.

(2) Gives effect to the sale of 2,000,000 shares of common stock in this offering.

(3) Represents 25,000 shares of common stock, of which 25% of such shares vested on March 1, 2023, 25% vest upon completion of our initial public offering, and 25% vest upon each of the three and six month anniversaries of our initial public offering closing date.

(4) Includes 397,858 shares of common stock owned of record by Stateside Developments USA LLC. Dr. Goddard serves as the managing member of Stateside Developments USA LLC and holds sole voting and investment power with respect to such shares.

(5) Includes 394,348 shares of common stock owned of record by Mill River Partners LLC. Each of Mr. Ciccio and Dr. Search serves on the board of managers of Mill River Partners LLC and shares voting and investment power with respect to such shares.

CERTAIN RELATIONSHIPS AND RELATED PARTY TRANSACTIONS

The following is a description of transactions or series of transactions since January 1, 2020, to which we were or will be a party, in which:

- the amount involved in the transaction exceeds, or will exceed, the lesser of $120,000 or one percent of the average of the Company's total assets for the last two completed fiscal years; and
- in which any of our executive officers, directors or holder of 5% or more of any class of our capital stock, including their immediate family members or affiliated entities, had or will have a direct or indirect material interest.

Compensation arrangements for our named executive officers and our directors are described elsewhere in this prospectus under "Executive Compensation" and "Management — Director Compensation."

Related Party Transactions

Group A Convertible Notes

From September 2018 through December 2020, we entered into an unsecured Subordinated Convertible Promissory Note Agreement (the "Group A Convertible Notes") with certain accredited investors, including Mill River Partners LLC, in an aggregate principal amount of $1,154,000. Interest on the unpaid principal balance accrues at a rate of 10% per annum and are set to mature on March 31, 2024. The Group A Convertible Notes will automatically convert into common stock before the effectiveness of this offering at 87.5% to 100% of the initial public offering price of this offering, subject to valuation ceilings that range from $5 million to $25 million. Theodore F. Search, Pharm.D. and John Ciccio, members of our board of directors, are members of the board of managers of Mill River Partners LLC. Mill River Partners LLC holds convertible notes with an aggregate balance of approximately $124,153 as of December 31, 2022.

BlinkBio Convertible Note and License Agreement

On August 19, 2020, we issued a convertible note to BlinkBio, Inc. in the principal amount of $2,400,000 in exchange for entry into a license agreement to utilize certain intellectual property controlled by BlinkBio. On March 15, 2021, the note was converted into 1,302,082 shares of our Series A preferred stock and then distributed to BlinkBio stockholders, including Stateside Developments USA LLC. Colin Goddard, Ph.D., our Chairman of the Board, is the managing member of Stateside Developments USA LLC.

In August 2020, we entered into a licensing agreement with BlinkBio, pursuant to which BlinkBio granted a license to us that allows us to utilize BlinkBio's proprietary technology to develop, manufacture and commercialize certain of our products. BlinkBio granted us an exclusive license for tunable drug conjugates that are directed towards, binds to or modifies the folate receptor alpha and a co-exclusive license for tunable drug conjugates that are directed towards, binds to or modifies any target other than the folate receptor alpha, such as HER2. Under the terms of the agreement, we are required to comply with the payment schedule for milestones and corresponding payment amounts. These amounts are provided under "Business — Our Licensing Agreements" on page 73 of this prospectus.

Colin Goddard, Ph.D., our Chairman of the Board, is the Chairman and Chief Executive Officer of BlinkBio.

Shareholder Loan

On December 15, 2020, we issued an unsecured loan to Paul A. Romness, MPH, our Founder, President, Chief Executive Officer and a member of our Board, in the principal amount of approximately $627,761. The balance on the loan as of December 31, 2021 and 2022 was $231,071 and $1,145, respectively.

The following summarizes activity under the loan as of the years ended December 31, 2021 and 2022:

Balance December 31, 2020	$	431,634
Repayment		(200,563)
Balance December 31, 2021	$	231,071

Advances during 2022		49,074
Repayment		(279,000)
Balance December 31, 2022	$	1,145

The balance under the loan was paid off as of March31, 2023. In the first quarter of 2023, we will pay to Mr. Romness his salary of $360,000 as backpay. We will also pay the related payroll taxes on such backpay.

Founder Advance

From 2020 to 2022, Paul A. Romness, MPH, our Founder, President, Chief Executive Officer and a member of our Board, sold an aggregate of 1,875,000 shares of common stock that were previously issued to him to certain individuals and entities for an aggregate amount of $2,625,000 to, among other things, pay off the unsecured loan issued to him by our company. In 2022, Mr. Romness advanced $92,000 to our company to assist us in funding our operations. As of December 31, 2022, we repaid the advance in full.

Our Policy Regarding Related Party Transactions

Our board of directors recognizes the fact that transactions with related persons present a heightened risk of conflicts of interest and/or improper valuation (or the perception thereof). Prior to the effectiveness of this offering, our board of directors will adopt a written policy on transactions with related persons that is in conformity with the requirements for issuers having publicly held common stock that is listed on NYSE American. Under the new policy:

- any related person transaction, and any material amendment or modification to a related person transaction, must be reviewed and approved or ratified by the Audit Committee; and
- any employment relationship or transaction involving an executive officer and any related compensation must be approved by the compensation committee of the board of directors or recommended by the compensation committee to the board of directors for its approval.

In connection with the review and approval or ratification of a related person transaction:

- management must disclose to the committee or disinterested directors, as applicable, the name of the related person and the basis on which the person is a related person, the material terms of the related person transaction, including the approximate dollar value of the amount involved in the transaction, and all the material facts as to the related person's direct or indirect interest in, or relationship to, the related person transaction;
- management must advise the committee or disinterested directors, as applicable, as to whether the related person transaction complies with the terms of our agreements governing our material outstanding indebtedness that limit or restrict our ability to enter into a related person transaction;
- management must advise the committee or disinterested directors, as applicable, as to whether the related person transaction will be required to be disclosed in our applicable filings under the Securities Act or the Exchange Act, and related rules, and, to the extent required to be disclosed, management must ensure that the related person transaction is disclosed in accordance with the Securities Act and the Exchange Act and related rules; and
- management must advise the committee or disinterested directors, as applicable, as to whether the related person transaction constitutes a "personal loan" for purposes of Section 402 of SOX.

In addition, the related person transaction policy will provide that the committee or disinterested directors, as applicable, in connection with any approval or ratification of a related person transaction involving a non-employee director, should consider whether such transaction would compromise the director's status as an "independent," "outside," or "non-employee" director, as applicable, under the rules and regulations of the SEC and the NYSE American.

DESCRIPTION OF CAPITAL STOCK

The following descriptions are summaries of the material terms of our third amended and restated certificate of incorporation and amended and restated bylaws, which will be effective prior to the effectiveness of the registration statement of which this prospectus is a part. The descriptions of our common stock give effect to changes to our capital structure that will occur before the effectiveness of this offering.

General

Our authorized capital stock currently consists of 50,000,000 shares of Class A common stock, par value $0.001 per share, 20,000,000 shares of Class B common stock, par value $0.001 per share, and 5,000,000 shares of preferred stock, par value $0.001 per share, of which 1,400,000 shares have been designated as Series A preferred stock.

As of April 24, 2023, there were outstanding 10,745,000 shares of our Class A common stock, no shares of our Class B common stock and 1,302,082 shares of our Series A preferred stock, held by an aggregate of 79 stockholders of record. After giving effect to (i) the conversion of all of our outstanding convertible notes, including accrued interest, totaling approximately $14.3 million, into 8,918,444 shares of Class A common stock; (ii) the issuance of an additional 325,000 shares of our common stock to the noteholders in our private placement commenced in November 2022 upon the automatic conversion of their outstanding convertible notes and (iii) the conversion of our Series A preferred stock into 1,302,082 shares of Class A common stock, we would have 21,290,526 shares of our Class A common stock outstanding (based on the initial public offering price of $5.00 per share) and no shares of our Class B common stock or preferred stock outstanding.

We have obtained approval from the holders of a majority of our outstanding Class A common stock and Series A preferred stock to amend our current second amended and restated certificate of incorporation to eliminate our authorized shares of Class B common stock and rename our Class A common stock as "common stock." The shares of Class B common stock, which have no voting rights and were previously issued to early employees and consultants of our company, have all been converted to Class A common stock. This amendment will be effective upon filing with the Delaware Secretary of State prior to the effectiveness of this offering.

Our board of directors and stockholders have adopted the OS Therapies Incorporated 2023 Incentive Compensation Plan in connection with this offering, which reserves 2,000,000 shares of our common stock for issuance under the plan.

Class A and Class B Common Stock

The holders of our Class A common stock are entitled to one vote for each share held on all matters submitted to a vote of the stockholders. The holders of our common stock do not have any cumulative voting rights. Holders of our Class B common stock have essentially identical rights to holders of our Class A common stock, except that holders of our Class B common stock are not entitled to voting rights with respect to the election of directors and other similar matters.

Holders of our common stock are entitled to receive ratably any dividends declared by our board of directors out of funds legally available for that purpose, subject to any preferential dividend rights of any outstanding preferred stock. Our common stock has no preemptive rights, conversion rights or other subscription rights or redemption or sinking fund provisions.

In the event of our liquidation, dissolution or winding up, holders of our common stock will be entitled to share ratably in all assets remaining after payment of all debts and other liabilities and any liquidation preference of any outstanding preferred stock. The shares of common stock to be issued by us in this offering will be, when issued and paid for, validly issued, fully paid and nonassessable.

Preferred Stock

Immediately prior to the effectiveness of this offering, all outstanding shares of our Series A preferred stock will be converted into shares of our Class A common stock on a one-for-one basis. Following this offering, our board of directors will have the authority, without further action by our stockholders, to issue up to 5,000,000 shares of preferred stock (of which 1,400,000 have been previously designated as Series A preferred stock and will be withdrawn and added back to authorized, unissued and undesignated preferred stock) in one or more series and to fix the rights, preferences, privileges and restrictions thereof. These rights, preferences and privileges could include dividend rights, conversion rights, voting rights, terms of redemption, liquidation preferences, sinking fund terms and

the number of shares constituting, or the designation of, such series, any or all of which may be greater than the rights of common stock. The issuance of our preferred stock could adversely affect the voting power of holders of common stock and the likelihood that such holders will receive dividend payments and payments upon our liquidation. In addition, the issuance of preferred stock could have the effect of delaying, deferring or preventing a change in control of our company or other corporate action. Immediately after the closing of this offering, no shares of preferred stock will be outstanding, and we have no present plan to issue any shares of preferred stock.

Warrants

We issued placement agent warrants to purchase an aggregate of (i) 425,113 shares of common stock at an exercise price of $1.33 per share, based on the initial public offering price of $5.00 per share, (ii) 91,231 shares of common stock at an exercise price of $2.68 per share, based on the initial public offering price of $5.00 per share, and (iii) 81,967 shares of common stock at an exercise price of $2.44 per share, based on the initial public offering price of $5.00 per share (collectively, the "Private Warrants"), to Noble Life Science Partners, a division of Noble Capital Markets, Inc., the placement agent for our Group B, Group C and Group D convertible note private placements. The Private Warrants may, at the option of the holder, be exercised in whole or part on a cashless basis. The Private Warrants expire five years after the effective date of this offering.

Make-Whole Liability Shares

We previously agreed to issue to (i) certain directors, officers, key employees and key advisors an aggregate of 740,000 shares of our common stock in consideration for accrued services rendered to our company and (ii) Noble Life Science Partners, a division of Noble Capital Markets, Inc., an aggregate of 475,553 shares of our common stock for its services as the placement agent in connection with three of our prior private placements of convertible notes. We did not issue the 740,000 shares at the time such services were performed due to an insufficient number of shares authorized for issuance by our company. On January 19, 2023, we issued the 740,000 shares of common stock, of which an aggregate of 360,000 shares was issued to certain of our directors and executive officers. We do not intend, and are not required, to issue the 475,553 shares to Noble Life Science Partners prior to the effectiveness of this offering.

Anti-Takeover Effects of Our Certificate of Incorporation and Bylaws and Delaware Law

Our third amended and restated certificate of incorporation and amended and restated bylaws will include a number of provisions that may have the effect of delaying, deferring or preventing another party from acquiring control of us and encouraging persons considering unsolicited tender offers or other unilateral takeover proposals to negotiate with our board of directors rather than pursue non-negotiated takeover attempts. These provisions include the items described below.

Board composition and filling vacancies. Our certificate of incorporation provides that directors may be removed with or without cause only by the affirmative vote of the holders of two-thirds or more of the shares then entitled to vote at an election of directors. Further, any vacancy on our board of directors, however occurring, including a vacancy resulting from an increase in the size of our board, may only be filled by the affirmative vote of a majority of our directors then in office even if less than a quorum. The limitations on removal of directors and treatment of vacancies, has the effect of making it more difficult for stockholders to change the composition of our board of directors.

No written consent of stockholders. Our certificate of incorporation provides that all stockholder actions are required to be taken by a vote of the stockholders at an annual or special meeting, and that stockholders may not take any action by written consent in lieu of a meeting. This limit may lengthen the amount of time required to take stockholder actions and would prevent the amendment of our bylaws or removal of directors by our stockholders without holding a meeting of stockholders.

Meetings of stockholders. Our certificate of incorporation and bylaws provide that a special meeting of stockholders may be called only by resolution adopted by our board of directors, chairman of the board of directors or chief executive officer or upon the written request of stockholders owning at least 33⅓% of the outstanding common stock and only those matters set forth in the notice of the special meeting may be considered or acted upon at a special meeting of stockholders. Stockholders owning less than 33⅓% may not call a special meeting, which may delay the ability of our stockholders to force consideration of a proposal or for holders controlling a majority of our capital stock to take any action, including the removal of directors. Our bylaws limit the business that may be conducted at an annual meeting of stockholders to those matters properly brought before the meeting.

Advance notice requirements. Our bylaws establish advance notice procedures with regard to stockholder proposals relating to the nomination of candidates for election as directors or new business to be brought before meetings of our stockholders. These procedures provide that notice of stockholder proposals must be timely given in writing to our corporate secretary prior to the meeting at which the action is to be taken. Generally, to be timely, notice must be received at our principal executive offices not less than 90 days nor more than 120 days prior to the first anniversary date of the annual meeting for the preceding year. Our bylaws specify the requirements as to form and content of all stockholders' notices. These requirements may preclude stockholders from bringing matters before the stockholders at an annual or special meeting.

Amendment to certificate of incorporation and bylaws. Any amendment of our certificate of incorporation must first be approved by a majority of our board of directors, and if required by law or our certificate of incorporation, must thereafter be approved by a majority of the outstanding shares entitled to vote on the amendment and a majority of the outstanding shares of each class entitled to vote thereon as a class, except that the amendment of the provisions relating to stockholder action, board composition, and limitation of liability must be approved by not less than two-thirds of the outstanding shares entitled to vote on the amendment, and not less than two-thirds of the outstanding shares of each class entitled to vote thereon as a class. Our bylaws may be amended by the affirmative vote of a majority of the directors then in office, subject to any limitations set forth in the bylaws; and may also be amended by the affirmative vote of a majority of the outstanding shares entitled to vote on the amendment, voting together as a single class, except that the amendment of the provisions relating to notice of stockholder business and nominations and special meetings must be approved by not less than two-thirds of the outstanding shares entitled to vote on the amendment, and not less than two-thirds of the outstanding shares of each class entitled to vote thereon as a class, or, if our board of directors recommends that the stockholders approve the amendment, by the affirmative vote of the majority of the outstanding shares entitled to vote on the amendment, in each case voting together as a single class.

Undesignated preferred stock. Upon the completion of this offering, our certificate of incorporation will provide for 5,000,000 authorized shares of preferred stock. The existence of authorized but unissued shares of preferred stock may enable our board of directors to discourage an attempt to obtain control of us by means of a merger, tender offer, proxy contest or otherwise. For example, if in the due exercise of its fiduciary obligations, our board of directors were to determine that a takeover proposal is not in the best interests of our stockholders, our board of directors could cause shares of preferred stock to be issued without stockholder approval in one or more private offerings or other transactions that might dilute the voting or other rights of the proposed acquirer or insurgent stockholder or stockholder group. In this regard, our certificate of incorporation grants our board of directors broad power to establish the rights and preferences of authorized and unissued shares of preferred stock. The issuance of shares of preferred stock could decrease the amount of earnings and assets available for distribution to holders of shares of common stock. The issuance may also adversely affect the rights and powers, including voting rights, of these holders and may have the effect of delaying, deterring or preventing a change in control of us.

Limitations on Liability and Indemnification of Officers and Directors

Our third amended and restated certificate of incorporation and amended and restated bylaws will provide indemnification for our directors and officers to the fullest extent permitted by the Delaware General Corporation Law. Prior to the completion of this offering, we intend to enter into indemnification agreements with each of our directors that may, in some cases, be broader than the specific indemnification provisions contained under Delaware law. In addition, as permitted by Delaware law, our certificate includes provisions that eliminate the personal liability of our directors and officers for monetary damages resulting from breaches of certain fiduciary duties as a director or officer, as applicable, except to the extent such an exemption from liability thereof is not permitted under the Delaware General Corporation Law. The effect of these provisions is to restrict our rights and the rights of our stockholders in derivative suits to recover monetary damages against a director or officer for breach of fiduciary duties as a director or officer, subject to certain exceptions in which case the director or officer would be personally liable. An officer may not be exculpated for any action brought by or in the right of the corporation. A director may not be exculpated for improper distributions to stockholders. Further, pursuant to Delaware law a director or officer may not be exculpated for:

- any breach of his or her duty of loyalty to us or our stockholders;
- acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law; and
- any transaction from which the director or officer derived an improper personal benefit.

These limitations of liability do not apply to liabilities arising under the federal or state securities laws and do not affect the availability of equitable remedies such as injunctive relief or rescission.

Our amended and restated bylaws will provide that we will indemnify our directors and officers to the fullest extent permitted by law, and may indemnify employees and other agents. Our bylaws also provide that we are obligated to advance expenses incurred by a director or officer in advance of the final disposition of any action or proceeding.

