Risk Factors Comparison 2025-03-13 to 2024-03-07 Form: 10-K

Legend: **New Text** ~~Removed Text~~ Unchanged Text Moved Text Section

We may not have or be able to obtain or maintain sufficient and affordable insurance coverage, and without sufficient coverage any claim brought against us could have a materially adverse effect on our business, financial condition or results of operations. We run clinical trials through investigators that could be negligent through no fault of our own and which could affect patients, cause potential liability claims against us and result in delayed or stopped clinical trials. We are required in many cases by contractual obligations, to indemnify collaborators, partners, third party contractors, clinical investigators and institutions. These indemnifications could result in a material impact due to product liability claims against us and / or these groups. We currently carry $ 3. 0 million in product liability insurance, which we believe is appropriate for our clinical trials. Although we maintain such insurance, any claim that may be brought against us could result in a court judgment or settlement in an amount that is not covered, in whole or in part, by our insurance or that is in excess of the limits of our insurance coverage. Our insurance policies also have various exclusions, and we may be subject to a product liability claim for which we have no coverage. We will have to pay any amounts awarded by a court or negotiated in a settlement that exceed our coverage limitations or that are not covered by our insurance, and we may not have, or be able to obtain, sufficient capital to pay such amounts. Testosterone is a Schedule III substance under the Controlled Substances Act and any failure to comply with this Act or its state equivalents would have a negative impact on our business. Testosterone is listed by the U. S. Drug Enforcement Agency, or DEA, as a Schedule III substance under the Controlled Substances Act of 1970. The DEA classifies substances as Schedule I, II, III, IV or V substances, with Schedule I substances considered to present the highest risk of substance abuse and Schedule V substances the lowest risk. Scheduled substances are subject to DEA regulations relating to manufacturing, storage, distribution and physician prescription procedures. For example, all regular Schedule III drug prescriptions must be signed by a physician and may not be refilled more than six months after the date of the original prescription or more than five times unless renewed by the physician. Entities must register annually with the DEA to manufacture, distribute, dispense, import, export and conduct research using controlled substances. In addition, the DEA requires entities handling controlled substances to maintain records and file reports, follow specific labeling and packaging requirements, and provide appropriate security measures to control against diversion of controlled substances. Failure to follow these requirements can lead to significant civil and / or criminal penalties and possibly even lead to a revocation of a DEA registration. Individual states also have controlled substances laws. State controlled substances laws often mirror federal law, however because the states are separate jurisdictions, they may schedule products separately. While some states automatically schedule a drug when the DEA does so, in other states there must be rulemaking or legislative action, which could delay commercialization. Products containing controlled substances may generate public controversy. As a result, these products may have their marketing approvals withdrawn. State and Federal legislatures and administrative agencies may take additional action to combat a perceived misuse or overuse of such products. We may have to dedicate resources to the defense and resolution of litigation. Securities legislation in the United States makes it relatively easy for stockholders to sue companies. This can lead to frivolous lawsuits which take substantial time, money, resources and attention or force us to settle such claims rather than seek adequate judicial remedy or dismissal of such claims. Historically, securities class action litigation has often been brought against a company following a decline in the market price of its securities. Biotechnology and pharmaceutical companies, including us, have experienced significant stock price volatility in recent years, increasing the risk of such litigation. ~~As~~ **We have insurance that covers claims of this nature. However, as** we defend class action lawsuits or future patent infringement actions should they be filed, or if we are required to defend future actions brought by shareholders, we may be required to pay substantial litigation costs and managerial attention and financial resources may be diverted from business operations even if the outcome is in our favor. In addition, while our insurance carrier may cover the costs of settling claims, the Company' s capital resources are critical to its continued operations, and the payment of litigation settlements and associated legal fees diverts these capital resources away from our operations, even if such amounts do not have a material impact on our financial statements. On November 14, 2019, the Company and certain of its officers were named as defendants in a purported shareholder class action lawsuit, Solomon Abady v. Lipocine Inc. et al., 2: 19- cv- 00906- PMW, filed in the United District Court for the District of Utah. The complaint alleges that the defendants made false and / or misleading statements and / or failed to disclose that our filing of the NDA for TLANDO to the FDA contained deficiencies and as a result the defendants' statements about our business and operations were false and misleading and / or lacked a reasonable basis in violation of federal securities laws. The lawsuit seeks certification as a class action (for a purported class of purchasers of the Company' s securities from March 27, 2019 through November 8, 2019), compensatory damages in an unspecified amount, and unspecified equitable or injunctive relief. ~~We have insurance that covers claims of this nature.