We plan to enter into separate indemnification agreements with our directors and officers. These agreements, among other things, require us to indemnify our directors and officers for any and all expenses (including reasonable attorneys' fees, retainers, court costs, transcript costs, fees of experts, witness fees, travel expenses, duplicating costs, printing and binding costs, telephone charges, postage, delivery service fees) judgments, fines and amounts paid in settlement actually and reasonably incurred by such directors or officers or on his or her behalf in connection with any action or proceeding arising out of their services as one of our directors or officers, or any of our subsidiaries or any other company or enterprise to which the person provides services at our request provided that such person follows the procedures for determining entitlement to indemnification and advancement of expenses set forth in the indemnification agreement. We believe that these bylaw provisions and indemnification agreements are necessary to attract and retain qualified persons as directors and officers.

The limitation of liability and indemnification provisions in our third amended and restated certificate of incorporation and amended and restated bylaws may discourage stockholders from bringing a lawsuit against directors for breach of their fiduciary duties. They may also reduce the likelihood of derivative litigation against directors and officers, even though an action, if successful, might provide a benefit to us and our stockholders. Our results of operations and financial condition may be harmed to the extent we pay the costs of settlement and damage awards against directors and officers pursuant to these indemnification provisions.

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

At present, there is no pending litigation or proceeding involving any of our directors or officers as to which indemnification is required or permitted, and we are not aware of any threatened litigation or proceeding that may result in a claim for indemnification.

Exclusive Forum

Our amended and restated bylaws to be adopted prior to the effectiveness of this offering will provide that, unless we consent in writing to the selection of an alternative forum, the Court of Chancery of the State of Delaware will be the sole and exclusive forum for any state law claims for: (1) any derivative action or proceeding brought on our behalf; (2) any action asserting a claim of breach of a fiduciary duty owed by any of our directors, officers and employees to us or our stockholders; (3) any action asserting a claim arising pursuant to the Delaware General Corporation Law or our certificate of incorporation or bylaws (including the interpretation, validity or enforceability thereof); or (4) any action asserting a claim that is governed by the internal affairs doctrine; provided, however, that this provision will not apply to any causes of action arising under the Securities Act or the Exchange Act. In addition, our amended and restated bylaws will provide that, unless we consent to an alternative forum, the federal district courts of the United States will be the sole and exclusive forum for resolving any complaint asserting a cause of action under the Securities Act (the Federal Forum Provision). Any person or entity purchasing or otherwise acquiring any interest in our securities will be deemed to have notice of and consented to these forum provisions. These forum provisions may impose additional costs on stockholders and may limit our stockholders' ability to bring a claim in a forum they find favorable, and the designated courts may reach different judgements or results than other courts. In addition, there is uncertainty as to whether our Federal Forum Provision will be enforced, which may impose additional costs on us and our stockholders.

Section 203 of the Delaware General Corporation Law

Upon completion of this offering, we will be subject to the provisions of Section 203 of the Delaware General Corporation Law. In general, Section 203 prohibits a publicly held Delaware corporation from engaging in a "business combination" with an "interested stockholder" for a three-year period following the time that this stockholder becomes an interested stockholder, unless the business combination is approved in a prescribed manner. Under Section 203, a business combination between a corporation and an interested stockholder is prohibited unless it satisfies one of the following conditions:

- before the stockholder became interested, our board of directors approved either the business combination or the transaction which resulted in the stockholder becoming an interested stockholder;
- upon consummation of the transaction which resulted in the stockholder becoming an interested stockholder, the interested stockholder owned at least 85% of the voting stock of the corporation outstanding at the time the transaction commenced, excluding for purposes of determining the voting stock outstanding, shares owned by persons who are directors and also officers, and employee stock plans, in some instances, but not the outstanding voting stock owned by the interested stockholder; or
- at or after the time the stockholder became interested, the business combination was approved by our board of directors and authorized at an annual or special meeting of the stockholders by the affirmative vote of at least two-thirds of the outstanding voting stock which is not owned by the interested stockholder.

Section 203 defines a business combination to include:

- any merger or consolidation involving the corporation and the interested stockholder;
- any sale, transfer, lease, pledge or other disposition involving the interested stockholder of 10% or more of the assets of the corporation;
- subject to exceptions, any transaction that results in the issuance or transfer by the corporation of any stock of the corporation to the interested stockholder;
- subject to exceptions, any transaction involving the corporation that has the effect of increasing the proportionate share of the stock of any class or series of the corporation beneficially owned by the interested stockholder; and
- the receipt by the interested stockholder of the benefit of any loans, advances, guarantees, pledges or other financial benefits provided by or through the corporation.

In general, Section 203 defines an interested stockholder as any entity or person beneficially owning 15% or more of the outstanding voting stock of the corporation and any entity or person affiliated with or controlling or controlled by the entity or person.

NYSE American Listing

We have applied to list our common stock for trading on the NYSE American under the symbol "OSTX." This listing is a condition to the offering. No assurance can be given that our application will be approved and that our common stock will ever be listed for trading on the NYSE American. If our listing application is not approved by the NYSE American, we will not consummate this offering.

Transfer Agent and Registrar

The transfer agent and registrar for our common stock will be Vstock Transfer, LLC, Woodmere, New York.

SHARES ELIGIBLE FOR FUTURE SALE

Prior to this offering, no public market for shares of our common stock has existed. Future sales of substantial amounts of shares of our common stock in the public market, or the possibility of these sales occurring, could cause the prevailing market price for our common stock to fall or impair our ability to raise equity capital in the future.

After this offering, we will have 23,290,526 outstanding shares of our common stock (23,590,526shares if the underwriters exercise their option to purchase additional shares in full), based on the number of shares outstanding as of April 24, 2023 and the issuances of shares in connection with the Recapitalization transactions. This includes shares that we intend to sell in this offering, which shares may be resold in the public market immediately following our initial public offering.

The shares of common stock that were not offered and sold in this offering will be upon issuance, "restricted securities," as that term is defined in Rule 144 under the Securities Act. These restricted securities are eligible for public sale only if they are registered under the Securities Act or if they qualify for an exemption from registration under Rule 144 or Rule 701 under the Securities Act, which are summarized below.

As a result of the lock-up agreements described below and subject to the provisions of Rules 144 and 701 under the Securities Act, these restricted securities will be available for sale in the public market as follows:

- on the date of this prospectus, none of these restricted securities will be available for sale in the public market;
- 365 days after the date of this prospectus, 8,830,054 shares; and
- 180 days after the date of this prospectus, 11,460,472 shares.

Rule 144

For a person who has not been deemed to have been one of our affiliates at any time during the 90 days preceding a sale, sales of our shares of common stock held longer than six months, but less than one year, will be subject only to the current public information requirement and can be sold under Rule 144 beginning 90 days after the effectiveness of this registration statement without restriction. A person who is not deemed to have been one of our affiliates at any time during the 90 days preceding a sale, and who has beneficially owned the shares proposed to be sold for at least one year, is entitled to sell his or her shares without complying with the manner of sale, public information, volume limitation or notice provisions of Rule 144.

Beginning 90 days after the effectiveness of this registration statement, a person who is our affiliate or who was our affiliate at any time during the preceding three months and who has beneficially owned restricted securities for at least six months, will generally be entitled to sell within any three-month period a number of shares that does not exceed one percent of the number of shares of our common stock then outstanding. Sales under Rule 144 by our affiliates are also subject to manner of sale provisions and notice requirements and to the availability of current public information about us. Persons who may be deemed to be our affiliates generally include individuals or entities that control, or are controlled by, or are under common control with, us and may include our directors and officers, as well as our significant stockholders.

Approximately 1,914,946 shares of our common stock will be eligible for sale under Rule 144 90 days following the effective date of this registration statement. One year following the effectiveness of this offering, 8,830,054 additional shares will become eligible for sale under Rule 144, subject to applicable volume limitations. We cannot estimate the number of shares of our common stock that our existing stockholders will elect to sell under Rule 144.

Form S-8 Registration Statement

Following the completion of this offering, we intend to file a registration statement on Form S8 under the Securities Act to register the shares of our common stock that are issuable pursuant to our 2023 Incentive Compensation Plan. Shares covered by this registration statement will be eligible for sale in the public markets, subject to vesting restrictions, any applicable lock-up agreements described below and Rule 144 limitations applicable to affiliates.

Rule 701

Rule 701 under the Securities Act permits resales of shares in reliance upon Rule 144 but without compliance with certain restrictions of Rule 144, including the holding period requirement and the volume and public information requirements. Any of our employees, consultants or advisors, other than our affiliates, who purchased shares from us under a written compensatory plan or contract may be entitled to rely on the resale provisions of Rule 701, but all holders of Rule 701 shares are required to wait until 90 days after the effective date of this registration statement before selling their shares under Rule 701. None of our currently outstanding shares will become eligible for sale pursuant to Rule 701 90 days following the effective date of this registration statement.

Lock-Up Agreements

Pursuant to lock-up agreements, we and our executive officers, directors and certain stockholders have agreed, without the prior written consent of the representative, not to directly or indirectly, offer to sell, pledge or otherwise transfer or dispose of any of shares of (or enter into any transaction or device that is designed to, or could be expected to, result in the transfer or disposition by any person at any time in the future of) our common stock, enter into any swap or other derivatives transaction that transfers to another, in whole or in part, any of the economic benefits or risks of ownership of shares of our common stock, make any demand for or exercise any right or cause to be filed a registration statement, including any amendments thereto, with respect to the registration of any shares of common stock or securities convertible into or exercisable or exchangeable for common stock or any other securities of ours or publicly disclose the intention to do any of the foregoing, subject to customary exceptions, for a period of six months in the case of our company and certain stockholders and a period of 12 months in the case of our directors and executive officers. Notwithstanding the foregoing, the shares of common stock that are being registered for resale by the selling stockholders identified in the resale prospectus are not subject to these lock-up restrictions. See the “Underwriting” section for a more complete description of the lock-up agreements that we and our directors, executive officers and certain stockholders have entered into with the underwriters.

Selling Stockholder Resale Prospectus

As described in the Explanatory Note to the registration statement of which this prospectus forms a part, the registration statement also contains a resale prospectus to be used in connection with the potential resale by certain selling stockholders of our common stock. These shares of common stock have been registered to permit public resale of such shares, and the selling stockholders may offer the shares for resale from time to time pursuant to the resale prospectus. The selling stockholders may also sell, transfer or otherwise dispose of all or a portion of their shares in transactions exempt from the registration requirements of the Securities Act or pursuant to another effective registration statement covering those shares. The shares being registered for resale are being registered to satisfy a contractual obligation owed by us to the selling stockholders pursuant to a convertible note purchase agreement, dated November 15, 2022, providing for the registration of 50% of their conversion shares on their behalf. Consummation of the offering made by the resale prospectus is conditioned on consummation of the initial public offering of shares of common stock by us pursuant to this prospectus.

UNDERWRITING

In connection with this offering, we expect to enter an underwriting agreement with Boustead Securities, LLC, as the representative of the underwriters named in this prospectus, with respect to the common stock in this offering. Under the terms and subject to the conditions contained in the underwriting agreement, the representative will agree to purchase from us on a firm commitment basis the respective number of shares of common stock at the public price less the underwriting discounts set forth on the cover page of this prospectus, and each of the underwriters has severally and not jointly agreed to purchase, and we have agreed to sell to the underwriters, at the public offering price per shares less the underwriting discounts set forth on the cover page of this prospectus, the number of shares of common stock listed next to its name in the following table:

Underwriter	Number of Shares
Boustead Securities, LLC	
Sutter Securities, Inc.	
Total	2,000,000

The shares of common stock sold by the underwriters to the public will initially be offered at the initial public offering price set forth on the cover page of this prospectus. Any shares of common stock sold by the underwriters to securities dealers may be sold at a discount from the initial public offering price not to exceed $__ per share. If all of the shares are not sold at the initial offering price, the representative may change the offering price and the other selling terms. The representative has advised us that the underwriters do not intend to make sales to discretionary accounts.

If the underwriters sell more shares of common stock than the total number set forth in the table above, we have granted to the representative an option, exercisable for 45 days from the date of this prospectus, to purchase up to 300,000 additional shares of common stock at the public offering price less the underwriting discount, constituting 15% of the total number of shares of common stock to be offered in this offering (excluding shares subject to this option). The representative may exercise this option solely for the purpose of covering over-allotments in connection with this offering. This offering is being conducted on a firm commitment basis. Any shares of common stock issued or sold under the option will be issued and sold on the same terms and conditions as the other shares of common stock that are the subject of this offering.

In connection with this offering, the underwriters may engage in stabilizing transactions, over-allotment transactions, syndicate covering transactions and penalty bids in compliance with Regulation M under the Exchange Act, as described below:

- Stabilizing transactions permit bids to purchase securities so long as the stabilizing bids do not exceed a specified maximum.
- Over-allotment transactions involve sales by the underwriters of securities in excess of the number of securities the underwriters are obligated to purchase, which creates a syndicate short position. The short position may be either a covered short position or a naked short position. In a covered short position, the number of securities over-allotted by the underwriters is not greater than the number of securities that they may purchase in the over-allotment option. In a naked short position, the number of securities involved is greater than the number of securities in the over-allotment option. The underwriters may close out any covered short position by either exercising their over-allotment option and/or purchasing securities in the open market.
- Syndicate covering transactions involve purchases of securities in the open market after the distribution has been completed in order to cover syndicate short positions. In determining the source of securities to close out the short position, the underwriters will consider, among other things, the price of securities available for purchase in the open market as compared to the price at which they may purchase securities through the over-allotment option. A naked short position occurs if the underwriters sell more securities than could be covered by the over-allotment option. This position can only be closed out by buying securities in the open market. A naked short position is more likely to be created if the underwriters are concerned that there could be downward pressure on the price of the securities in the open market after pricing that could adversely affect investors who purchase in this offering.
- Penalty bids permit the underwriters to reclaim a selling concession from a syndicate member when securities originally sold by the syndicate member are purchased in a stabilizing or syndicate covering transaction to cover syndicate short positions.

These stabilizing transactions, syndicate covering transactions and penalty bids may have the effect of raising or maintaining the market price of our securities or preventing or retarding a decline in the market price of the securities. As a result, the price of our shares of common stock may be higher than the price that might otherwise exist in the open market. These transactions may be discontinued at any time.

Discounts and Expenses

The following table shows the underwriting discounts payable to the underwriters by us in connection with this offering (assuming both the exercise and non-exercise of the over-allotment option that we have granted to the representative), based on the initial public offering price of $5.00 per share:

	Per Share	Total Without Over-Allotment Option	Total With Entire Over-Allotment Option
Public offering price	$ 5.00	$ 10,000,000	$ 11,500,000
Underwriting discounts and commissions (7%)	$ 0.35	$ 700,000	$ 805,000
Non-accountable expense allowance (1%)	$ 0.05	$ 100,000	$ 115,000
Proceeds, before expenses, to us	$ 4.60	$ 9,200,000	$ 10,580,000

We have agreed to pay a non-accountable expense allowance to the representative equal to 1% of the gross proceeds received at the closing of the offering.

We have agreed to pay the representative the reasonable out-of-pocket expenses incurred by the representative in connection with this offering up to $258,000. The representative's reimbursable out-of-pocket expenses include: (i) reasonable fees of representative's legal counsel up to $100,000, (ii) due diligence and other expenses incurred prior to completion of this offering up to $75,000, (iii) road show, travel, platform on-boarding fees, and other reasonable out-of-pocket accountable expenses up to $75,000, and (iv) $8,000 for background check on our officers, directors and major shareholders. As of the date of this prospectus, we have paid the representative advances of $_____ for its anticipated out-of-pocket costs. Such advance payments will be returned to us to the extent such out-of-pocket expenses are not actually incurred in accordance with FINRA Rule 5110(g)(4)(A).

Representative's Warrants

We have agreed to issue warrants to the representative to purchase a number of shares of common stock equal to 7% of the total number of shares sold in this offering at an exercise price equal to 100% of the public offering price of the shares sold in this offering. The representative's warrants will be exercisable upon issuance, will have a cashless exercise provision and will terminate on the fifth anniversary of the commencement date of sales in this offering. The representative's warrants are not exercisable or convertible for more than five years from the commencement date of sales in this offering. The representative's warrants also provide for customary anti-dilution provisions, a single demand registration right, and immediate "piggyback" registration rights with respect to the registration of the shares of common stock underlying the warrants, with a term of such demand and "piggyback" registration rights not to exceed five years from the commencement of sales in the offering.

The representative's warrants and the underlying shares may be deemed to be compensation by FINRA, and therefore will be subject to FINRA Rule 5110(e)(1). In accordance with FINRA Rule 5110(e)(1), neither the representative's warrants nor any of our shares of common stock issued upon exercise of the representative's warrants may be sold, transferred, assigned, pledged or hypothecated, or be the subject of any hedging, short sale, derivative, put or call transaction that would result in the effective economic disposition of such securities by any person, for a period of 180 days immediately following the commencement date of sales in this offering, subject to certain exceptions. The representative's warrants to be received by the representative and related persons in connection with this offering: (i) fully comply with lock-up restrictions pursuant to FINRA Rule 5110(e)(1); and (ii) fully comply with transfer restrictions pursuant to FINRA Rule 5110(e)(2). We have registered the representative's warrants and the shares underlying the representative's warrants in this offering.

Determination of Offering Price

In determining the initial public offering price, we and the representative have considered a number of factors, including:

- the information set forth in this prospectus and otherwise available to the representative;
- our prospects and the history and prospects for the industry in which we compete;
- an assessment of our management;
- our prospects for future revenue and earnings;
- the recent prices of, and demand for, shares sold by us prior to this offering;
- the general condition of the securities markets at the time of this offering;
- the recent market prices of, and demand for, publicly traded securities of generally comparable companies; and
- other factors deemed relevant by the representative and us.

The estimated initial public offering price set forth on the cover page of this preliminary prospectus is subject to change as a result of market conditions and other factors. Neither we nor the representative can assure investors that an active trading market will develop for our shares of common stock, or that the shares will trade in the public market at or above the initial public offering price.