~~ The Company filed a motion to dismiss the class action lawsuit on July 24, 2020. In response, the plaintiffs filed their response to the motion to dismiss the class action lawsuit on September 22, 2020 and the Company filed its reply to its motion to dismiss on October 22, 2020. A hearing on the motion to dismiss occurred on January 12, 2022. On April 14, 2023, a judgment was issued ordering the case dismissed with prejudice and closure of the action. Although this outcome was in favor of our current and former officers and directors, we incurred litigation costs and expended managerial resources defending ourselves against these allegations. In addition, there can be no assurance that we will not experience similar claims in the future. ~~Additionally on April 2, 2019, we filed a lawsuit against Clarus in the United States District Court in Delaware alleging that Clarus' s JATENZO ® product infringes six of Lipocine' s issued U. S. patents: 9, 034, 858; 9, 205, 057; 9, 480, 690; 9, 757, 390; 6, 569, 463; and 6, 923, 988. Clarus answered the complaint and asserted counterclaims of non- infringement and invalidity. We answered Clarus' s~~

~~counterclaims on April 29, 2019. On February 11, 2020, we voluntarily dismissed allegations of patent infringement for expired U. S. Patent Nos. 6, 569, 463 and 6, 923, 988 in an effort to streamline the issues and associated costs for dispute. The Court held a scheduling conference on August 15, 2019, a claim construction hearing on February 11, 2020 and a summary judgment hearing on January 15, 2021. In May 2021, the Court granted Clarus' motion for Summary Judgment, finding the asserted claims of Lipocine' s U. S. patents 9, 034, 858; 9, 205, 057; 9, 480, 690; and 9, 757, 390 invalid for failure to satisfy the written description requirement of 35 U. S. C. § 112. Clarus still had remaining claims before the Court. On July 13, 2021, we entered into a Global Agreement with Clarus which resolved all outstanding claims of this litigation. Under the terms of the settlement, we agreed to pay Clarus $ 4. 0 million, payable as follows: $ 2. 5 million immediately, $ 1. 0 million on July 13, 2022 and $ 500, 000 on July 13, 2023. In April 2022, we amended the Global Agreement with Clarus in an Amended Settlement Agreement and we agreed to settle the payments due in July 2022 and 2023 for $ 1, 250, 000 rather than the $ 1, 500, 000 total future payments due under the terms of the Global Agreement agreed to in 2021. The payment of this and other settlement payments divert capital resources away from our operations, which may adversely affect our business.~~ Cyber security risks and the failure to maintain the integrity of company, employee or guest data could expose us to data loss, litigation and liability, and our reputation could be significantly harmed. We collect **,** and third parties collaborating on our clinical trials collect and retain **,** large volumes of data, including personally identifiable information regarding clinical trial participants and others, for business purposes, including for regulatory, research and development and commercialization purposes, and our collaborators' various information technology systems enter, process, summarize and report such data. We also maintain personally identifiable information about our employees. The integrity and protection of our Company, employee and clinical data is critical to our business. We are subject to significant security and privacy regulations, as well as requirements imposed by government regulation. Maintaining compliance with these evolving regulations and requirements could be difficult and may increase our expenses. In addition, a penetrated or compromised data system or the intentional, inadvertent or negligent release or disclosure of data could result in theft, loss or fraudulent or unlawful use of company, employee or clinical data which could harm our reputation, disrupt our operations, or result in remedial and other costs, fines or lawsuits. Risks Related to Our Dependence on Third Parties We may enter into license agreements and / or collaborations with third parties for the development and commercialization of our drug candidates. If those collaborations, including, without limitation, our license arrangement with Verity for the development and commercialization of TLANDO, are not successful, we may not be able to capitalize on the market potential of these drug candidates and may have to alter our development and commercialization plans for our products. Our drug development programs for our product candidates will require substantial additional cash to fund expenses. We have not yet established any collaborative arrangements relating to the development or commercialization of LPCN 1154, LPCN **2401, LPCN** 2101, LPCN 2203, LPCN 1144, LPCN 1148, or LPCN 1107. We have entered into the Verity License Agreement for TLANDO and LPCN 1111 with respect to TRT in the U. S **. and Canada** . We intend to continue to develop our product candidates in the United States with or without a partner although our ability to advance these product candidates will depend on our capital resources and / or our ability to find a suitable partner to further develop our product candidates. In order to commercialize our