We have agreed to indemnify the representative and the other underwriters against certain liabilities, including liabilities under the Securities Act. If we are unable to provide this indemnification, we will contribute to payments that the representative and the other underwriters may be required to make for these liabilities.

Right of First Refusal

We have agreed to provide the representative the right of first refusal for 12 months following the consummation of this offering, to act as sole investment banker, sole book-runner, and/or sole placement agent, at the representative's sole discretion, for each and every equity or debt transaction, including future public and private equity and/or debt offerings, including all equity linked financings, whether in conjunction with another advisor, or broker-dealer, or on our own volition. In the event that we engage the representative to provide such services, the representative will be compensated consistent with our engagement agreement with the representative, unless we mutually agree otherwise.

Tail Rights

Following the termination or expiration of our engagement agreement with the representative, the representative will be entitled to success fees in accordance with our engagement agreement if we complete a transaction with a party who became aware of us or who became known to us prior to such termination or expiration of the engagement agreement.

Company and Affiliate Lock-Ups

We will not, without the prior written consent of the representative, from the date of execution of the Underwriting Agreement and continuing for a period of six months from the date on which the trading of our common stock commences, (i) offer, pledge, announce the intention to sell, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, change the terms of (including to re-price) or grant any option, right or warrant to purchase or otherwise transfer or dispose of, directly or indirectly, or file with the Commission a registration statement under the Securities Act relating to, our common stock or any securities convertible into or exercisable or exchangeable for our common stock, or (ii) enter into any swap or other agreement that transfers, in whole or in part, any of the economic consequences of ownership of the common stock or any such other securities, whether any such transaction described in clause (i) or (ii) above is to be settled by delivery of common stock or such other securities, in cash or otherwise. We will agree not to accelerate the vesting of any stock option or warrant or allow the lapse of any repurchase right prior to the expiration of the lock-up period.

Our executive officers and directors have agreed to be locked up for a period of 12 months, and certain stockholders for a period of six months, from the date on which the trading of our common stock commences. During the lock-up period, without the prior written consent of the representative, they will not, directly or indirectly, (i) offer, pledge, assign, encumber, announce the intention to sell, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, lend, grant, grant any option, right or warrant to purchase, or otherwise transfer or dispose of, any shares of common stock or any securities convertible into or exercisable or exchangeable for common stock, owned either of record or beneficially, by any signatory of the lock-up agreement on the date of the prospectus or thereafter acquired, (ii) enter into any swap or other agreement that transfers, in whole or in part, any of the economic consequences of ownership of the common stock or any securities convertible into or exercisable or exchangeable for common stock, whether any such transaction described in clauses (i) or (ii) above is to be settled by delivery of common stock or such other securities, in cash or otherwise, or publicly announce an intention to do any of the foregoing, and (iii) make any demand for or exercise any right with respect to, the registration of any shares of common stock or any security convertible into or exercisable or exchangeable for common stock. Notwithstanding the foregoing, the shares of common stock that are being registered for resale by the selling stockholders identified in the resale prospectus are not subject to these lock-up restrictions.

Electronic Offer, Sale and Distribution of Shares of Common Stock

A prospectus in electronic format may be made available on the websites maintained by the representative. In addition, shares of common stock may be sold by the representative to securities dealers who resell shares of common stock to online brokerage account holders. Other than the prospectus in electronic format, the information on the representative's website and any information contained in any other website maintained by the representative is not part of the prospectus or the registration statement of which this prospectus forms a part, has not been approved and/or endorsed by us or the representative in its capacity as representative and should not be relied upon by investors.

Offer Restrictions Outside the United States

Other than in the United States, no action has been taken by us or the underwriters that would permit a public offering of the securities offered by this prospectus in any jurisdiction where action for that purpose is required. The securities offered by this prospectus may not be offered or sold, directly or indirectly, nor may this prospectus or any other offering material or advertisements in connection with the offer and sale of any such securities be distributed or published in any jurisdiction, except under circumstances that will result in compliance with the applicable rules and regulations of that jurisdiction. Persons into whose possession this prospectus comes are advised to inform themselves about and to observe any restrictions relating to this offering and the distribution of this prospectus. This prospectus does not constitute an offer to sell or a solicitation of an offer to buy any securities offered by this prospectus in any jurisdiction in which such an offer or a solicitation is unlawful.

LEGAL MATTERS

The validity of the shares of common stock offered by this prospectus will be passed upon for us by Olshan Frome Wolosky LLP, New York, New York. Certain legal matters related to this offering will be passed upon for the underwriters by ArentFox Schiff LLP, Washington, DC.

EXPERTS

The financial statements of OS Therapies Incorporated as of December 31, 2022 and 2021, for the years then ended, have been included herein in reliance upon the report of MaloneBailey, LLP, independent registered public accounting firm, and upon the authority of said firm as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

We have filed with the SEC the Registration Statement on Form S-1 under the Securities Act with respect to the common stock we are offering by this prospectus. For further information pertaining to us and our common stock, you should refer to the registration statement and to its exhibits. Whenever we make reference in this prospectus to any of our contracts, agreements or other documents, the references are not necessarily complete, and you should refer to the exhibits attached to the registration statement for copies of the actual contract, agreement or other document.

Upon the completion of the offering, we will be subject to the informational requirements of the Exchange Act and will file annual, quarterly and current reports, proxy statements and other information with the SEC. You can read our SEC filings, including the registration statement, at the SEC's website at *www.sec.gov*. We also maintain a website at *www.ostherapies.com*. Upon completion of the offering, you may access, free of charge, our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and amendment to those reported filed or furnished pursuant to Section 13(a) or 15(d) of the Exchange Act as soon as reasonably practicable after such material is electronically filed with, or furnished to, the SEC.

OS THERAPIES INCORPORATED

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REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Shareholders and Board of Directors of
OS Therapies Incorporated

Opinion on the Financial Statements

We have audited the accompanying balance sheets of OS Therapies Incorporated (the "Company") as of December 31, 2022 and December 31, 2021, and the related statements of operations, stockholders' deficit, and cash flows for the years then ended, and the related notes (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2022 and December 31, 2021, and the results of its operation and its cash flow for the years then ended, in conformity with accounting principles generally accepted in the United States of America.

Going Concern Matter

The accompanying financial statements have been prepared assuming that the Company will continue as a going concern. As discussed in Note 1 to the financial statements, the Company has suffered recurring losses from operations and has a net capital deficiency that raises substantial doubt about its ability to continue as a going concern. Management's plans in regard to these matters are also described in Note 1. The 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 audit in accordance with the standards of the PCAOB and in accordance with auditing standards generally accepted in the United States of America. 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 audit we are required to obtain an understanding of internal control over financial reporting but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion.

Our audit included performing procedures to assess the risks of material misstatement of the 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 audit 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 audit provide a reasonable basis for our opinion.

/s/ MaloneBailey, LLP
www.malonebailey.com
We have served as the Company's auditor since 2020.
Houston, Texas
March 13, 2023, except for Note 9 which is dated March31, 2023

OS Therapies Incorporated
Balance Sheets

	December 31, 2022	December 31, 2021
ASSETS		
Current Assets		
Cash	$ 171,480	$ 80,788
Deferred Offering Costs	324,210	—
Employee Advances	—	956
Shareholder Loan Receivable	1,145	231,071
Total Current Assets	496,835	312,815
Long Term Assets		
Fixed Assets (Net)	12,270	13,076
TOTAL ASSETS	$ 509,105	$ 325,891
LIABILITIES AND STOCKHOLDERS' DEFICIT		
Current Liabilities		
Accounts Payable	$ 1,225,134	$ 856,521
Accrued Interest on Convertible Notes	1,223,843	566,931
Accrued Expenses	15,000	—
Accrued Payroll and Payroll Taxes – Related Party	420,000	367,020
Accrued Payroll and Payroll Taxes	6,011	—
Redemption Premium	3,039,054	1,612,054
Preferred Dividends Payable	218,750	93,750
Total Current Liabilities	6,147,792	3,496,276
Long Term Liabilities		
Convertible Notes – A (Net Debt Discount)	1,038,120	999,613
Convertible Notes – A (Related Party Net Debt Discount)	100,000	97,497
Convertible Notes – B (Net Debt Discount)	5,154,000	4,794,624
Convertible Notes – C (Net Debt Discount)	3,218,845	1,180,681
Convertible Notes – D (Net Debt Discount)	836,667	—
Make-whole Stock Liability	1,470,909	1,108,413
TEDCO Grant	100,000	100,000
Total Long Term Liabilities	11,918,541	8,280,828
Total Liabilities	18,066,333	11,777,104
STOCKHOLDERS' DEFICIT		
Common Stock A, par value $0.001, 50,000,000 shares authorized, 9,980,000 issued and outstanding	9,980	9,980
Common Stock B, par value $0.001, 20,000,000 shares authorized, 0 shares issued and outstanding	—	—
Preferred Stock A, par value $0.001, 1,400,000 shares authorized, 1,302,082 shares Preferred Stock A issued	1,302	1,302
Additional paid-in capital	4,033,093	3,759,423
Accumulated deficit	(21,601,603)	(15,221,918)
Total Stockholders' Deficit	(17,557,228)	(11,451,213)
TOTAL LIABILITIES AND STOCKHOLDERS' DEFICIT	$ 509,105	$ 325,891

The accompanying notes are an integral part of these financial statements.

OS Therapies Incorporated
Statements of Operations

	Year Ended December 31, 2022	Year Ended December 31, 2021
OPERATING EXPENSES		
Research & Development Expenses	$ 3,291,417	$ 2,174,179
General & Administrative	1,153,672	1,503,534
Licensing	1,210	1,159,642
Loss from Operations	(4,446,299)	(4,837,355)
OTHER INCOME/EXPENSE		
Interest Expense	(1,808,386)	(2,582,893)
NET LOSS	(6,254,685)	(7,420,248)
Cumulative Series A Preferred Stock Dividend Requirement	(125,000)	(93,750)
NET LOSS available to common shareholders	$ (6,379,685)	$ (7,513,998)
Weighted Average # of Shares – Class A	9,980,000	9,980,000
Basic & Diluted Loss per Common Share – Class A	$ (0.64)	$ (0.75)

The accompanying notes are an integral part of these financial statements

OS Therapies Incorporated
Statements of Stockholders' Deficit
For the Years Ended December 31, 2022 and 2021

	Common Stock CS A – Shares CS – A Par Amount		Preferred Stock Shares Par Amount		Additional Paid-in Capital	Accumulated Deficit	Total Stockholders' Deficit
Balances, December 31, 2020	9,980,000	$ 9,980	—	$ —	$ 807,100	$ (7,707,920)	$ (6,890,840)
Conversion of Debt and Interest to Preferred Stock	—	—	1,302,082	1,302	2,498,698	—	2,500,000
Warrants Issued to placement agent for convertible notes	—	—	—	—	453,625	—	453,625
Preferred Dividends	—	—	—	—	—	(93,750)	(93,750)
Net Loss	—	—	—	—	—	(7,420,248)	(7,420,248)
Balances, December 31, 2021	9,980,000	9,980	1,302,082	1,302	3,759,423	(15,221,918)	(11,451,213)
Warrants Issued to placement agent for convertible notes					273,670		273,670
Preferred Dividends						(125,000)	(125,000)
Net loss		—		—		(6,254,685)	(6,254,685)
Balances, December 31, 2022	9,980,000	$ 9,980	1,302,082	$ 1,302	$ 4,033,093	$ (21,601,603)	$ (17,557,228)

The accompanying notes are an integral part of these financial statements .

OS Therapies Incorporated
Statements of Cash Flows
For the Years Ended December 31, 2022 and 2021

	Year Ended December 31, 2022	Year Ended December 31, 2021
CASH FLOWS FROM OPERATING ACTIVITIES		
Net loss	$ (6,254,685)	$ (7,420,248)
Depreciation expense	805	805
Preferred stock for interest	—	100,000
Amortization of Debt Discounts	1,151,474	2,069,482
Make-whole expense	362,496	272,482
Adjustments to reconcile net loss to net cash used in operating activities:		
Accounts Payable	216,426	856,481
Accrued Expenses	15,000	(595,000)
Accrued Interest on Convertible Notes	656,913	368,977
Accrued Payroll and payroll taxes	58,991	(55,790)
Net cash used in operating activities	**(3,792,580)**	**(4,402,811)**
CASH FLOWS FROM INVESTING ACTIVITIES		
Employee Advances	956	11,844
Purchases of Equipment	—	(11,934)
Increase in Shareholder Loan	(49,075)	563
Shareholder Loan Repayment	279,000	200,000
Net cash provided by investing activities	**230,881**	**200,473**
CASH FLOWS FROM FINANCING ACTIVITIES		
Deferred Offering Costs	(172,021)	—
TEDCO Grant	—	100,000
Net Proceeds from Convertible Debt A, B, & C	3,824,412	2,950,350
Net cash provided by financing activities	**3,652,391**	**3,050,350**
Net change in cash	90,692	(1,151,988)
Cash – beginning of period	80,788	1,232,776
Cash – end of period	$ 171,480	$ 80,788
Cash paid for interest	$ —	$ 10,000
NON CASH INVESTING AND FINANCING ACTIVITIES		
Discount on Notes Payable – redemption premium	1,427,000	740,804
Conversion of debt to preferred stock	—	2,400,000
Deferred offering costs	152,189	
Dividends Payable	125,000	93,750
Discount on Notes Payable – placement agent warrants	273,670	453,625

The accompanying notes are an integral part of these financial statements.

OS Therapies Incorporated
Notes to the Financial Statements
For the Years Ended December 31, 2022 and 2021

NOTE 1 — ORGANIZATION AND DESCRIPTION OF BUSINESS, LIQUIDITY, AND RISK FACTORS

OS Therapies Incorporated ("we," "us," "our," the "Company") is a Delaware corporation incorporated on June 24, 2019. It is based in Rockville, Maryland. The Company is the successor to an LLC formed in 2018.

The Company intends to focus on the identification, development, and commercialization of treatments for Osteosarcoma and other related diseases. As of December 31, 2022, there is one ongoing clinical trial for Osteosarcoma therapy.

Liquidity

The Company has prepared its financial statements on a going concern basis, which assumes that the Company will realize its assets and satisfy its liabilities in the normal course of business. However, the Company has incurred net losses since its inception and has negative operating cash flows. These circumstances raise substantial doubt about the Company's ability to continue as a going concern. The accompanying financial statements do not include any adjustments to reflect the possible future effects on the recoverability and classification of assets or the amounts and classifications of liabilities that may result from the outcome of the uncertainty concerning the Company's ability to continue as a going concern.

As of December 31, 2022, the Company had cash of $171,480. For the foreseeable future, the Company's ability to continue its operations is dependent upon its ability to obtain additional capital. The Company is currently seeking to raise additional capital through a public or private financing of equity; although there can be no assurances the Company will be successful in such a campaign.

NOTE 2 — SIGNIFICANT ACCOUNTING POLICIES

Basis of Presentation

The accompanying financial statements are presented in conformity with accounting principles generally accepted in the United States of America ("GAAP") and pursuant to the rules and regulations of US Securities and Exchange Commission ("SEC"). The accounting and reporting policies of the Company conform to accounting principles generally accepted in the United States of America, and the Company's fiscal year end is December 31.

Use of Estimates

The preparation of financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the amounts reported in its financial statements and accompanying notes. On an ongoing basis, management evaluates these estimates and judgments, which are based on historical and anticipated results and trends and on various other assumptions that management believes to be reasonable under the circumstances. By their nature, estimates are subject to an inherent degree of uncertainty and, as such, actual results may differ from management's estimates.

Cash

Cash consist primarily of deposits with commercial banks and financial institutions. The Company maintains cash balances at various financial institutions. Both interest and non-interest bearing accounts with the same insured depository institution are insured by the Federal Deposit Insurance Corporation (FDIC) for a combined total of $250,000. In the normal course of business, the Company may have deposits that exceed the FDIC insured limit. The Company believes that it is not subject to unusual credit risk beyond the normal credit risk associated with commercial banking relationships. At December 31, 2022 and December 31, 2021, there were no accounts in excess of the FDIC limits.

OS Therapies Incorporated
Notes to the Financial Statements
For the Years Ended December 31, 2022 and 2021

NOTE 2 — SIGNIFICANT ACCOUNTING POLICIES (cont.)

Fixed Asset Policy

A capital asset is defined as a unit of property that has an economic useful life that extends beyond 12 months. Any items costing below the threshold or not fitting the definition of a capital asset will be expensed in the financial statements. All capital assets are recorded at historical cost as of the date acquired. Computer assets will be capitalized and Straight-Line depreciated over 5-years for financial statement purposes.

Impairment of Long-Lived Assets

The Company reviews long-lived assets for impairment when events or changes in circumstances indicate the carrying value of the assets may not be recoverable. Recoverability is measured by comparison of the book values of the assets to future net undiscounted cash flows that the assets or the asset groups are expected to generate. If such assets are considered to be impaired, the impairment to be recognized is measured by the amount by which the book value of the assets exceed their fair value, which is measured based on the estimated discounted future net cash flows arising from the assets or asset groups. No impairment losses on long-lived assets have been recorded for years ending December 31, 2022 and December 31, 2021.

Deferred Offering Costs

Deferred offering costs consist of capitalized underwriting, legal, accounting and other expenses incurred through the balance sheet date that are directly related to the Proposed Public Offering and that will be charged to stockholders' equity upon the completion of the Proposed Public Offering. Should the Proposed Public Offering prove to be unsuccessful, these deferred costs, as well as additional expenses incurred, will be charged to operations. At December 31, 2022, the Company had $324,210 in capitalized deferred offering costs.

Debt Discount and Redemption Premium

The Company evaluated the Notes in accordance with ASC 480, Distinguishing Liabilities from Equity ("ASC 480") and determined the Notes are considered share-settled debt and should be recorded as a liability. This conclusion was determined based on the debt providing the holder with a variable number of shares at settlement with an aggregate fair value equal to the debt instrument's outstanding principal. The general measurement guidance in ASC 480 requires obligations that can be settled in shares with a fixed monetary value at settlement (e.g., share-settled debt) to be carried at fair value unless other accounting guidance specifies another measurement attribute. It has been determined that the appropriate guidance for share-settled debt is ASC 835. As a result, the Notes will be recorded at the amortized cost.