TLANDO product candidates in the United States and Canada, we have partnered with Verity with respect to TLANDO and LPCN 1111 and we will likely look to establish partnership arrangements with respect to the development of some of our other product candidates. We may also seek to enter into collaborative arrangements to develop and commercialize our product candidates outside the United States **and have partnered with SPC for South Korea and with Pharmalink for the GCC countries for TRT** . We will face significant competition in seeking appropriate collaborators and these collaborations are complex and time- consuming to negotiate and document. We may not be able to negotiate collaborations on acceptable terms or in a timely manner, or at all. If that were to occur, we may have to curtail the development or delay commercialization of our product candidates in certain geographies, reduce the scope of our sales or marketing activities, reduce the scope of our development plans, or increase our expenditures and undertake development or commercialization activities at our own expense. If we elect to increase our expenditures to fund development or commercialization activities either inside or outside of the United States on our own, we may need to obtain additional capital, which may not be available to us on acceptable terms, or at all. To the extent we have, and if we do enter into any further such arrangements with any third parties, we will likely have limited control over the amount and timing of resources that our partners dedicate to the development or commercialization of our product candidates. On January 12, 2024, we entered into the Verity License Agreement with Verity, pursuant to which we granted to Verity an exclusive, royalty- bearing, sublicensable right and license to develop and commercialize our TLANDO and LPCN 1111 products with respect to TRT in the U. S. and Canada. Consequently, our ability to generate any revenues from TLANDO with respect to TRT in the U. S. and Canada depends on the efforts of Verity to commercialize TLANDO. We have very limited control over the amount and timing of resources that Verity dedicates to these efforts. Our ability to generate revenues from this and other collaborative arrangements **, including with SPC and Pharmalink,** will depend on our collaborators' abilities and efforts to successfully perform the functions agreed to with them in these arrangements. License agreements and / or collaborations involving our drug candidates, such as our agreement with Verity, pose numerous risks to us, including the following: ● partners have significant discretion in determining the efforts and resources that they will apply to these efforts and may not perform their obligations as expected; ● partners may de- emphasize or not pursue development and commercialization of our drug candidates or may elect not to continue or renew development or commercialization programs based on clinical trial results, changes in the partners' strategic focus, including as a result of a sale or disposition of a business unit or development function, or available funding or external factors such as an acquisition that diverts resources or creates competing priorities; ● partners may delay clinical trials, provide insufficient funding for a clinical trial program, stop a clinical trial or abandon a drug candidate, repeat or conduct new clinical trials or require a new formulation of a drug candidate for clinical testing; ● partners could independently develop, or develop with third parties, products that compete directly or indirectly with our products or drug candidates if the partners believe that competitive products are more

likely to be successfully developed or can be commercialized under terms that are more economically attractive than ours; ● partners may not be able to acquire and maintain supplier and manufacturer relationships necessary to successfully commercialize our products; ● a partner with marketing and distribution rights to multiple products may not commit sufficient resources to the marketing and distribution of our product relative to other products; ● partners may not properly obtain, maintain, defend or enforce our intellectual property rights or may use our proprietary information and intellectual property in such a way as to invite litigation or other intellectual property related proceedings that could jeopardize or invalidate our proprietary information and intellectual property or expose us to potential litigation or other intellectual property related proceedings; ● disputes may arise between our partners and us that result in the delay or termination of the research, development or commercialization of our products or drug candidates or that result in costly litigation or arbitration that diverts management attention and resources; ● agreements may be terminated and, if terminated, may result in a need for additional capital to pursue further development or commercialization of the applicable drug candidates; ● agreements may not lead to development or commercialization of drug candidates in the most efficient manner or at all; and ● if a partner of ours were to be involved in a business combination, the continued pursuit and emphasis on our product development or commercialization program could be delayed, diminished or terminated. If our license arrangements with Verity, or any **other or** future license or collaboration we may enter into, if any, are not successful, our business, financial condition, results of operations, prospects and development and commercialization efforts may be adversely affected. Any termination or expiration of the Verity License Agreement, or any **other or** future license or collaboration we may enter into, if any, could adversely affect us financially or harm our business reputation, development and commercialization efforts. We rely upon third- party contractors and service providers for the execution of some aspects of our development programs. Failure of these collaborators to provide services of a suitable quality and within acceptable timeframes may cause the delay or failure of our development programs. We outsource certain functions, tests and services to contract research organizations (“ CROs ”), medical institutions and collaborators; and also outsource manufacturing to collaborators and / or contract manufacturers (“ CMOs ”). We also rely on third parties for quality assurance, clinical monitoring, clinical data management and regulatory expertise. We may also engage a CRO to run all aspects of a clinical trial on our behalf. There is no assurance that such individuals or organizations will be able to provide the functions, tests, drug supply or services as agreed upon or in a quality fashion. Any failure to do so could cause us to suffer significant delays in the development of our products or processes. Due to our reliance on CROs or other third parties to assist us or who have historically assisted us in conducting clinical trials, we will be unable to directly control all aspects of our clinical trials. We engaged a CRO to conduct our SOAR, DV and DF Phase 3 clinical studies for TLANDO, as well as the ABPM study for TLANDO. Additionally, we utilized a CRO for the Phase 2 LiFT clinical study for LPCN 1144, the Phase 2 clinical study for LPCN 1148 and the pilot **, pivotal** and future ~~pivotal~~ studies for LPCN 1154. As a result, we have less direct control over the conduct of our clinical trials, the timing and completion of the trials and the management of data developed through the trials than 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. Outside parties, including CROs, may: ● have staffing difficulties or disruptions; ● fail to comply with contractual obligations; ● experience regulatory compliance issues; ● undergo changes in priorities or may become financially distressed; ● form relationships with other entities, some of which may be our competitors; or ● **be subject to** manufacturing capacity limitations. These factors may materially adversely affect their willingness or ability to conduct our trials in a manner acceptable to us. We may experience unexpected cost increases that are beyond our control. Moreover, the FDA requires us to comply with GCP’ s for conducting, recording, and reporting the results of clinical trials to assure that data and reported results are credible and accurate and that the rights, integrity and confidentiality of trial participants are protected. Our reliance on third parties that we do not control does not relieve us of these responsibilities and requirements. Problems with the timeliness or quality of the work of a CRO may lead us to seek to terminate the relationship and use an alternative service provider. However, making this change may be costly and may delay our trials, and contractual restrictions may make such a change difficult or impossible. If we must replace any CRO that is conducting our clinical trials, our trials may have to be suspended until we find another CRO that offers comparable services. The time that it takes us to find alternative organizations may cause a delay in the commercialization of our product candidates or may cause us to incur significant expenses to replicate data that may be lost. Although we do not believe that any CRO on which we may rely will offer services that are not available elsewhere, it may be difficult to find a replacement organization that can conduct our trials in an acceptable manner and at an acceptable cost. Any delay in or inability to complete our clinical trials could significantly compromise our ability to secure regulatory approval of our product candidates and preclude our ability to commercialize them, thereby limiting or preventing our ability to generate revenue from their sales. We and our ~~Licensee~~ **Licensees rely / will** rely on a single supplier for our supply of testosterone esters, the active pharmaceutical ingredient of TLANDO, LPCN 1111, LPCN 1148, and LPCN 1144, and the loss of this supplier could harm our business. We and our ~~Licensee~~ **Licensees rely / will** rely on a single third- party supplier for our supply of testosterone esters, the active pharmaceutical ingredient of TLANDO, LPCN 1111, LPCN 1148, and LPCN 1144. Since there are only a limited number of testosterone esters suppliers in the world, if this supplier ceases to provide us with testosterone esters, we or our ~~Licensee~~ **Licensees** may be unable to procure testosterone esters on commercially favorable terms and / or may not be able to obtain testosterone esters in a timely manner. Furthermore, the limited number of suppliers of testosterone esters may provide such companies with greater opportunity to raise their prices. If we or our ~~Licensee~~ **Licensees** are unable to obtain testosterone esters in a timely manner and / or in sufficient quantities, our ability to develop, and potentially commercialize, LPCN 1111, LPCN 1148, and LPCN 1144 may be adversely affected. In addition, any increase in price for testosterone esters will likely reduce our potential gross margins for LPCN 1148 and LPCN 1144. We rely on limited suppliers for our supply of NAS, the active pharmaceutical ingredients of LPCN 1154, LPCN 2101, and LPCN 2203 and the loss of these limited suppliers could harm our business. We rely on a limited third- party supplier for our supply of NAS, the active pharmaceutical ingredients of LPCN 1154, LPCN 2101, and LPCN 2203. Since there are only a