The initial fair value of the redemption value relating to the convertible debt instruments are capitalized and amortized over the term of the related debt using the straight-line method, which approximates the interest method. If a loan is paid in full, any unamortized financing costs will be removed from the related accounts and charged to operations. Amortization of debt discount is recorded as a component of interest expense. In accordance with ASU 2015-03, Interest — Imputation of Interest, the unamortized debt discount is presented in the accompanying balance sheet as a direct deduction from the carrying amount of the related debt.

Research and Development Costs

Research and development expenses are charged to operations as incurred. Research and development expenses include, among other things, salaries, costs of outside collaborators and outside services, and supplies.

Revenue Recognition

As of the date of incorporation, the Company adopted ASU 2014-09, *Revenue from Contracts with Customers*, and all subsequent amendments to the ASU (collectively, "ASC 606"), which (i) creates a single framework for recognizing revenue from contracts with customers that fall within its scope and (ii) revises when it is appropriate to recognize a gain (loss) from the transfer of nonfinancial assets.

OS Therapies Incorporated
Notes to the Financial Statements
For the Years Ended December 31, 2022 and 2021

NOTE 2 — SIGNIFICANT ACCOUNTING POLICIES (cont.)

Stock-Based Compensation

The Company, in accordance with ASC 718, employs the use of stock-based compensation. The compensation expense related to stock granted to employees and non-employees is measured at the grant date based on the estimated fair value of the award and is recognized on a straight-line basis over the requisite service period. Forfeitures are recognized as a reduction of stock-based compensation expense as they occur. Stock-based compensation expense for an award with a performance condition is recognized when the achievement of such performance condition is determined to be probable. If the outcome of such performance condition is not determined to be probable or is not met, no compensation expense is recognized and any previously recognized compensation expense is reversed.

Income taxes

The Company accounts for income taxes using the asset-and-liability method in accordance with ASC 740, *Income Taxes* ("ASC 740"). Deferred tax assets and liabilities are recognized for the future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases and operating loss and tax credit carryforwards. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. The effect on the deferred tax assets and liabilities of a change in tax rate is recognized in the period that includes the enactment date. A valuation allowance is recorded if it is "more likely than not" that some portion or all of the deferred tax assets will not be realized in future periods.

The Company follows the guidance in ASC Topic 740-10 in assessing uncertain tax positions. The standard applies to all tax positions and clarifies the recognition of tax benefits in the financial statements by providing for a two-step approach of recognition and measurement. The first step involves assessing whether the tax position is more-likely-than-not to be sustained upon examination based upon its technical merits. The second step involves measurement of the amount to be recognized. Tax positions that meet the more-likely than-not threshold are measured at the largest amount of tax benefit that is greater than 50% likely of being realized upon ultimate finalization with the taxing authority. The Company recognizes the impact of an uncertain income tax position in the financial statements if it believes that the position is more likely than not to be sustained by the relevant taxing authority.

The Company will recognize interest and penalties related to tax positions in income tax expense. As of December 31, 2022 or December 31, 2021, the Company had no unrecognized uncertain income tax positions.

Basic and Diluted Loss per Share

The Company computes loss per share in accordance with ASC 260, *Earnings per Share* ("ASC 260"). ASC 260 requires presentation of both basic and diluted earnings per share ("EPS") on the face of the statements of operations. Basic EPS is computed by dividing net loss available to common shareholders (numerator) by the weighted average number of common shares outstanding (denominator) during the period. Diluted EPS gives effect to all dilutive potential common shares outstanding during the period using the treasury stock method and convertible notes payable using the if-converted method. Diluted EPS excludes all dilutive potential shares if their effect is antidilutive.

Below is a table listing all preferred stock and common stock equivalents:

Common Stock Equivalents	**12/31/2022**	**12/31/2021**
Convertible Debt	8,230,248	5,825,870
Make-Whole Liability	1,590,939	1,009,691
Warrants	771,143	634,313
Preferred Stock	1,302,082	1,302,082
Total	11,894,412	**8,771,956**

OS Therapies Incorporated
Notes to the Financial Statements
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NOTE 2 — SIGNIFICANT ACCOUNTING POLICIES (cont.)

Fair Value Measurements

The Company applies ASC 820 *Fair Value Measurement* ("ASC 820"), which establishes a framework for measuring fair value and clarifies the definition of fair value within that framework. ASC 820 defines fair value as an exit price, which is the price that would be received for an asset or paid to transfer a liability in the Company's principal or most advantageous market in an orderly transaction between market participants on the measurement date. The fair value hierarchy established in ASC 820 generally requires an entity to maximize the use of observable inputs and minimize the use of unobservable inputs when measuring fair value. Observable inputs reflect the assumptions that market participants would use in pricing the asset or liability and are developed based on market data obtained from sources independent of the reporting entity. Unobservable inputs reflect the entity's own assumptions based on market data and the entity's judgments about the assumptions that market participants would use in pricing the asset or liability and are to be developed based on the best information available in the circumstances.

The carrying value of the Company's prepaid expenses, accounts payable and accrued expenses approximate fair value because of the short-term maturity of these financial instruments. The redemption feature of the debt instruments is recorded at fair value (See Note 3).

The valuation hierarchy is composed of three levels. The classification within the valuation hierarchy is based on the lowest level of input that is significant to the fair value measurement. The levels within the valuation hierarchy are described below:

Level 1 — Assets and liabilities with unadjusted, quoted prices listed on active market exchanges. Inputs to the fair value measurement are observable inputs, such as quoted prices in active markets for identical assets or liabilities.

Level 2 — Inputs to the fair value measurement are determined using prices for recently traded assets and liabilities with similar underlying terms, as well as direct or indirect observable inputs, such as interest rates and yield curves that are observable at commonly quoted intervals.

Level 3 — Inputs to the fair value measurement are unobservable inputs, such as estimates, assumptions, and valuation techniques when little or no market data exists for the assets or liabilities.

Recent Accounting Pronouncements

The Company has evaluated all recent accounting pronouncements and believes that none of them will have a material effect on the Company's financial position, results of operations, or cash flows except as discussed below.

Accounting policies being evaluated:

We adopted ASC 842 on January 1, 2022 using the modified retrospective basis and did not restate comparative periods as permitted under Accounting Standards Update ("ASU") 2018-11. ASC 842 supersedes nearly all existing lease accounting guidance under GAAP issued by the Financial Accounting Standards Board ("FASB") including ASC Topic 840, Leases. ASC 842 requires that lessees recognize ROU assets and lease liabilities calculated based on the present value of lease payments for all lease agreements with terms that are greater than twelve months. ASC 842 distinguishes leases as either a finance lease or an operating lease that affects how the leases are measured and presented in the statement of operations and statement of cash flows.

Under ASC 842, the "short-term" lease designation can be applied to an entire class of leases rather than on a lease-by-lease basis. By electing this practical expedient, short-term leases do not need to be reported on the balance sheet. This and other practical expedients simplify the lease classification process and help organizations more easily adhere to the new lease standard. Based on the foregoing, the Company does not have lease asset or liability entries.

OS Therapies Incorporated
Notes to the Financial Statements
For the Years Ended December 31, 2022 and 2021

NOTE 2 — SIGNIFICANT ACCOUNTING POLICIES (cont.)

Accounting principles adopted:

In August 2018, the FASB issued ASU No. 2018-13, *Fair Value Measurement (Topic 820): Disclosure Framework — Changes to the Disclosure Requirements for Fair Value Measurement*. This amendment modifies the disclosure requirements for fair value measurements. The guidance is effective for all entities for fiscal years ending after December 15, 2020, and interim periods within those fiscal years. Early adoption is permitted. The guidance was adopted as of January 1, 2020. The impact on the Company's financial position, results of operations and cash flows was negligible.

In June 2018, the FASB issued ASU 2018-07, *Compensation-Stock Compensation (Topic 718): Improvements to Non-employee Share-Based Payment Accounting.* ASU 2018-07 expands the scope of Topic 718 to include share-based payment transactions for acquiring goods and services from non-employees. The Company adopted this standard effective January 1, 2019. Effective January 1, 2019, the date of adoption, the Company changed its expense recognition for share-based payments to non-employees to an amount determined at the grant or modification date instead of a variable amount to be re-measured each reporting period. The Company calculated the fair value of its non-employee grants as of the adoption date and determined that there was no impact to the Company's accumulated deficit or other components of equity upon adoption of ASU 2018-07. The unamortized expense for non-employee grants will be recognized on a straight-line basis over the remaining contractual term of the respective non-employee option agreements. The adoption of ASU 2018-07 did not have a material impact on the Company's financial statements.

In January 2021, the Company early adopted ASU 2020-06 *Debt with Conversion and Other Options (Subtopic 470-20) and Derivatives and Hedging — Contracts in Entity's Own Equity (Subtopic 815-40).* ASU 2020-06 simplifies the accounting for convertible debt instruments and convertible preferred stock by reducing the number of accounting models and limiting the number of embedded conversion features separately recognized from the primary contract. The guidance also includes targeted improvements to the disclosures for convertible instruments and earnings per share. ASU 2020-06 is effective for fiscal years beginning after December 15, 2021, including interim periods within those fiscal years. Early adoption is permitted, but no earlier than fiscal years beginning after December 15, 2020.

NOTE 3 — RELATED PARTY TRANSACTIONS

Shareholder Loan

The Company founder, Paul A. Romness, MPH, took advances from the Company of $49,074 in 2022 and $0 in 2021. On December 15, 2020, the Board of Directors approved an agreement whereby the CEO would pay back these advances, with appropriate interest. The agreement was later modified as the Board determined the CEO was due market rate compensation for two years (July 2018 through June 2020 was $120,000, and $240,000 for July 2020 to June 2021).

In the first quarter of 2023, a $360,000 bonus check will be issued to Mr. Romness, CEO. The payroll taxes will be paid. The $360,000 is comprised of backpay (see paragraph above).

The following summarizes activity under the related party loan:

Balance December 31, 2020	**$**	**431,634**
Repayment		(200,563)
Balance December 31, 2021	**$**	**231,071**
Advances during 2022		49,074
Repayment		(279,000)
Balance December 31, 2022	**$**	**1,145**

OS Therapies Incorporated
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NOTE 3 — RELATED PARTY TRANSACTIONS (cont.)

At December 31, 2022, the Company had a payroll payable to the CEO of $420,000 and related income taxes payable of $6,090. In 2021, the Company and the CEO agreed to no imputed interest for the CEO as the debt owed to and from the CEO net a difference of the payroll taxes due.

Related Parties — Convertible Debt

Of the total outstanding notes at December 31, 2022, 10.4% of Group A are held by related parties.

Ted Search and John Ciccio, collectively known as Mill River Partners LLC, are members of the Board and hold convertible notes with face amounts of $100,000 and $97,497 as of December 31, 2022 and 2021, respectively.

NOTE 4 — CONVERTIBLE DEBT

Convertible Debt

The Convertible Notes are separated into four groups — A, B, C, D and BlinkBio — per the table below.

Group	Rate	Maturity	Collateral	Conversion Rate	2022 Carrying Amount	2021 Carrying Amount
A	10%	Varies	None	87.5% – 100%	$ 1,138,120	$ 1,097,110
B	6%	3/31/2022	None	80%	$ 5,154,000	$ 4,794,624
C	6%	3/31/2024	None	80%	$ 3,218,845	$ 1,180,681
D	6%	11/15/2024	None	50%	$ 836,667	$ —
Blink Bio	10%	3/15/2022	None	100%	$ —	$ —

Group A

Commencing in September 2018 through 2020, the Company entered into an unsecured Subordinated Convertible Promissory Note Agreement (the "Agreements") with certain lenders (together, the "Holders" or individually, the "Holder"). Interest on the unpaid principal balance accrues at a rate of 10% per annum, computed on the basis of the actual number of days elapsed and a year of 365 days. Unless earlier converted into shares of Equity Securities, the principal and accrued interest shall be due and payable by the Company on demand by the Holders at any time after the earlier of (i) the Maturity Date (as defined in each Agreement) and (ii) the closing of the Next Equity Financing (as defined below). In general, the stated Maturity Date varies from the date of issuance.

The Notes will automatically convert into the type of Equity Securities issued in the Next Equity Financing upon closing. The number of shares of such Equity Securities to be issued will be equal to the quotient obtained by dividing the outstanding principal and unpaid accrued interest due on the Note on the date of conversion of 87.5 – 100% of the price paid per share for Equity Securities by the investors in the Next Equity Financing. Equity Securities refers to Company's common stock or preferred stock and Next Equity Financing refers to the next sale (or series of related sales) by the Company of its equity securities from which the Company receives gross proceeds of not less than $3,000,000 (including the aggregate amount of debt securities converted into Equity Securities upon conversion or cancellation of promissory notes) or $5,000,000, depending upon the signed agreement terms.

In the event that the Company raises aggregate additional cash proceeds of at least $3,000,000 or $5,000,000 through the sale of the Company's equity securities, excluding the sales or conversions of Notes under the Agreement, the outstanding principal amount due shall automatically, and without any action on part of the holder, be converted into fully paid and non-assessable units of the Company's equity stock sold in such qualified financing at 12.5% of the equity stock conversion price. The Company, at its option, may pay and all accrued, but unpaid, interest and other charges in cash or by the issuance of additional equity stock at a rate of the applicable conversion price.

OS Therapies Incorporated
Notes to the Financial Statements
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NOTE 4 — CONVERTIBLE DEBT (cont.)

The Company evaluated the Notes in accordance with ASC 480, *Distinguishing Liabilities from Equity* ("ASC 480"), and determined the Notes are considered share-settled debt and should be recorded as a liability. This conclusion was determined based on the debt providing the holder with a variable number of shares at settlement with an aggregate fair value equal to the debt instrument's outstanding principal. The general measurement guidance in ASC 480 requires obligations that can be settled in shares with a fixed monetary value at settlement (e.g., share-settled debt) to be carried at fair value unless other accounting guidance specifies another measurement attribute. It has been determined that the appropriate guidance for share-settled debt is ASC 835. As a result, the Notes were recorded at the amortized cost.

The convertible debt balance at December 31, 2022 and 2021 is summarized as follows:

Debt A	As of December 31, 2022	As of December 31, 2021
Principal amount outstanding	$ 1,154,000	$ 1,154,000
Less: discounts (issuance, redemptions)	(185,224)	(172,724)
Amortization of discounts	169,344	115,834
Carrying value	1,138,120	1,097,110
Less Related Party Portion	(100,000)	(97,497)
Convertible Notes – A	$ 1,038,120	$ 999,613

Group B

Commencing in May 2020, the Company entered into an unsecured Subordinated Convertible Promissory Note Agreement (the "Agreements") with certain lenders (together, the "Holders" or individually, the "Holder"), pursuant to which the Company issued a Subordinated Convertible Promissory Note (individually the "Note" or together the "Notes") to the Holders, principally the Investors brought in by an investment bank. Interest on the unpaid principal balance accrues at a rate of 6% per annum, computed on the basis of the actual number of days elapsed and a year of 365 days. Unless earlier converted into shares of Equity Securities, the principal and accrued interest shall be due and payable by the Company on demand by the Holders at any time after the earlier of (i) the Maturity Date (as defined in each Agreement) and (ii) the closing of the Next Equity Financing (as defined below). In general, the stated Maturity Dates are March 31, 2024.

The Notes will automatically convert into the type of Equity Securities issued in the Next Equity Financing upon closing. The number of shares of such Equity Securities to be issued will be equal to the quotient obtained by dividing the outstanding principal and unpaid accrued interest due on the Note on the date of conversion of 80% of the price paid per share for Equity Securities by the investors in the Next Equity Financing. No such Next Equity Financing has occurred through December 31, 2022. Equity Securities refers to Company's common stock or preferred stock and Next Equity Financing refers to the next sale (or series of related sales) by the Company of its equity securities from which the Company receives gross proceeds of not less than $10,000,000 (including the aggregate amount of debt securities converted into Equity Securities upon conversion or cancellation of promissory notes).

In the event that the Company raises aggregate additional cash proceeds of at least $10,000,000 through the sale of the Company's equity securities, excluding the sales or conversions of Notes under the Agreement, the outstanding principal amount due shall automatically, and without any action on part of the holder, be converted into fully paid and non-assessable units of the Company's equity stock sold in such qualified financing at 12.5% of the equity stock conversion price.

The Company, at its option, may pay and all accrued, but unpaid, interest and other charges in cash or by the issuance of additional equity stock at a rate of the applicable conversion price.

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NOTE 4 — CONVERTIBLE DEBT (cont.)

The Company evaluated the Notes in accordance with ASC 480, *Distinguishing Liabilities from Equity* ("ASC 480"), and determined the Notes are considered share-settled debt and should be recorded as a liability. This conclusion was determined based on the debt providing the holder with a variable number of shares at settlement with an aggregate fair value equal to the debt instrument's outstanding principal. The general measurement guidance in ASC 480 requires obligations that can be settled in shares with a fixed monetary value at settlement (e.g., share-settled debt) to be carried at fair value unless other accounting guidance specifies another measurement attribute. It has been determined that the appropriate guidance for share-settled debt is ASC 835. As a result, the Notes were recorded at the amortized cost.

The convertible debt balance at December 31, 2022 and 2021 is summarized as follows:

Debt B	As of December 31, 2022	As of December 31, 2021
Principal amount outstanding	$ 5,154,000	$ 5,154,000
Less: discounts (issuance, redemptions, warrants)	(1,818,939)	(2,649,696)
Amortization of discounts	1,818,939	2,290,320
Carrying value	$ 5,154,000	$ 4,794,624

Group C

Commencing in July 2021, the Company entered into an unsecured Subordinated Convertible Promissory Note Agreement (the "Agreements") with certain lenders (together, the "Holders" or individually, the "Holder"), pursuant to which the Company issued a Subordinated Convertible Promissory Note (individually the "Note" or together the "Notes") to the Holders, principally the Investors brought in by an investment bank. Interest on the unpaid principal balance accrues at a rate of 6% per annum, computed on the basis of the actual number of days elapsed and a year of 365 days. Unless earlier converted into shares of Equity Securities, the principal and accrued interest shall be due and payable by the Company on demand by the Holders at any time after the earlier of (i) the Maturity Date (as defined in each Agreement) and (ii) the closing of the Next Equity Financing (as defined below). In general, the stated Maturity Date is March 31, 2024.