limited number of NAS suppliers in the world, if a supplier ceases to provide us with NAS, we may be unable to procure NAS on developmental or commercially favorable terms. Furthermore, the limited number of suppliers of NAS may provide such suppliers with a greater opportunity to raise their prices. If we are unable to obtain NAS in a timely manner and / or in sufficient quantities, our ability to develop **and potentially commercialize** LPCN 1154, LPCN 2101, and LPCN 2203 may be adversely affected. If we do not establish successful collaborations, we may have to alter our development and commercialization plans for our products. Our drug development programs for our product candidates will require substantial additional cash to fund expenses. We have not yet established any collaborative arrangements relating to the development or commercialization of LPCN **1154, LPCN** 1148, LPCN 1144, or LPCN 1107. We **could** ~~intend to~~ continue to develop some of our product candidates in the United States without a partner although our ability to advance these product candidates will depend on our capital resources. However, in order to commercialize our product candidates in the United States, we will likely look to establish a partnership or co- promotion arrangement with an established pharmaceutical company that has a sales force, collaborate on the establishment of an internal sales force or build an internal sales force on our own. We may also seek to enter into collaborative arrangements to develop and commercialize our product candidates outside the United States. We will face significant competition in seeking appropriate collaborators and these collaborations are complex and time- consuming to negotiate and document. We may not be able to negotiate collaborations on acceptable terms or in a timely manner, or at all. If that were to occur, we may have to curtail the development or delay commercialization of our product candidates in certain geographies, reduce the scope of our sales or marketing activities, reduce the scope of our commercialization plans, or increase our expenditures and undertake development or commercialization activities at our own expense. If we elect to increase our expenditures to fund development or commercialization activities either inside or outside of the United States on our own, we may need to obtain additional capital, which may not be available to us on acceptable terms, or at all. If we are successful in entering into collaborative arrangements and any of our collaborative partners do not devote sufficient time and resources to a collaboration arrangement with us, we may not realize the potential commercial benefits of the arrangement, and our results of operations may be materially adversely affected. In addition, if any future collaboration partner were to breach or terminate its arrangements with us, the development and commercialization of our product candidates could be delayed, curtailed or terminated because we may not have sufficient financial resources or capabilities to continue development and commercialization of our product candidates on our own in such locations. Risks Related to Ownership of Our Common Stock Our stock price could decline significantly based on the results and timing of clinical trials, and / or regulatory and other decisions affecting our product candidates. Results of clinical trials and preclinical studies of our current and potential product candidates may not be viewed favorably by us or third parties, including the FDA or other regulatory authorities, investors, analysts and potential collaborators. The same may be true of how we design the clinical trials of our product candidates and regulatory decisions affecting those clinical trials. Pharmaceutical company stock prices have declined significantly when such results and decisions were unfavorable or perceived negatively or when a product candidate did not otherwise meet expectations. The final results from our clinical development programs may be negative, may not meet expectations or may be perceived negatively. The designs of our clinical trials (which may change significantly and be more expensive than currently anticipated depending on our clinical results and regulatory decisions) may also be viewed negatively by third parties. We may not be successful in completing these clinical trials on our projected timetable, if at all. In addition, we may never achieve FDA approval for any of our product candidates other than TLANDO, which could cause our stock price to decline significantly and have other significant adverse effects on our business. If we do not maintain effective internal controls over financial reporting in the future, the accuracy and timeliness of our financial reporting may be adversely affected. The Sarbanes- Oxley Act requires, among other things, that we assess the effectiveness of our internal control over financial reporting annually and disclosure controls and procedures quarterly. In particular, we must perform system and process evaluation and testing of our internal control over financial reporting to allow management to report on the effectiveness of our internal control over financial reporting, as required by Section 404 of the Sarbanes- Oxley Act. If material weaknesses are identified in the future or we are not able to comply with the requirements of Section 404 in a timely manner, our reported financial results could be materially misstated, we could receive an adverse opinion regarding our internal controls over financial reporting from our accounting firm, and we could be subject to investigations or sanctions by regulatory authorities, which would