The Notes will automatically convert into the type of Equity Securities issued in the Next Equity Financing upon closing. The number of shares of such Equity Securities to be issued will be equal to the quotient obtained by dividing the outstanding principal and unpaid accrued interest due on the Note on the date of conversion of 80% of the price paid per share for Equity Securities by the investors in the Next Equity Financing. No such Next Equity Financing has occurred through December 31, 2022. Equity Securities refers to Company's common stock or preferred stock and Next Equity Financing refers to the next sale (or series of related sales) by the Company of its equity securities from which the Company receives gross proceeds of not less than $10,000,000 (including the aggregate amount of debt securities converted into Equity Securities upon conversion or cancellation of promissory notes).

In the event that the Company raises aggregate additional cash proceeds of at least $10,000,000 through the sale of the Company's equity securities, excluding the sales or conversions of Notes under the Agreement, the outstanding principal amount due shall automatically, and without any action on part of the holder, be converted into fully paid and non-assessable units of the Company's equity stock sold in such qualified financing at 12.5% of the equity stock conversion price.

The Company, at its option, may pay and all accrued, but unpaid, interest and other charges in cash or by the issuance of additional equity stock at a rate of the applicable conversion price.

The Company evaluated the Notes in accordance with ASC 480, *Distinguishing Liabilities from Equity* ("ASC 480"), and determined the Notes are considered share-settled debt and should be recorded as a liability. This conclusion was determined based on the debt providing the holder with a variable number of shares at settlement with an aggregate fair value equal to the debt instrument's outstanding principal. The general measurement guidance in

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Notes to the Financial Statements
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NOTE 4 — CONVERTIBLE DEBT (cont.)

ASC 480 requires obligations that can be settled in shares with a fixed monetary value at settlement (e.g., share settled debt) to be carried at fair value unless other accounting guidance specifies another measurement attribute. It has been determined that the appropriate guidance for share-settled debt is ASC 835. As a result, the Notes were recorded at the amortized cost.

The convertible debt balance at December 31, 2022 and 2021 is summarized as follows:

Debt C	As of December 31, 2022	As of December 31, 2021
Principal amount outstanding	$ 3,820,020	$ 1,685,020
Less: discounts (issuance, redemptions, warrants)	(1,063,223)	(604,129)
Amortization of discounts	462,048	99,790
Carrying value	$ 3,218,845	$ 1,180,681

Group D

Commencing in November 2022, the Company entered into an unsecured Subordinated Convertible Promissory Note Agreement (the "Agreements") with certain lenders (together, the "Holders" or individually, the "Holder"), pursuant to which the Company issued a Subordinated Convertible Promissory Note (individually the "Note" or together the "Notes") to the Holders, principally the Investors brought in by an investment bank. Interest on the unpaid principal balance accrues at a rate of 6% per annum, computed on the basis of the actual number of days elapsed and a year of 365 days. Unless earlier converted into shares of Equity Securities, the principal and accrued interest shall be due and payable by the Company on demand by the Holders at any time after the earlier of (i) the Maturity Date (as defined in each Agreement) and (ii) the closing of the Next Equity Financing (as defined below). In general, the stated Maturity Date is November 15, 2023.

The Notes will automatically convert into the type of Equity Securities issued in the Next Equity Financing upon closing. The number of shares of such Equity Securities to be issued will be equal to the quotient obtained by dividing the outstanding principal and unpaid accrued interest due on the Note on the date of conversion of 50% of the price paid per share for Equity Securities by the investors in the Next Equity Financing. No such Next Equity Financing has occurred through December 31, 2022. Equity Securities refers to Company's common stock or preferred stock and Next Equity Financing refers to the next sale (or series of related sales) by the Company of its equity securities from which the Company receives gross proceeds of not less than $10,000,000 (including the aggregate amount of debt securities converted into Equity Securities upon conversion or cancellation of promissory notes).

In the event that the Company raises aggregate additional cash proceeds of at least $10,000,000 through the sale of the Company's equity securities, excluding the sales or conversions of Notes under the Agreement, the outstanding principal amount due shall automatically, and without any action on part of the holder, be converted into fully paid and non-assessable units of the Company's equity stock sold in such qualified financing at 50% of the equity stock conversion price.

In connection with the Group D Convertible Notes, the Company agreed to issue an additional 250,000 shares of Class A common stock to the Group D Investors, pro-rated based on such investor's investment amount, as an inducement for their investment in the Group D Convertible Notes. The Company will issue such shares upon the automatic conversion of the Group D Convertible Notes.

The Company, at its option, may pay and all accrued, but unpaid, interest and other charges in cash or by the issuance of additional equity stock at a rate of the applicable conversion price.

The Company evaluated the Notes in accordance with ASC 480, *Distinguishing Liabilities from Equity* ("ASC 480"), and determined the Notes are considered share-settled debt and should be recorded as a liability. This conclusion was determined based on the debt providing the holder with a variable number of shares at settlement with

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Notes to the Financial Statements
For the Years Ended December 31, 2022 and 2021

NOTE 4 — CONVERTIBLE DEBT (cont.)

an aggregate fair value equal to the debt instrument's outstanding principal. The general measurement guidance in ASC 480 requires obligations that can be settled in shares with a fixed monetary value at settlement (e.g., share-settled debt) to be carried at fair value unless other accounting guidance specifies another measurement attribute. It has been determined that the appropriate guidance for share-settled debt is ASC 835. As a result, the Notes were recorded at the amortized cost.

The convertible debt balance at December 31, 2022 and 2021 is summarized as follows:

Debt D	As of December 31, 2022	As of December 31, 2021
Principal amount outstanding	$ 2,000,000	$ —
Less: discounts (issuance, redemptions, warrants)	(1,539,654)	—
Amortization of discounts	376,321	—
Carrying value	$ 836,667	$ —

Blink Bio

Note payable

On August 19, 2020, the Company gave a convertible note, initially valued at $2,400,000, to Blink Bio (see Note 7 for license agreement). The Note bears simple interest at the rate of 10% per annum and is set to convert within 120 days of the signing date, to Preferred Stock at conversion price per share equal to the Capped Conversion Price ($1.92 per share), unless agreed by mutual consent to extend, which it was in December 2021 to March 2021.

Principal and accrued interest were due in a balloon payment on March 15, 2021. Interest expense through March 15, 2021 was $55,804. The principal and then total interest of $100,000 converted into 1,302,082 shares of Preferred Stock on March 15, 2021.

Redemption Liability

The fair value of the redemption liability is calculated under Level 3 of the fair value hierarchy, is determined based upon a Probability-Weighted of Expected Returns Model ("PWERM"). This PWERM was determined to be the most appropriate method of estimating the value of possible redemption or conversion outcomes over time, since the Company has not entered into a priced equity round through December 31, 2022. The fair value of the redemption liability is calculated using the initial value of the convertible note less the debt discount rate of 12.5% in Group A, 20% in Groups B and C, and 50% in Group D. The redemption liability is then amortized over the remaining life of the note, utilizing the interest rates of 10% and 6% respectively for the groups. The life of each note in Group A is for a set period of 3 years, and is variable in Groups B, C, and D, with a range of 12 months to 3 years. The Company retains the option to negotiate an extended maturity date for Groups B, C, and D. The new embedded redemption values were $1,427,000 and $740,804 for the years ending December 31, 2022 and 2021, respectively. The redemption liability is re-measured at each period end and is summarized as follows:

	As of December 31, 2022	As of December 31, 2021
New Embedded Redemption Value – Group A	144,250	144,250
New Embedded Redemption Value – Group B	1,130,800	1,130,800
New Embedded Redemption Value – Group C	764,004	337,004
New Embedded Redemption Value – Group D	1,000,000	—
Ending Balance	**$ 3,039,054**	**$ 1,612,054**

OS Therapies Incorporated
Notes to the Financial Statements
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NOTE 4 — CONVERTIBLE DEBT (cont.)

Fees Associated with Convertible Debt Raise

The fees associated with the convertible debt raise are legal and investment fees associated with the issuance of the convertible notes for Groups A, B, C & D. There were no related parties who received these fees. The fees are amortized over the life of the convertible note utilizing an interest rate of 10% for Group A and 6% for Groups B, C and D. The debt issuance liability is re-measured at each period end and is summarized in the table below.

	As of December 31, 2022	As of December 31, 2021
Debt Issuance		
Group A	$ —	$ —
Group B	—	253,420
Group C	114,000	75,250
Group D	196,588	—
Total Net Debt Issuance	$ 310,588	$ 328,670

Make-whole liability — Shares due Noble Capital

In March 2020, the Company signed a new advisory agreement with Noble Capital, in lieu of cash remuneration and the Company agreed to issue 4% of the Company shares, with an anti-dilution clause. The Make-whole liability represents the shares earned for the anti-dilution of their stock position over 2020 and 2021. The 2021 year-end had the Company owing total cumulative additional shares of 466,404, valued in the amount of $408,413, after issuing 400,000 shares in 2020. In 2021, the Company recorded an associated expense to Advisory Fees of $152,482, to recognize the share value earned on the anti-dilution compensation in 2021. In 2022, the Company set aside 141,248 cumulative additional shares to satisfy the anti-dilution clause. In 2022, the Company recorded an associated expense to Advisory Fees of $282,496, to recognize the share value earned on the anti-dilution compensation in the current year.

In addition, the Company owed officers, key employees, key advisors and directors cumulative shares of 740,000 shares of Class A common stock that has yet to be issued and is valued at $780,000 and included in this liability as follows:

Name	Position	# Shares	Value	Date Earned
Gerald Commissiong	Key Vendor	30,000	$ 30,000	6/4/2019
John Hadden	Key Vendor	50,000	50,000	6/4/2019
Christopher P. Acevedo	Former Chief Financial Officer	200,000	200,000	7/1/2020
John Doll	Employee	100,000	100,000	6/1/2020
Jutta Warner, Ph.D.	Consultant	200,000	200,000	9/8/2020
Theodore F. Search, Pharm.D.	Director	40,000	40,000	1/1/2021
John Ciccio	Director	40,000	40,000	1/1/2021
Colin Goddard, Ph.D.	Chairman of the Board	40,000	40,000	1/1/2021
Joacim Borg	Director	40,000	80,000	7/1/2022
TOTAL		**740,000**	**$ 780,000**	

Warrants for Placement Agent — Noble Capital

In March 2020, the Company signed a new advisory agreement with Noble Capital, in lieu of cash remuneration it was provided a 10% warrant fee, in addition to cash remuneration on debt raises from Noble procured investments. The terms of the warrants are five years at an exercise price that equates to the average price the Convertible Debt Holders paid in each debt raise round. The number of warrants earned in 2022 is 136,830,

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NOTE 4 — CONVERTIBLE DEBT (cont.)

valued at $273,670. The number of warrants earned in 2021 is 226,813, valued at $453,625. The total warrants earned as of December 31, 2022 was 771,143, after considering the 407,500 warrants earned in 2020 under the agreement. Warrants earned in 2022, 2021 and 2020 have been accounted for as a discount to the associated convertible debt with the discounts amortized over the term of the related debt. The Debt Discount Accretion expense on warrants in 2022 and 2021 are $217,820 and $441,120, respectively. The total unamortized discount of those warrants are $323,042 and $267,192 as of December 31, 2022 and December 31, 2021, respectively.

NOTE 5 — TEDCO GRANT

In May of 2021, the Company received the first of two tranches from TEDCO's *Rural & Underserved Business Recovery from Impact of COVID-19 (RUBRIC) Grant* in the amount of $50,000. A second tranche of $50,000 was received in October 2021 for a total reimbursable grant amount of $100,000. The Company is obligated to report on and pay to TEDCO 3% of their quarterly revenues for a five-year period following the reward date. Income from grants and investments are not considered revenues. Royalties due to TEDCO are capped at 150% of the amount of the award or $150,000 total. The Company has the option to eliminate the quarterly royalty obligation by making an advance payment prior to the end of the five-year period, in which case, the Company shall receive a 10% reduction of the royalty cap percentage for each year prior to the expiration of the five-year reimbursement period that the grant is repaid in full. If the Company ceases to meet eligibility requirements the reimbursement obligation shall become due to TEDCO immediately; however the discount for meeting the obligation shall still apply.

NOTE 6 — INCOME TAXES

Significant components of the Company's deferred tax assets and liabilities were as follows:

	2022	2021
Deferred tax assets:		
Net operating loss carryforwards	$ 4,776,491	$ 3,263,790
General Business Credit Carryover	217,480	34,602
R&D Credit (available for payroll tax offset)	509,475	285,518
Subtotal	5,503,446	3,583,910
Valuation allowance	(5,503,446)	(3,583,910)
Total deferred tax assets	$ —	$ —

The federal income tax rate used for 2022 is 21%. The Maryland rate is 8.25%. For the years ending December 31, 2022 and December 31, 2021, the Company had federal net operating loss ("NOL") of $16,453,174 and $11,509,196, respectively. The 2019 NOL carryforward of $292,144 will expire in tax years up through 2037. The NOLs generated in tax years 2020 and beyond will carry forward indefinitely, but the deductibility of such federal net operating losses is limited. The Company has provided a valuation allowance to offset the deferred tax assets due to the uncertainty of realizing the benefits of the net deferred tax asset.

The Company's issuances of common stock may have likely resulted in ownership changes as defined by Section 382 of the Code; however, the Company has not conducted a Section 382 study to date. It is possible that a future analysis may result in the conclusion that a substantial portion, or perhaps substantially all of the Company's NOL carryforwards and R&D tax credit carryforwards will expire due to the limitations of Sections 382 and 383 of the Code. As a result, the utilization of the carryforwards may be limited, and a portion of the carryforwards may expire unused. The Company is subject to U.S. federal tax examinations by tax authorities for the year 2022 due to the fact that NOL carryforwards exist going back to 2019 that may be utilized on a current or future year tax return.

OS Therapies Incorporated
Notes to the Financial Statements
For the Years Ended December 31, 2022 and 2021

NOTE 7 — COMMITMENTS AND CONTINGENCIES

Rental Agreement

The Company has a rental agreement with BXP Shady Grove Lot 7 LLC, beginning in April 2022 and ending in March 2023. The payment term of the license agreement is $1,000 per month. Rent expense for the year ended December 31, 2022 was $10,312 and for the year ended December 31, 2021 was $3,305.

Employee Commitments

There are no employee commitments as the Company operates on at A-Will employment basis.

License Obligation and Manufacturing Agreements Advaxis

The Company entered into an exclusive license agreement with Advaxis, Inc in September 2018, as amended, pursuant to which it acquired the right to develop and commercialize Advaxis HER2 Construct, the Company's product candidate and the use of Advaxis HER2 Construct patents. Per the agreement, monthly payments began April 30, 2020, and a total of $1,205,000 has been paid to ADVAXIS towards the License Commencement Payment by December 31, 2020, the grand total of which is $1,550,000. These payments have been recorded as licensing expenses in the accompanying statement of operations. Milestone 3 was updated to a $5,000,000 payment on April 23, 2021. No payments were due or made in 2022. A payment schedule is set for future milestones, as follows:

Milestone		Milestone Payment
1. OST has secured funding of at least Two Million Three Hundred Thirty-Seven Thousand Five Hundred US Dollars ($2,337,500), in the aggregate (The Funding Milestone) (paid)		License Commencement Payment:
	$	1,550,000
2. The earlier to occur of: (A) OST having secured at least Eight Million US Dollars, in the aggregate or (B) Completion of the first Clinical Trial (with "Completion" meaning that the final patient has enrolled in first Clinical Trial). (paid)	$	1,375,000
3. The earlier to occur of: (A) receipt of Regulatory Approval from the FDA for the First Indication of the first Licensed Product or (B) Initiation of the first Registrational Trial of the first Licensed Product in the Field	$	5,000,000
4. Cumulative Net Sales of all Licensed Products in excess of Twenty Million US Dollars ($20,000,000)	$	1,500,000
5. Cumulative Net Sales of all Licensed Products in excess of Fifty Million US Dollars ($50,000,000) Cumulative Net Sales of all Licensed Products in ex	$	5,000,000
6. Cumulative Net Sales of all Licensed Products in excess of One Hundred Million US Dollars ($100,000,000)	$	10,000,000

All milestone payments are non-creditable and non-refundable and shall be due and payable upon the occurrence of the corresponding date or Milestone, regardless of any failure by OST to provide the notice required by Section 6.4a of the licensing agreement. For clarity, each Milestone payment is payable only once. As of December 31, 2020, the first milestone had been achieved. As of January 7, 2021, the License Commencement payment was paid in full. As of May 21, 2021, the second milestone has been completed and paid in full.

On an aggregate basis across all Licensed Products under the licensing agreement and during the Royalty term, OST shall pay quarterly to Advaxis royalties on Net Sales of Licensed Products at a certain percentage rate with respect to all Net Sales in a given Calendar Quarter. No royalties were payable in 2022.

OS Therapies Incorporated
Notes to the Financial Statements
For the Years Ended December 31, 2022 and 2021

NOTE 7 — COMMITMENTS AND CONTINGENCIES (cont.)

BlinkBio

In July 2020, the Company entered into a Licensing Agreement with BlinkBio, Inc., to utilize their proprietary technology. As of August 2020, the $300,000 License fee was fully paid and recorded in license expense. These payments have been recorded in the Licensing expenses of the accompany statement of operation. No payments were due or made in 2022. A payment schedule is set for future milestones, is summarized below:

Milestone Bearing Event	Milestone Payment
1. License Fee to utilize proprietary technology (paid)	$300,000 + $2.4 million Convertible Note
2. Commencement of a toxicology study commented pursuant to Good Laboratory Practices (per 21 CFR Part 58) such that any resulting positive data would be admissible to applicable Regulatory Authorities to support an IND (commonly referred to as "GLP-Tox")	$ 375,000
3. Completion of a Phase I Clinical Trial	$ 1,500,000
4. Completion of a Phase II Clinical Trial	$ 2,500,000
5. Filing of an NDA, BLA or MAA registration (or the equivalent in any other territory around the world)	$ 6,000,000
6. Regulatory Approval in the first of the United States, within the EU or within the UK	$ 12,000,000

The Company shall make the cash payments set forth in the table above by wire transfer of immediately available funds, to BlinkBio within thirty (30) days of the occurrence of each milestone set forth with respect to the first Product to attain each such milestone, except that the first Milestone above shall apply with respect to The Company's first product candidate. During the Royalty Term, the Company will pay BlinkBio a royalty of six percent (6%) on Net Sales on a Product-by-Product and country-by-country basis during the Royalty Term, in a country in which no Valid Claim Covers the manufacture, use, or sale of a Product, the royalty on Net Sales of such Product in such country shall be reduced to three percent (3%). No royalties were due in 2022.

For the avoidance of doubt, each Milestone payment shall be payable only once, and the aggregate amount of Milestone payments payable hereunder shall not exceed $22,375,000. A Milestone may be achieved by The Company or a Commercial Sublicensee.

George Clinical Inc.

In June 2020, the Company entered into a Research Service Agreement with George Clinical Inc., to use their clinical research services for the Company's study: "*An Open Label, Phase 2 Study of Maintenance Therapy with OST-HER2 after Resection of Recurrent Osteosarcoma*". The study has seventeen patients and is expected to last for 28 months, or through September 2022. The Agreement budget totals $2,423,928. The total research and development expense recorded in the statement of operations for the years ended December 31, 2022 and 2021 was $928,059 and $555,724, respectively. The remainder is set up to be paid according to the service fee schedule below:

George Clinical Payment Schedule	Payment Amount
1. Service Fee Advance (paid 6/8/2020)	$ 49,989
2. Float – Service Fee Advance of 20% of $372,145.28 and PTC Advance Fee of 20% of $313,254 (Paid 11/4/2020)	$ 162,346
3. Statistics Fees – 10% on Commencement of Study	$ 13,640
4. Statistics Fees – 50% on Development of SAP tables	$ 68,200
5. Statistics Fees – 40% on Final Analysis	$ 54,560
6. Service Fees – Remainder Due	Split Monthly Over Course of Study

OS Therapies Incorporated
Notes to the Financial Statements
For the Years Ended December 31, 2022 and 2021

NOTE 7 — COMMITMENTS AND CONTINGENCIES (cont.)

George Clinical will track and invoice the Company for the number of task units completed and pass through costs will be invoiced each month in arrears based on actual costs without mark-up. The PTC Advance Fee will be used to offset final pass through fees payable. As of December 31, 2022, the balance due to George Clinical was $170,990.

Legal Proceedings

From time to time, the Company may be involved in disputes, including litigation, relating to claims arising out of operations in the normal course of business. Any of these claims could subject the Company to costly legal expenses and, while management generally believes that there will be adequate insurance to cover different liabilities at such time the Company becomes a public company and commences clinical trials, the Company's future insurance carriers may deny coverage or policy limits may be inadequate to fully satisfy any damage awards or settlements. If this were to happen, the payment of any such awards could have a material adverse effect on the results of operations and financial position. Additionally, any such claims, whether or not successful, could damage the Company's reputation and business. The Company is currently not a party to any legal proceedings, the adverse outcome of which, in management's opinion, individually or in the aggregate, could have a material adverse effect on the Company's results of operations or financial position.

NOTE 8 — EQUITY

Common Stock

In 2021, the Company split Common Stock into two classes with fifty million shares of Class A Common Stock, $0.001 par value per share ("Class A Common Stock") designated and twenty million shares of Class B Common Stock, $0.001 par value per share ("Class B Common Stock"). As of December 31, 2022 and 2021, the Company has 9,980,000 and 9,980,000 shares of Class A Common Stock, respectively, and 0 shares of Class B Common Stock. Common Stock A has voting rights and Class B Common Stock has no voting rights.

Preferred Stock

In 2021, 5,000,000 shares of Preferred Stock were authorized, 1,400,000 was designated as Series A Preferred Stock, with 1,302,082 shares issued of Series A Preferred Stock. Series A Preferred Stock has 5% cumulative coupon and liquidation priority above all Common Shares. The coupon dividends are computed at 5% of the principal per annum and are recorded monthly. The dividend due as of December 31, 2022 and 2021 were $125,000 and $93,750, respectively for a total accrued dividend payable at December 31, 2022 of $218,750. The stock can be converted to common shares at a 1:1 ratio with a $0.001 par value.

The Series A Preferred Stock has the following rights and privileges:

Voting — Votes together with the Common Stock on all matters on an as-converted basis. Approval of a majority of the New Preferred Stock voting as a separate class will be required to, among other things: (i) adversely change rights of the New Preferred Stock, (ii) change the authorized number of shares of New Preferred Stock.

Conversion — Each share of New Preferred Stock is convertible into one share of Common Stock (subject to proportional adjustments for stock splits, stock dividends and the like) at any time at the option of the holder. Conversion ratio will be subject to adjustment on a broad-based, weighted average basis in the event of subsequent issuances at a price less than the original issue price (as adjusted) subject to customary exceptions.

Liquidation — One times the original issue price of the New Preferred Stock plus declared but unpaid dividends on each share of New Preferred Stock (or, if greater, the amount that the New Preferred Stock would receive on an as-converted basis) will be paid first on each share of New Preferred Stock, and the balance of proceeds to be paid to Common Stock. A merger, reorganization or similar transaction (including a sale, exclusive license or other disposition of all or substantially all of the assets of the Company or its subsidiaries) will be treated as

OS Therapies Incorporated
Notes to the Financial Statements
For the Years Ended December 31, 2022 and 2021

NOTE 8 — EQUITY (cont.)

a liquidation, thereby triggering payment of the liquidation preference described above. For the avoidance of doubt, the liquidation preference is intended to provide the Investor (and its permitted assigns) with an aggregate liquidation payment of $2,500,000.

	Total, as of 12/31/2022	Total, as of 12/31/2021
Shares Issued to Investors	1,302,082	1,302,082
Total Shares Issued	1,302,082	1,302,082

NOTE 9 — SUBSEQUENT EVENTS

1. The Company has completed the A-3 round, as of January 20, 2023, it received $.125 million in new notes in 2023. These notes expire on May 31, 2024.

2. The Company granted 25,000 shares to its Chief Financial Officer in March 2023 of which 25% of such shares vested on March 1, 2023, 25% vest upon completion of our initial public offering, and 25% vest upon each of the three and six month anniversaries of the public offering closing date.

3. The Company has completed the A-4 round, as of March 31, 2023, it received $.6 million in new notes in 2023. These notes expire on November 15, 2023. In connection with these notes, the Company agreed to issue an aggregate of 75,000 shares of common stock to the investors of the new notes.

2,000,000 Shares

OS THERAPIES INCORPORATED

Common Stock

_____

Preliminary Prospectus

_____

Boustead Securities, LLC	**Sutter Securities, Inc.**

Through and including _____, 2023 (the 25th day after the date of this prospectus), all dealers that effect transactions in these securities, whether or not participating in this offering, may be required to deliver a prospectus. This is in addition to the dealer's obligation to deliver a prospectus when acting as an underwriter and with respect to an unsold allotment or subscription.

_____, 2023

Table of Contents

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

PRELIMINARY PROSPECTUS	SUBJECT TO COMPLETION DATED APRIL 24, 2023

544,421 Shares

OS THERAPIES INCORPORATED

Common Stock

This prospectus relates to the resale of 544,421 shares of common stock of OS Therapies Incorporated that will be issued before the effectiveness of this registration statement to the selling stockholders named in this prospectus upon the automatic conversion of convertible promissory notes acquired by them in our private placement commenced in November 2022. The notes will convert at a price of $2.44 per share. Consummation of the offering made by this prospectus is conditioned on consummation of the initial public offering of shares of common stock by OS Therapies Incorporated pursuant to the primary offering prospectus that forms a part of this registration statement.

Prior to our initial public offering, which will occur concurrently with the resale of shares by the selling stockholders, no public market has existed for our common stock. We intend to list our shares of common stock for trading on the NYSE American under the symbol "OSTX." This listing is a condition to our initial public offering.

The shares of common stock offered hereby by the selling stockholders may be sold from time to time by such selling stockholders or by their permitted transferees. The distribution of shares of our common stock offered hereby may be effected in one or more transactions that may take place in ordinary brokers' transactions, privately negotiated transactions or through sales to one or more dealers for resale of such shares as principals, at market prices prevailing at the time of sale, at prices related to such prevailing market prices or at negotiated price. Usual and customary or specifically negotiated brokerage fees or commissions may be paid by the selling stockholders. The selling stockholders have represented to us that they will not offer or sell their shares prior to the closing of the primary offering.

The selling stockholders, and intermediaries through whom such shares are sold, may be deemed underwriters within the meaning of the Securities Act of 1933, as amended (the "Securities Act"), with respect to the shares offered hereby, and any profits realized or commissions received may be deemed underwriting compensation. We have agreed to indemnify the selling stockholders against certain liabilities, including liability under the Securities Act.

We will not receive any proceeds from the sale of shares of our common stock by the selling stockholders.

On _____, 2023, a registration statement under the Securities Act with respect to our initial public offering of 2,000,000 shares of our common stock was declared effective by the Securities and Exchange Commission. We received approximately $8.56 million in net proceeds from the offering (assuming no exercise of the underwriters' over-allotment option) after payment of underwriting discounts and commissions and estimated expenses of the offering.

Our business and investment in our common stock involves significant risks. These risks are described under the caption "Risk Factors" beginning on page 13 of the primary offering prospectus.

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

The date of this prospectus is _____, 2023

Summary of the Resale Offering

Common stock offered	544,421 shares.
Common stock outstanding immediately before this offering	10,745,000 shares.[(1)]
Common stock to be outstanding immediately after this offering	23,290,526 shares (23,590,526 shares if the underwriters exercise their option to purchase additional shares in full).[(1)]
Use of proceeds	We will not receive any proceeds from the sale of the shares of common stock held by the selling stockholders being registered in this prospectus.
Risk Factors	You should carefully read the "Risk Factors" section of the primary offering prospectus that forms a part of this registration statement for a discussion of factors that you should consider before deciding to invest in our common stock.
Proposed ticker symbol	"OSTX"

(1) The number of shares outstanding immediately before this offering (as of April 24, 2023) excludes, and the number of shares of common stock to be outstanding immediately after this offering includes, the issuance of the following shares which will occur before the effectiveness of this registration statement:

(i) 8,918,444 shares of common stock upon the automatic conversion of all outstanding convertible notes, including accrued interest, totaling approximately $14.3 million as of April 24, 2023 (at the public offering price of $5.00 per share in the primary offering);

(ii) 325,000 additional shares of common stock issuable to the noteholders in our private placement commenced in November 2022 upon the automatic conversion of their outstanding convertible notes; and

(iii) 1,302,082 shares of common stock upon the automatic conversion, on a one-for-one basis, of all outstanding shares of Series A preferred stock outstanding.

Additionally, we currently have outstanding warrants to purchase up to 598,311 shares of common stock and expect to issue warrants to purchase up to 140,000 shares of common stock to the representative of the underwriters (up to 161,000 shares if the underwriters exercise their over-allotment option in full) in connection with our initial public offering. These shares are not included in the common stock figures above.

USE OF PROCEEDS

We will not receive any proceeds from the sale of the shares of common stock held by the selling stockholders named in this prospectus.

Expenses expected to be incurred by us in connection with this prospectus are estimated at approximately $10,000. The selling stockholders are responsible for their own underwriting commissions and discounts and counsel fees and expenses.

SELLING STOCKHOLDERS

The shares of common stock being offered hereby by each selling stockholder will be issued before the effectiveness of this registration statement to such selling stockholder upon the automatic conversion of convertible promissory notes acquired by such selling stockholder in our private placement commenced in November 2022. The shares are being registered to satisfy a contractual obligation owed by us to the selling stockholders pursuant to a convertible note purchase agreement, dated November 15, 2022, providing for the registration of 50% of their conversion shares on their behalf.

The following table sets forth certain information with respect to the selling stockholders' beneficial ownership of shares of common stock as of the date of this prospectus. Beneficial ownership is determined in accordance with the applicable rules and regulations of the SEC and includes voting or investment power with respect to our capital stock. Unless otherwise indicated, we believe that all persons named in the table below have sole voting and investment power with respect to all shares of common stock beneficially owned by them.

Percentage of beneficial ownership before this offering is based on 21,290,526 shares of our common stock outstanding as of April 24, 2023, which gives effect to the issuance of (i) 8,918,444 shares of common stock upon the automatic conversion of all outstanding convertible notes, including accrued interest, totaling approximately $14.3 million as of (based on the initial public offering price of $5.00 per share); (ii) 325,000 additional shares of common stock the noteholders in our private placement commenced in November 2022 upon the automatic conversion of their outstanding convertible notes; and (iii) 1,302,082 shares of common stock upon the automatic conversion of all outstanding shares of Series A preferred stock.

The selling stockholders may from time to time offer and sell any or all of the shares of common stock set forth below pursuant to this prospectus. Except for investing in our private placement commenced in November 2022, the selling stockholders have not had any material relationship with us within the past three years. None of the selling stockholders is affiliated with a registered broker-dealer.

The table below assumes that the selling stockholders will sell all of the shares offered for sale hereby. The selling stockholders, however, are under no obligation to sell any shares pursuant to this prospectus.

Names and addresses	Number of shares of common stock beneficially owned before the offering	Number of shares being registered in the offering	Number of shares of common stock beneficially owned after offering	Percentage of class of common stock beneficially owned after offering
Adam Kent	27,284	10,517	16,767	*
Burt Stangarone	13,669	5,272	8,397	*
Christopher B. Warren[(1)]	129,566	15,759	113,807	*
Robert Niecestro, Ph.D.	27,331	10,541	16,790	*
H. Edward Dobroski	224,516	5,286	219,230	*
Hackett Family Trust, 7/28/98[(2)]	226,629	21,064	205,565	*
Howard Kent	109,136	42,068	67,068	*
Ryan Malfitano	47,349	10,490	36,859	*
Satterfield Vintage Investments, L.P.[(3)]	1,026,142	21,118	1,005,024	4.3%
Scott C. Rooney	414,728	21,041	393,687	1.7%
Einodmil LLC[(4)]	944,736	355,369	589,367	2.5%
T.J. Brown Living Trust[(5)]	56,663	5,269	51,394	*
Mark Kutner	92,698	20,627	72,071	*

* Represents less than 1% shares outstanding.

(1) Includes 24,174 shares owned of record by IRAR Trust FBO Christopher Warren. Christopher B. Warren is the trustee of the IRAR Trust FBO Christopher Warren and holds sole voting and investment power with respect to such shares.

(2) Terry Hackett is the trustee of the Hackett Family Trust, 7/28/98, and holds sole voting and investment power with respect to such shares.

(3) Thomas A. Satterfield, Jr. is the President and sole shareholder of the general partner of Satterfield Vintage Investments, L.P., and may therefore be deemed to hold voting and dispositive power with respect to such shares.

(4) Shalom Auerbach is the managing member of Einodmil LLC and may therefore be deemed to hold voting and dispositive power with respect to such shares.

(5) T.J. Brown is the trustee of the T.J. Brown Living Trust and holds sole voting and investment power with respect to such shares.

PLAN OF DISTRIBUTION

Since there is currently no public market established for our common stock, the selling stockholders have represented to us that they will not offer or sell their shares prior to the closing of the primary offering. After the primary offering closes, our common stock is listed on the NYSE American and there is an established market for the resale shares, the selling stockholders may sell the resale shares from time to time at the market price prevailing on the NYSE American at the time of offer and sale, or at prices related to such prevailing market prices or in negotiated transactions or a combination of such methods of sale directly or through brokers.

The selling stockholders may use any one or more of the following methods when disposing of shares or interests therein:

- ordinary brokerage transactions and transactions in which the broker-dealer solicits purchasers;
- block trades in which the broker-dealer will attempt to sell the shares as agent, but may position and resell a portion of the block as principal to facilitate the transaction;
- purchases by a broker-dealer as principal and resale by the broker-dealer for its account;
- an exchange distribution in accordance with the rules of the applicable exchange;
- privately negotiated transactions;
- to cover short sales made after the date the registration statement of which this Resale Prospectus is a part is declared effective by the SEC;
- through the writing or settlement of options or other hedging transactions, whether through an option exchange or otherwise;
- broker-dealers may agree with the selling shareholder to sell a specified number of such shares at a stipulated price per share; and
- a combination of any such methods of sale.

The selling stockholders may, from time to time, pledge or grant a security interest in some or all of the shares of common stock owned by them and, if they default in the performance of their secured obligations, the pledgees or secured parties may offer and sell the shares of common stock from time to time, under this prospectus, or under an amendment to this prospectus under Rule 424(b)(3) or other applicable provision of the Securities Act amending the list of selling stockholders to include the pledgee, transferee or other successors in interest as a selling stockholders under this prospectus. The selling stockholders also may transfer the securities in other circumstances, in which case the transferees, pledgees or other successors in interest will be the selling beneficial owners for purposes of this prospectus.

In connection with the sale of our common stock or interests therein, the selling stockholders may enter into hedging transactions with broker-dealers or other financial institutions, which may in turn engage in short sales of the common stock and deliver these securities to close out their short positions, or loan or pledge the common stock to broker-dealers that in turn may sell these securities. The selling stockholders may also enter into option or other transactions with broker-dealers or other financial institutions or the creation of one or more derivative securities which require the delivery to such broker-dealer or other financial institution of shares offered by this prospectus, which shares such broker-dealer or other financial institution may resell pursuant to this prospectus (as supplemented or amended to reflect such transaction).