require additional financial and management resources, and the market price of our stock could decline. We incur significant expenses in order to comply with the requirements of being a public company in the United States. As a public company, we incur significantly more legal, accounting and other expenses than as a private company. In addition, the Sarbanes- Oxley Act of 2002 and rules ~~subsequently~~ implemented by the SEC and U. S. stock exchanges impose numerous requirements on public companies, including requiring changes in corporate governance practices. Also, the Exchange Act requires, among other things, that we file annual, quarterly and current reports with respect to our business and operating results. Our management and other personnel will need to devote a substantial amount of time to compliance with these laws and regulations. These requirements have increased and will continue to increase our legal, accounting, and financial compliance costs and have made and will continue to make some activities more time **-** consuming and costly. Our share price is expected to be volatile and may be influenced by numerous factors that are beyond our control. A low share price and low market valuation may make it difficult to raise sufficient additional cash due to the significant dilution to current stockholders. Market prices for shares of biotechnology and biopharmaceutical companies such as ours are often volatile. The market price of our common stock may fluctuate significantly in response to a number of factors, most of which we cannot control, including: ● the success of the commercialization of TLANDO; ● plans for, costs of, progress of and results from clinical trials of our product candidates; ● the failure of our product candidates to receive FDA approval; ● regulatory uncertainty in the TRT class; ● FDA Advisory Committee meetings and related recommendations ~~including meetings convened on the TRT class or on similar companies; ● announcements by the FDA that may impact on-going clinical studies related to safety or efficacy of TRT products~~ ; ● product approval and potential FDA required labeling

language and / or Phase 4 study commitments; ● announcements of new products, technologies, commercial relationships, acquisitions or other events by us or our competitors; ● our ability to license our products to third parties; ● failure to engage with collaborators or build an internal sales force to commercialize our products should a product candidate other than TLANDO receive FDA approval; ● the success or failure of other TRT products or non- testosterone based testosterone therapy products; ● failure of our products, if approved, to achieve commercial success; ● fluctuations in stock market prices and trading volumes of similar companies; ● general market conditions and overall fluctuations in U. S. equity markets; ● variations in our quarterly operating results; ● changes in our financial guidance or securities analysts' estimates of our financial performance; ● changes in accounting principles; ● sales of large blocks of our common stock, including sales by our executive officers, directors and significant stockholders; ● additions or departures of key personnel; ● discussion of us or our stock price by the press and by online investor communities; ● our cash balance; and ● other risks and uncertainties described in these risk factors. In recent years, the stock of other biotechnology and biopharmaceutical companies has experienced extreme price fluctuations that have been unrelated to the operating performance of the affected companies. There can be no assurance that the market price of our shares of common stock will not experience significant fluctuations in the future, including fluctuations that are unrelated to our performance. These fluctuations may result due to macroeconomic and world events, national or local events, general perception of the biotechnology industry or to a lack of liquidity. In addition, other biotechnology companies or our competitors' programs could have positive or negative results that impact their stock prices and their results, or stock fluctuations could have a positive or negative impact on our stock price regardless of whether such impact is direct or not. Stockholders may not agree with our business, scientific, clinical, commercial, or financial strategy, including additional dilutive financings, and may decide to sell their shares or vote against shareholder proposals. Such actions could materially impact our stock price. In addition, portfolio managers of funds or large investors can change or change their view on us and decide to sell our shares. These actions could have a material impact on our stock price. In order to complete a financing, or for other business reasons, we may elect to consolidate our shares of common stock. Investors may not agree with these actions and may sell our shares. We may have little or no ability to impact or alter such decisions. The stock prices of many companies in the biotechnology industry have experienced wide fluctuations that have often been unrelated to the operating performance of the companies. Following periods of volatility in the market price of a company' s securities, securities class action litigation often has been initiated against a company. For example, on July 1, 2016, the Company and certain of its officers were named as defendants in a purported shareholder class action lawsuit, David Lewis v. Lipocine Inc., et al., filed in the United States District Court for the District of New Jersey. This initial action was followed by additional lawsuits also filed in the District of New Jersey. David Lewis v Lipocine Inc., et al. was ultimately settled. Additionally on November 14, 2019, the Company and certain of its officers were named as defendants in a purported shareholder class action lawsuit, Solomon Abady v. Lipocine Inc. et al., 2: 19- cv- 00906- PMW, filed in the United District Court for the District of Utah. This initial action was followed by additional lawsuits also filed in the United States District Court for the District of Utah. Any future class action litigation that may be initiated against us may result in us incurring substantial costs and our management' s attention may be diverted from our operations, which could significantly harm our business. In addition, such litigation could lead to increased volatility in our share price. ~~The value of our warrants outstanding from the November 2019 Offering is subject to potentially material increases and decreases based on fluctuations in the price of our common stock. In November 2019, we completed a public offering of common stock and warrants to purchase common stock (the " November 2019 Offering "). Gross proceeds from the November 2019 Offering were approximately $ 6. 0 million. In the November 2019 Offering, the Company sold (i) 614, 706 Class A Units, with each Class A Unit consisting of one share of common stock and a common stock warrant to purchase one share of common stock, and (ii) 91, 177 Class B Units, with each Class B Unit consisting of one pre- funded warrant to purchase one share of a common stock and one common stock warrant to purchase one share of common stock at a price of $ 8. 50 per Class A Unit and $ 8. 4998 per Class B Unit. The pre- funded warrants were issued in lieu of common stock in order to ensure the purchaser did not exceed certain beneficial ownership limitations. The pre- funded warrants were immediately exercisable at an exercise price of $ 0. 0017 per share, subject to adjustment. Additionally, the common stock warrants were immediately exercisable at an exercise price of $ 8. 50 per share and expire on November 17, 2024. As of December 31, 2023, there were 64, 362 warrants from the November 2019 offering outstanding. We account for the common stock warrants as a derivative instrument, and changes in the fair value of the warrants are included under other income (expense) in the Company' s statements of operations for each reporting period. As of December 31, 2023, the aggregate fair value of the warrant liability included in the Company' s consolidated balance sheet was approximately $ 17, 000. We use the Black- Scholes option pricing model to determine the fair value of the warrants. As a result, the option- pricing model requires the input of several assumptions, including the stock price volatility, share price and risk- free interest rate. Changes in these assumptions can materially affect the fair value estimate. While the liability may only result from a change of control at a point in time, we ultimately may incur amounts significantly different than the carrying value of the liability.~~ We may not be able to maintain our listing on the ~~NASDAQ~~ **Nasdaq** Capital Market, which would adversely affect the price and liquidity of our common stock. As a small capitalization pharmaceutical company, the price of our common shares has been, and is likely to continue to be, highly volatile. Any announcements concerning us or our competitors, clinical trial results, quarterly variations in operating results, introduction of new products, delays in the introduction of new products or changes in product pricing policies by us or our competitors, acquisition or loss of significant customers, partners and suppliers, changes in earnings estimates or our ratings by analysts, regulatory developments, or fluctuations in the economy or general market conditions, among other factors, could cause the market price of our common shares to fluctuate substantially. There can be no assurance that the market price of our common shares will not decline below its current price or that it will not experience significant fluctuations in the future, including fluctuations that are unrelated to our performance. Currently our common stock is quoted on the ~~NASDAQ~~ **Nasdaq** Capital Market under the symbol " LPCN **.** " ~~.~~ We must satisfy certain minimum listing maintenance requirements to maintain the ~~NASDAQ~~ **Nasdaq** Capital Market quotation, including certain

governance requirements and a series of financial tests relating to stockholders' equity or net income or market value, public float, number of market makers and stockholders, market capitalization, and maintaining a minimum bid price of $ 1. 00 per share. If Nasdaq delists our common stock from trading on its exchange and we are not able to list our securities on another national securities exchange, we expect our securities could be quoted on an over- the- counter market. If this were to occur, we could face significant material adverse consequences, including: ● a limited availability of market quotations for our securities; ● reduced liquidity for our securities; ● a determination that our common stock is a " penny stock " which will require brokers trading in our common stock to adhere to more stringent rules and possibly result in a reduced level of trading activity in the secondary trading market for our securities; ● a limited amount of news and analyst coverage; and ● a decreased ability to issue additional securities or obtain additional financing in the future. The National Securities Markets Improvement Act of 1996, which is a federal statute, prevents or preempts the states from regulating the sale of certain securities, which are referred to as " covered securities. " If our common stock continues to be listed on ~~NASDAQ~~ **Nasdaq** , our