The aggregate proceeds to the selling stockholders from the sale of the common stock offered by them will be the purchase price of the common stock less discounts or commissions, if any. The selling stockholders reserve the right to accept and, together with their agents from time to time, to reject, in whole or in part, any proposed purchase of common stock to be made directly or through agents. We will not receive any of the proceeds from this offering.

Broker-dealers engaged by the selling stockholders may arrange for other broker-dealers to participate in sales. Broker-dealers may receive commissions or discounts from the selling stockholders (or, if any broker-dealer acts as agent for the purchase of shares, from the purchaser) in amounts to be negotiated. The selling stockholders do not expect these commissions and discounts to exceed what is customary in the types of transactions involved, and in no case will the maximum compensation received by any broker-dealer exceed seven percent.

The selling stockholders also may resell all or a portion of the shares in open market transactions in reliance upon Rule 144 under the Securities Act, provided that they meet the criteria and conform to the requirements of that rule.

Any underwriters, agents, or broker-dealers, and any selling stockholders who are affiliates of broker-dealers, that participate in the sale of the Common Stock or interests therein may be "underwriters" within the meaning of Section 2(11) of the Securities Act. Any discounts, commissions, concessions or profit they earn on any resale of the shares may be underwriting discounts and commissions under the Securities Act. The selling stockholders who are "underwriters" within the meaning of Section 2(11) of the Securities Act will be subject to the prospectus delivery requirements of the Securities Act. We know of no existing arrangements between any of the selling stockholders and any other stockholder, broker, dealer, underwriter, or agent relating to the sale or distribution of the shares, nor can we presently estimate the amount, if any, of such compensation. See "Selling Stockholders" for description of any material relationship that a shareholder has with us and the description of such relationship.

To the extent required, shares of our common stock to be sold, the name of the selling stockholder, the respective purchase prices and public offering prices, the names of any agents, dealer or underwriter, any applicable commissions or discounts with respect to a particular offer will be set forth in an accompanying prospectus supplement or, if appropriate, a post-effective amendment to the registration statement that includes this prospectus.

In order to comply with the securities laws of some states, if applicable, the shares of common stock may be sold in these jurisdictions only through registered or licensed brokers or dealers. In addition, in some states the shares of common stock may not be sold unless it has been registered or qualified for sale or an exemption from registration or qualification requirements is available and is complied with.

We have advised the selling stockholders that the anti-manipulation rules of Regulation M under the Exchange Act may apply to sales of shares in the market and to the activities of the selling stockholders and their affiliates. In addition, we will make copies of this prospectus (as it may be supplemented or amended from time to time) available to the selling stockholders for the purpose of satisfying the prospectus delivery requirements of the Securities Act. The selling stockholders may indemnify any broker-dealer that participates in transactions involving the sale of the shares against certain liabilities, including liabilities arising under the Securities Act.

LEGAL MATTERS

The validity of the shares of common stock offered by this prospectus will be passed upon for us by Olshan Frome Wolosky LLP, New York, New York.

544,421 Shares

OS THERAPIES INCORPORATED

Common Stock

Resale Prospectus

You should rely only on the information contained in this Resale Prospectus. No dealer, salesperson or other person is authorized to give information that is not contained in this Resale Prospectus. This Resale Prospectus is not an offer to sell nor is it seeking an offer to buy these securities in any jurisdiction where the offer or sale is not permitted. The information contained in this Resale Prospectus is correct only as of the date of this Resale Prospectus, regardless of the time of the delivery of this Resale Prospectus or the sale of these securities.

_____, 2023

PART II
INFORMATION NOT REQUIRED IN PROSPECTUS

ITEM 13. OTHER EXPENSES OF ISSUANCE AND DISTRIBUTION

The following table sets forth the fees and expenses, other than underwriting discounts and commissions, payable in connection with the registration of the common stock hereunder. All amounts are estimates except the SEC registration fee.

Item	Amount to be Paid
SEC registration fee	$ 1,656
FINRA filing fee	5,000
NYSE American listing fee	60,000
Printing and mailing expenses	8,000
Legal fees and expenses	200,000
Accounting fees and expenses	100,000
Transfer agent and registrar fees and expenses	5,000
Miscellaneous expenses	2,344
Total	$ 382,000

ITEM 14. INDEMNIFICATION OF DIRECTORS AND OFFICERS

Section 145 of the Delaware General Corporation Law (the "DGCL"), authorizes a corporation to indemnify its directors and officers against liabilities arising out of actions, suits and proceedings to which they are made or threatened to be made a party by reason of the fact that they have served or are currently serving as a director or officer to a corporation. The indemnity may cover expenses (including attorneys' fees) judgments, fines and amounts paid in settlement actually and reasonably incurred by the director or officer in connection with any such action, suit or proceeding. Section 145 permits corporations to pay expenses (including attorneys' fees) incurred by directors and officers in advance of the final disposition of such action, suit or proceeding. In addition, Section 145 provides that a corporation has the power to purchase and maintain insurance on behalf of its directors and officers against any liability asserted against them and incurred by them in their capacity as a director or officer, or arising out of their status as such, whether or not the corporation would have the power to indemnify the director or officer against such liability under Section 145.

We have adopted provisions in our certificate of incorporation to be in effect upon the closing of this offering and bylaws to be in effect upon the effectiveness of this registration statement that limit or eliminate the personal liability of our directors to the fullest extent permitted by the DGCL, as it now exists or may in the future be amended. Consequently, a director will not be personally liable to us or our stockholders for monetary damages or breach of fiduciary duty as a director, except for liability for:

- any breach of the director's duty of loyalty to us or our stockholders;
- any act or omission not in good faith or that involves intentional misconduct or a knowing violation of law;
- any unlawful payments related to dividends or unlawful stock purchases, redemptions or other distributions; or
- any transaction from which the director derived an improper personal benefit.

These limitations of liability do not alter director liability under the federal securities laws and do not affect the availability of equitable remedies such as an injunction or rescission.

In addition, our bylaws provide that:

- we will indemnify our directors, officers and, in the discretion of our board of directors, certain employees to the fullest extent permitted by the DGCL, as it now exists or may in the future be amended; and
- we will advance reasonable expenses, including attorneys' fees, to our directors and, in the discretion of our board of directors, to our officers and certain employees, in connection with legal proceedings relating to their service for or on behalf of us, subject to limited exceptions.

We intend to enter into separate indemnification agreements with each of our directors and executive officers. These agreements provide that we will indemnify each of our directors, our executive officers and, at times, their affiliates to the fullest extent permitted by Delaware law. We will advance expenses, including attorneys' fees (but excluding judgments, fines and settlement amounts), to each indemnified director, executive officer or affiliate in connection with any proceeding in which indemnification is available and we will indemnify our directors and officers for any action or proceeding arising out of that person's services as a director or officer brought on behalf of us or in furtherance of our rights. Additionally, certain of our directors or officers may have certain rights to indemnification, advancement of expenses or insurance provided by their affiliates or other third parties, which indemnification relates to and might apply to the same proceedings arising out of such director's or officer's services as a director referenced herein. Nonetheless, we will agree in the indemnification agreements that our obligations to those same directors or officers are primary and any obligation of such affiliates or other third parties to advance expenses or to provide indemnification for the expenses or liabilities incurred by those directors are secondary.

We also maintain general liability insurance which covers certain liabilities of our directors and officers arising out of claims based on acts or omissions in their capacities as directors or officers, including liabilities under the Securities Act of 1933, as amended (the "Securities Act").

The underwriting agreement to be filed as an exhibit to this registration statement is expected to provide for indemnification of us and our directors and officers by the underwriters against certain liabilities under the Securities Act and the Securities Exchange Act of 1934.

Delaware Law

Section 102 of the DGCL permits a corporation to eliminate the personal liability of directors of a corporation to the corporation or its stockholders for monetary damages for a breach of fiduciary duty as a director, except where the director breached his duty of loyalty, failed to act in good faith, engaged in intentional misconduct or knowingly violated a law, authorized the payment of a dividend or approved a stock repurchase in violation of Delaware corporate law or obtained an improper personal benefit.

Section 145 of the DGCL provides that a corporation has the power to indemnify a director, officer, employee, or agent of the corporation, or a person serving at the request of the corporation for another corporation, partnership, joint venture, trust or other enterprise in related capacities against expenses, including attorneys' fees, judgments, fines and amounts paid in settlement actually and reasonably incurred by the person in connection with an action, suit or proceeding to which he was or is a party or is threatened to be made a party to any threatened, ending or completed action, suit or proceeding by reason of such position, if such person acted in good faith and in a manner he reasonably believed to be in or not opposed to the best interests of the corporation, and, in any criminal action or proceeding, had no reasonable cause to believe his conduct was unlawful, except that, in the case of actions brought by or in the right of the corporation, no indemnification will be made with respect to any claim, issue or matter as to which such person will have been adjudged to be liable to the corporation unless and only to the extent that the Court of Chancery or other adjudicating court determines that, despite the adjudication of liability but in view of all of the circumstances of the case, such person is fairly and reasonably entitled to indemnity for such expenses which the Court of Chancery or such other court will deem proper.

Third Amended and Restated Certificate of Incorporation

Our third amended and restated certificate of incorporation, which will be effective prior to effectiveness of this offering, will provide that we are authorized to provide indemnification and advancement of expenses to our directors, officers and certain other covered persons to the fullest extent permitted by the DGCL. Our certificate of incorporation

will limit the personal liability of directors for breach of fiduciary duty to the maximum extent permitted by the DGCL and provides that no director will have personal liability to us or to our stockholders for monetary damages for breach of fiduciary duty or other duty as a director. However, these provisions will not eliminate or limit the liability of any of our directors for:

- for any breach of the director's duty of loyalty to us or our stockholders;
- for acts or omissions not in good faith or that involve intentional misconduct or a knowing violation of law;
- for voting for or assenting to unlawful payments of dividends, stock repurchases or other distributions; or
- for any transaction from which the director derived an improper personal benefit.

In addition, our third amended and restated certificate of incorporation will also provide that we will indemnify each person who was or is a party or threatened to be made a party to any threatened, pending or completed action, suit or proceeding, other than an action by or in the right of us, by reason of the fact that such person is or was a director or officer of the Company or is or was serving at the request of the Company as a director, officer, employee, general partner, agent or fiduciary of another corporation, partnership, joint venture, trust or other enterprise (all such persons being referred to as an "Indemnitee"), against all expenses, including attorneys' fees, judgments, fines and amounts paid in settlement actually and reasonably incurred in connection with such action, suit or proceeding, if such Indemnitee acted in good faith and in a manner he or she reasonably believed to be in, or not opposed to, our best interests, and, with respect to any criminal action or proceeding, he or she had no reasonable cause to believe his or her conduct was unlawful.

Indemnification Agreements

We intend to enter into separate indemnification agreements with each of our directors and executive officers. These indemnification agreements may require us, among other things, to indemnify our directors and officers for some expenses, including attorneys' fees, judgments, fines and settlement amounts incurred by a director or officer in any action or proceeding arising out of his or her service as one of our directors or officers, or any of our subsidiaries or any other company or enterprise to which the person provides services at our request.

We intend to apply for a general liability insurance policy that covers certain liabilities of our directors and officers arising out of claims based on their acts or omissions committed in their capacities as directors or officers.

ITEM 15. RECENT SALES OF UNREGISTERED SECURITIES.

In the three years preceding the filing of this registration statement, we have issued the following securities that were not registered under the Securities Act:

From July 2018 through November 2021, we issued convertible notes with an aggregate principal amount of $1,154,000 (the "Group A Convertible Notes") to accredited investors, including related parties, in exchange for cash in an aggregate amount of $1,154,000. The Group A Convertible Notes bear interest at a rate of 10% per annum and mature on March 31, 2024. The Group A Convertible Notes will automatically convert into common stock at 80% to 87.5% of the price per share in our Next Equity Financing (which is this initial public offering), subject to valuation ceilings that range from $5 million to $25 million. The Group A Convertible Notes will have a conversion price that ranges from $0.40 to $1.98 per share, depending on the applicable valuation ceiling of each note (based on the initial public offering price of $5.00 per share).

From April 2020 through June 2021, we issued convertible notes with an aggregate principal amount of $5,154,000 (the "Group B Convertible Notes") to accredited investors in exchange for cash in an aggregate amount of $5,154,000. The Group B Convertible Notes bear interest at a rate of 6% per annum and mature on March 31, 2024. The Group B Convertible Notes will automatically convert into common stock at 80% of the price per share in our Next Equity Financing (which is this initial public offering), subject to a valuation ceiling of $19 million. As a result of the valuation ceiling, the Group B Convertible Notes will have a conversion price of $1.33 per share (based on the initial public offering price of $5.00 per share).

In connection with the private placement of Group B Convertible Notes, we issued to Noble Life Science Partners, a division of Noble Capital Markets, Inc., the placement agent for the offering, warrants to purchase 425,113 shares of common stock at an exercise price of $1.33 per share (the "Group B Warrants"), based on the initial public offering price of $5.00 per share. The Group B Warrants may, at the option of the holder, be exercised in whole or part on a cashless basis. The Group B Warrants expire five years after the effective date of this offering.

On August 19, 2020, we issued a convertible note with a principal amount of $2,400,000 (the "BlinkBio Convertible Note") to BlinkBio, Inc., which is a related party based on Dr. Goddard being our Chairman and as the Chairman and Chief Executive Officer of BlinkBio, in exchange for the entry into the license agreement to utilize a group of patents described as silicon based drug conjugates and methods, along with silanol based therapeutic payloads. The BlinkBio Convertible Note bears interest at a rate of 10% per annum. On March 15, 2021, we issued 1,302,082 shares of Series A preferred stock to BlinkBio in exchange for the BlinkBio Convertible Note.

From June 2021 through January 2023, we issued convertible notes with an aggregate principal amount of $3,945,020 (the "Group C Convertible Notes") to accredited investors in exchange for cash in an aggregate amount of $3,945,020. The Group C Convertible Notes bear interest at a rate of 6% per annum and mature on May 31, 2024. The Group C Convertible Notes will automatically convert into common stock at 80% of the price per share in our Next Equity Financing (which is this initial public offering), subject to a valuation ceiling of $50 million. As a result of the valuation ceiling, the Group C Convertible Notes will have a conversion price of $2.68 per share (based on the initial public offering price of $5.00 per share).

In connection with the private placement of Group C Convertible Notes, we issued to Noble Life Science Partners, a division of Noble Capital Markets, Inc., the placement agent for the offering, warrants to purchase 91,231 shares of common stock at an exercise price of $2.68 per share (the "Group C Warrants"), based on the initial public offering price of $5.00 per share. The Group C Warrants may, at the option of the holder, be exercised in whole or part on a cashless basis. The Group C Warrants expire five years after the effective date of this offering.

In November 2022, we issued convertible notes with an aggregate principal amount of $2,000,000 (the "November 2022 Convertible Notes") to accredited investors in exchange for cash in an aggregate amount of $2,000,000. In March 2023, we issued two convertible notes in the aggregate principal amount of $600,000 on the same terms as the November 2022 Convertible Notes (the "March 2023 Convertible Notes" and, together with the November 2022 Convertible Notes, the "Group D Convertible Notes") to a holder of November 2022 Convertible Notes and a holder of the Group C Convertible Notes in exchange for cash in an amount of $600,000. The Group D Convertible Notes bear interest at a rate of 6% per annum and mature on November 15, 2023. The Group D Convertible Notes automatically convert into common stock at 50% of the price per share in our Next Equity Financing (which is this initial public offering), subject to a valuation ceiling of $50 million. As a result of the valuation ceiling, the Group D Convertible Notes will have a conversion price of $2.44 per share (based on the initial public offering price of $5.00 per share).

In connection with the Group D Convertible Notes, we agreed to issue an additional 325,000 shares of Class A common stock to the Group D investors, pro-rated based on such investor's investment amount, as an inducement for their investment in the Group D Convertible Notes. We will issue such shares upon the automatic conversion of the Group D Convertible Notes. Additionally, we issued to Noble Life Science Partners, a division of Noble Capital Markets, Inc., the placement agent for the offering, warrants to purchase 81,967 shares of common stock at an exercise price of $2.44 per share (the "Group D Warrants"), based on the initial public offering price of $5.00 per share. The Group D Warrants may, at the option of the holder, be exercised in whole or part on a cashless basis. The Group D Warrants expire five years after the effective date of this offering.

On June 5, 2019, we issued 1,000 shares of common stock to Paul A. Romness, MPH, our Founder, President, Chief Executive Officer and a member of our Board, along with certain other members of our Board, officers and key advisors at a purchase price of $0.001 per share for an aggregate amount of $1.00. We expanded our share capitalization on April 23, 2020, and the 1,000 shares were exchanged for 10,000,000 shares in a forward 10,000:1 stock split. On May 19, 2021, we again recapitalized, and the 10,000,000 shares were exchanged for 10,000,000 shares of Class A common stock. In 2020, 20,000 of these shares were returned and cancelled.

In March 2023, we granted 25,000 shares of our common stock to Alan A. Musso, our Chief Financial Officer, of which 25% of such shares vested on March 1, 2023, 25% vest upon completion of our initial public offering, and 25% vest upon each of the three and six month anniversaries of the public offering closing date.

The issuances described in Item 15 were not registered under the Securities Act of 1933 in reliance upon the exemption from registration provided by Section 4(a)(2) thereof and Regulation D promulgated thereunder, which exempts transactions by an issuer not involving any public offering. The recipients of securities in each such transaction represented their intention to acquire the securities for investment only and not with a view to or for sale in connection with any distribution thereof and appropriate legends were affixed to the share certificates and other instruments issued in such transactions. All recipients either received adequate information about the registrant or had access, through employment or other relationships, to such information.

ITEM 16. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES.

(a) Exhibits

Exhibit number	Description
1.1*	Form of Underwriting Agreement.
3.1*	Second Amended and Restated Certificate of Incorporation of OS Therapies Incorporated, as currently in effect.
3.2*	Form of Third Amended and Restated Certificate of Incorporation of OS Therapies Incorporated, to be in effect prior to the effectiveness of this offering.
3.3*	Bylaws of OS Therapies Incorporated, as currently in effect.
3.4*	Form of Amended and Restated Bylaws of OS Therapies Incorporated, to be in effect prior to the effectiveness of this offering.
4.1*	Specimen Common Stock Certificate.
4.2*	Form of Representative's Warrant.
4.3*	Form of Placement Agent Warrant (Group B Convertible Notes placement).
4.4*	Form of Placement Agent Warrant (Group C Convertible Notes placement).
4.5*	Form of Placement Agent Warrant (Group D Convertible Notes placement).
5.1	Opinion of Olshan Frome Wolosky LLP, as to the legality of the common stock.
10.1†*	Form of Group A Convertible Note.
10.2†+*	Form of Group B Convertible Note.
10.3†+*	Form of Group C Convertible Note.
10.4†+*	Form of Group D Convertible Note.
10.5+¥*	Amended and Restated Development, License and Supply Agreement, dated as of November 13, 2020, by and between OS Therapies Incorporated and Advaxis, Inc. (now Ayala Pharmaceuticals, Inc.).
10.5.1	First Amendment to Amended and Restated Development, License and Supply Agreement, dated as of April 23, 2021, between OS Therapies Incorporated and Advaxis, Inc. (now Ayala Pharmaceuticals, Inc.).
10.6+*	License Agreement, dated as of August 19, 2020, by and between OS Therapies Incorporated and BlinkBio, Inc.
10.7#*	Employment Agreement, dated as of February 21, 2023, between OS Therapies Incorporated and Paul A. Romness, MPH.
10.8#*	Employment Letter, dated June 23, 2020, between OS Therapies Incorporated and Robert G. Petit, Ph.D.
10.9#*	Consulting Agreement, dated March 1, 2023, between OS Therapies Incorporated and Alan A. Musso.
10.10#*	Form of Indemnification Agreement between OS Therapies Incorporated and each of its directors.
10.11#*	OS Therapies Incorporated 2023 Incentive Compensation Plan.
23.1*	Consent of MaloneBailey, LLP, independent registered public accounting firm.
23.2	Consent of Olshan Frome Wolosky LLP (included in the opinion filed as Exhibit 5.1).
24*	Power of Attorney (set forth on signature page of the Registration Statement).
107	Calculation of Filing Fee Table.

* Previously filed.

† Pursuant to Instruction 2 to Item 601 of Regulation S-K, the convertible notes are identical for all noteholders in the particular group except for face or principal amount, issuance date and the name of the payee.

+ Pursuant to Item 601(a)(5) of Regulation S-K, certain schedules and exhibits have been omitted. The registrant agrees to furnish supplementally a copy of any omitted schedule or exhibit to the SEC upon its request.

¥ Pursuant to Item 601(b)(10)(iv) of Regulation S-K, certain portions of this exhibit have been redacted. Redacted information is indicated by [***].

# Indicates a management contract or any compensatory plan, contract or arrangement.

(b) Financial statements schedules

The financial statements filed as part of this registration statement are listed in the index to the financial statements immediately preceding such financial statements, which index to the financial statements is incorporated herein by reference.

ITEM 17. UNDERTAKINGS

The undersigned registrant hereby undertakes:

(1) To file, during any period in which it offers or sells securities, a post-effective amendment to this registration statement to:

(i) To include any prospectus required by Section 10(a)(3) of the Securities Act;

(ii) To reflect in the prospectus any facts or events which, individually or together represent a fundamental change in the information in the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Commission pursuant to Rule 424(b) (Section 230.424(b) of this chapter) if, in the aggregate, the changes in volume and price represent no more than a 20% change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement; and

(iii) To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement.

(2) For determining liability under the Securities Act, treat each post-effective amendment as a new registration statement of the securities offered, and the offering of the securities as at that time to be the initial bona fide offering thereof.

(3) File a post-effective amendment to remove from registration any of the securities that remain unsold at the end of the offering.

(4) (i) For the purpose of determining liability under the Securities Act to any purchaser: Each prospectus filed pursuant to Rule 424(b) under the Securities Act as part of a registration statement relating to an offering, other than registration statements relying on Rule 430B or other than prospectuses filed in reliance on Rule 430A (230.430A of this chapter), shall be deemed to be part of and included in the registration statement as of the date it is first used after effectiveness. *Provided however,* that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such first use, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such date of first use.

(5) That, for the purpose of determining liability of the registrant under the Securities Act of 1933 to any purchaser in the initial distribution of the securities:

The undersigned registrant undertakes that in a primary offering of securities of the undersigned registrant pursuant to this registration statement, regardless of the underwriting method used to sell the securities to the purchaser, if the securities are offered or sold to such purchaser by means of any of the following communications, the undersigned registrant will be a seller to the purchaser and will be considered to offer or sell such securities to such purchaser:

(i) Any preliminary prospectus or prospectus of the undersigned registrant relating to the offering required to be filed pursuant to Rule 424 (§230.424 of this chapter);

(ii) Any free writing prospectus relating to the offering prepared by or on behalf of the undersigned registrant or used or referred to by the undersigned registrant;

(iii) The portion of any other free writing prospectus relating to the offering containing material information about the undersigned registrant or its securities provided by or on behalf of the undersigned registrant; and

(iv) Any other communication that is an offer in the offering made by the undersigned registrant to the purchaser.

(6) Insofar as indemnification for liabilities arising under the Securities Act of 1933 (the "Act") may be permitted to directors, officers and controlling persons of the small business issuer pursuant to the foregoing provisions, or otherwise, the small business issuer has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the small business issuer in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the small business issuer will, unless in the opinion of its counsel that matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Act and will be governed by the final adjudication of such issue.

(7) The undersigned registrant hereby undertakes that it will:

(i) For purposes of determining any liability under the Securities Act that the information omitted from the form of prospectus filed as part of this registration statement in reliance upon Rule 430A and contained in a form of prospectus filed by the Registrant pursuant to Rule 424(b)(1) or (4) or 497(h) under the Securities Act shall be deemed to be a part of this registration statement as of the time the Commission declared it effective.

(ii) For the purpose of determining any liability under the Securities Act, that each post-effective amendment that contains a form of prospectus as a new registration statement for the securities offered in the registration statement, and that offering of the securities at that time as the initial bona fide offering of those securities.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the registrant has duly caused this Amendment No. 2 to the Registration Statement on Form S-1 to be signed on its behalf by the undersigned, thereunto duly authorized, in Rockville, Maryland, on the 24th day of April, 2023.

	OS THERAPIES INCORPORATED
	By: */s/ Paul A. Romness, MPH*
	Name: Paul A. Romness, MPH
	Title: President and Chief Executive Officer

Pursuant to the requirements of the Securities Act of 1933, as amended, this Amendment No. 2 to the Registration Statement on Form S-1 has been signed by the following persons in the capacities and on the dates indicated.

Name	**Position**	**Date**
/s/ Paul A. Romness, MPH Paul A. Romness, MPH	President, Chief Executive Officer and Director (principal executive officer)	April 24, 2023
/s/ Alan A. Musso Alan A. Musso	Chief Financial Officer (principal financial officer and principal accounting officer)	April 24, 2023
* Colin Goddard, Ph.D.	Chairman of the Board	April 24, 2023
* Joacim Borg	Director	April 24, 2023
* John Ciccio	Director	April 24, 2023
* Theodore F. Search, Pharm.D.	Director	April 24, 2023

* By: */s/ Paul A. Romness, MPH*
Name: Paul A. Romness, MPH
Title: Attorney-in-Fact

OLSHAN

1325 AVENUE OF THE AMERICAS • NEW YORK, NEW YORK 10019
TELEPHONE: 212.451.2300 • FACSIMILE: 212.451.2222

April 24, 2023

OS Therapies Incorporated
15825 Shady Grove Road, Suite 135
Rockville, Maryland 20850

Re: Registration Statement on Form S-1

Ladies and Gentlemen:

We are acting as counsel to OS Therapies Incorporated, a Delaware corporation (the "Company"), in connection with (a) the Registration Statement on Form S-1 (No. 333-271034), originally filed on March 31, 2023 (as it may be amended, the "Registration Statement"), under the Securities Act of 1933, as amended (the "Act"), relating to (i) the offer and sale by the Company of 2,000,000 shares (the "Shares") of the Company's common stock, par value $0.001 per share (the "Common Stock"), plus an option to purchase from the Company up to 300,000 additional shares of Common Stock to cover over-allotments, if any, (ii) the issuance by the Company to Boustead Securities, LLC, as representative (the "Representative") of the several underwriters listed in the Underwriting Agreement (as defined below), of warrants (the "Representative's Warrants") to purchase up to 161,000 shares (the "Warrant Shares") of Common Stock, (iii) the issuance by the Company to the Representative of the Warrant Shares upon the exercise of the Representative's Warrants, and (iv) the offer and sale from time to time by the selling stockholders identified in the Registration Statement (the "Selling Stockholders") of 544,421 shares (the "Resale Shares") of Common Stock to be issued to the Selling Stockholders prior to the effectiveness of the Registration Statement upon the automatic conversion of convertible promissory notes held by such Selling Stockholders, and (b) the Underwriting Agreement between the Company and the Representative relating to the Shares, Representative's Warrants, Warrant Shares and Resale Shares (the "Underwriting Agreement").

We have examined the originals, or certified, conformed or reproduction copies, of all such records, agreements, instruments and documents as we have deemed relevant or necessary as the basis for the opinion hereinafter expressed. In all such examinations, we have assumed the genuineness of all signatures on originals or certified copies and the conformity to original or certified copies of all copies submitted to us as conformed or reproduction copies. As to various questions of fact relevant to such opinion, we have relied upon, and assumed the accuracy of, certificates and oral or written statements and other information of or from public officials, officers or representatives of the Company, and others.

Based upon the foregoing, and the laws of the State of Delaware, we are of the opinion that:

1. The Shares have been duly authorized and, when issued, delivered and paid for in accordance with the terms of the Underwriting Agreement, will be validly issued, fully paid, nonassessable and binding obligations of the Company under the laws of the State of Delaware.

2. The Representative's Warrants have been duly authorized and, when executed and delivered by the Company in accordance with the terms of the Underwriting Agreement, will constitute valid and binding obligations of the Company, enforceable against the Company in accordance with their respective terms, except (i) as such enforceability may be limited by bankruptcy, insolvency, reorganization or similar laws affecting creditors' rights generally and by general equitable principles (regardless of whether enforceability is considered in a proceeding in equity or at law), (ii) as enforceability of any indemnification or contribution provision may be limited under the federal and state securities laws, (iii) that the remedy of specific performance and injunctive and other forms of equitable relief may be subject to the equitable defenses and to the discretion of the court before which any proceeding therefor may be brought and (iv) that we express no opinion as to whether a state court outside of the State of New York or a federal court of the United States would give effect to the choice of New York law provided for in the Representative's Warrants.

3. The Warrant Shares have been duly authorized and, when issued, delivered and paid for upon valid exercise in accordance with the terms of the Representative's Warrants, will be validly issued, fully paid, nonassessable and binding obligations of the Company.

4. The Resale Shares have been duly authorized and, when issued to the Selling Stockholders prior to the effectiveness of the Registration Statement upon the automatic conversion of convertible notes held by such Selling Stockholders, will be validly issued, fully paid and nonassessable.

We hereby consent to the filing of this opinion as an exhibit to the Registration Statement and to the reference to this firm under the caption "Legal Matters" in the prospectus forming a part of the Registration Statement. In giving this consent, we do not hereby admit that we are in the category of persons whose consent is required under Section 7 of the Act.

Very truly yours,

/s/ Olshan Frome Wolosky LLP

OLSHAN FROME WOLOSKY LLP

FIRST AMENDMENT TO
AMENDED AND RESTATED DEVELOPMENT, LICENSE
AND SUPPLY AGREEMENT

April 23, 2021

This First Amendment to the Amended and Restated Development, License and Supply Agreement (this "**Amendment**") between OS Therapies Incorporated, a corporation organized under the laws of the State of Delaware, having an address of 104 Tech Park Drive Cambridge, MD 21613 (the "**Company**") and Advaxis, Inc., a corporation organized under the laws of the State of Delaware, having an address of 305 College Road East, Princeton, NJ 08540 ("**Advaxis**") is made on the date set forth above (the "**Effective Date**").

Recitals:

WHEREAS, the Company and Advaxis entered into an Amended and Restated Development, License and Supply Agreement effective as of November 13, 2020 (the "**License Agreement**");

WHEREAS, the Company and Advaxis have determined that it is the best interests of both parties to extend the License Agreement;

NOW, THEREFORE, the Company and Advaxis hereby agree to amend the License Agreement as follows:

1. Recitals. The foregoing recitals are true and correct and are incorporated herein by this reference. All initial capitalized terms and other terms not otherwise defined herein shall have the meanings ascribed to them in the License Agreement.

2. Milestone Payments. The parties agree to delete Section 6.4 of the License Agreement in its entirety and replace as follows:

a. Milestone Payments.

i) Immediately upon the first achievement of each of the events set forth below (each, a "**Milestone**") OST shall notify Advaxis in writing of such occurrence, and within five (5) business days following such occurrence, OST shall pay to Advaxis the corresponding amount set forth below (each, a "**Milestone Payment**") provided that OST shall have twenty (20) business days following the occurrence of the second milestone to pay to Advaxis the corresponding amount for such milestone.

	Milestone	Milestone Payment
1.	OST has secured funding of at least Two Million Three Hundred Thirty-Seven Thousand Five Hundred US Dollars ($2,337,500), in the aggregate (the "**Funding Milestone**")	License Commencement Payment
2.	The earlier to occur of: (A) OST having secured at least Five Million US Dollars, in the aggregate or (B) Completion of the first Clinical Trial (with "Completion" meaning that the final patient has been enrolled in first Clinical Trial).	$1,375,000
3.	The earlier to occur of: (A) receipt of Regulatory Approval from the FDA for the First Indication of the first Licensed Product or (B) Initiation of the first Registrational Trial of the first Licensed Product in the Field	$5,000,000
4.	Cumulative Net Sales of all Licensed Products in excess of Twenty Million US Dollars ($20,000,000)	$1,500,000
5.	Cumulative Net Sales of all Licensed Products in excess of Fifty Million US Dollars ($50,000,000)	$5,000,000
6.	Cumulative Net Sales of all Licensed Products in excess of One Hundred Million US Dollars ($100,000,000)	$10,000,000

ii) All Milestone Payments are non-creditable and non-refundable and shall be due and payable upon the occurrence of the corresponding date or Milestone regardless of any failure by OST to provide the notice required by Section 6.4(a). For clarity, each Milestone Payment is payable only once.

3. Except as stated in this Amendment, all other provisions of the License Agreement shall remain unchanged and continue in full force and effect.

4. The Company and Advaxis hereby ratify and confirm the License Agreement, as amended hereby, and agree that the License Agreement, as amended hereby, shall bind and inure to the benefit of the parties, and their respective successors, assigns and representatives.

5. This Amendment may be signed by facsimile and other electronically scanned signatures shall constitute original signatures for all purposes of these resolutions and a facsimile or an electronically scanned copy of these resolutions shall be deemed an original and any person may rely upon a facsimile or an electronically scanned copy of these resolutions in determining the validity of the actions taken by the parties hereunder.

6. The undersigned hereby direct that a copy of this Amendment be filed with the minutes of the proceedings of the Company and that this Amendment shall also be attached to the License Agreement of the Company.

ACKNOWLEDGED AND AGREED TO AS OF THE DATE SET FORTH ABOVE:

COMPANY:
OS THERAPIES INCORPORATED

By: */s/ Paul Romness*
Name: Paul Romness
Title: President

ADVAXIS, INC.

By: */s/ Kenneth A. Berlin*

Name: Kenneth A. Berlin
Title: President and CEO

Exhibit 107

Calculation of Filing Fee Table

FORM S-1
(Form Type)

OS THERAPIES INCORPORATED
(Exact Name of Registrant as Specified in its Charter)

Table 1: Newly Registered Securities

	Security Type	Security Class Title	Fee Calculation Rule	Amount Registered	Proposed Maximum Offering Price	Maximum Aggregate Offering Price[1]	Fee Rate	Amount of Registration Fee
Fees to be Paid	Equity	Common stock, par value $0.001 per share[2]	457(o)	2,300,000 shares	$ 5.00	$ 11,500,000	$ 0.0001102	$ 1,267.30
Fees to be Paid	Equity	Representative's Warrants[3]	457(g)	—	—	—	—	—
Fees to be Paid	Equity	Shares of Common Stock, issuable upon exercise of the Representative's Warrants[4]	457(g)	161,000 shares	$ 5.00	$ 805,000	$ 0.0001102	$ 88.71
Fees to be Paid	Equity	Common stock, par value $0.001 per share, pursuant to the Resale Prospectus[5]	457(o)	544,421 shares	$ 5.00	$ 2,722,105	$ 0.0001102	$ 299.98
		Total Offering Amounts				$ 15,027,105		$ 1,655.99
		Fees Previously Paid						$ 1,651.95
		Total Fee Offsets						—
		Net Fee Due						$ 4.04

(1) Estimated solely for the purpose of calculating the registration fee pursuant to Rule 457(g) or Rule 457(o), as applicable, promulgated under the Securities Act of 1933, as amended (the "Securities Act").

(2) Includes additional shares of common stock that may be issued upon exercise of a 45-day option granted to the underwriters to cover over-allotments, if any. Also includes an indeterminate number of securities that may become offered, issuable or sold to prevent dilution resulting from stock splits, stock dividends and similar transactions, which are included pursuant to Rule 416 under the Securities Act.

(3) No separate registration fee required pursuant to Rule 457(g) of the Securities Act.

(4) Estimated solely for the purpose of calculating the registration fee pursuant to Rule 457(g) under the Securities Act. We have agreed to issue to the representative of the underwriters warrants to purchase the number of shares of our common stock (the "Representative's Warrants") in the aggregate equal to seven percent (7%) of the shares of our common stock to be issued and sold in this offering (including shares issuable upon exercise of the over-allotment option described herein). The Representative's Warrants are exercisable for a price per share equal to 100% of the public offering price.

(5) Pursuant to a resale offering at a presumed offering price of $5.00 per share.