common stock will be a covered security. Although the states are preempted from regulating the sale of our securities, the federal statute does allow the states to investigate companies if there is a suspicion of fraud, and, if there is a finding of fraudulent activity, then the states can regulate or bar the sale of covered securities in a particular case. Anti- takeover provisions in our amended and restated certificate of incorporation and our amended and restated bylaws, as well as provisions of Delaware law and our stockholder rights plan, might discourage, delay or prevent a change in control of our Company or changes in our Board of Directors or management and, therefore, depress the trading price of our common stock. Our amended and restated certificate of incorporation, amended and restated bylaws and Delaware law contain provisions that may depress the market price of our common stock by acting to discourage, delay or prevent a merger, acquisition or other change in control that stockholders may consider favorable, including transactions in which stockholders might otherwise receive a premium for their shares of our common stock. These provisions may also prevent or frustrate attempts by our stockholders to replace or remove members of our Board of Directors or our management. Our corporate governance documents include provisions: ● limiting the ability of our stockholders to call and bring business before special meetings and to take action by written consent in lieu of a meeting; ● requiring advance notice of stockholder proposals for business to be conducted at meetings of our stockholders and for nominations of candidates for election to our Board of Directors; ● authorizing blank check preferred stock, which could be issued with voting, liquidation, dividend and other rights superior to our common stock; and ● limiting the liability of, and providing indemnification to, our directors and officers. As a Delaware corporation, we are also subject to provisions of Delaware law, including Section 203 of the Delaware General Corporation Law, which limits the ability of stockholders owning in excess of 15 % of our outstanding voting stock from engaging in certain business combinations with us. Any provision of our amended and restated certificate of incorporation, amended and restated bylaws or Delaware law that has the effect of delaying or deterring a change in control could limit the opportunity for our stockholders to receive a premium for their shares of our common stock, and could also affect the price that some investors are willing to pay for our common stock. Additionally, on ~~November 5~~ **October 22** , ~~2021~~ **2024** , we adopted an amended and restated stockholder rights plan that would cause substantial dilution to, and substantially increase the costs paid by, a stockholder who attempts to acquire us on terms not approved by our board. The intent of the stockholder rights plan is to protect our stockholders' interests by encouraging anyone seeking control of our Company to negotiate with our board. However, our stockholder rights plan could make it more difficult for a third party to acquire us without the consent of our board, even if doing so may be beneficial to our stockholders. This plan may discourage, delay or prevent a tender offer or takeover attempt, including offers or attempts that could result in a premium over the market price of our common stock. This plan could reduce the price that stockholders might be willing to pay for shares of our common stock in the future. Furthermore, the anti- takeover provisions of our stockholder rights plan may entrench management and make it more difficult to replace management even if the stockholders consider it beneficial to do so. ~~The common warrants issued in the November 2019 Offering include a right to receive the Black Scholes value of the warrants in the event of a fundamental transaction, which payment would be senior to our common stock. The common warrants issued in the November 2019 Offering provide that, in the event of a " fundamental transaction, " including, among other things, a merger or consolidation of the Company or sale of all or substantially all of the Company' s assets, the holders of such warrants have the option to require the Company to pay to such holders an amount of cash equal to the Black Scholes value of the warrants. Such amount would be payable prior to any payments to holders of our common stock. The payment of such amount could result in common stockholders and other warrant holders not receiving any consideration if we were to liquidate, dissolve or wind up, either voluntarily or involuntarily. In addition, the existence of such right may reduce the value of our common stock, make it harder for us to sell shares of common stock in offerings in the future, or prevent or delay a change of control.~~ We have no current plans to pay dividends on our common stock and investors must look solely to stock appreciation for a return on their investment in us. We do not anticipate paying any cash dividends on our common stock in the foreseeable future. We currently intend to retain all future earnings to fund the development and growth of our business. Any payment of future dividends will be at the discretion of our board of directors and will depend on, among other things, our earnings, financial condition, capital requirements, level of indebtedness, statutory and contractual restrictions applying to the payment of dividends and other considerations that the board of directors deems relevant. Investors may need to rely on sales of their common stock after price appreciation, which may never occur, as the only way to realize a return on their investment. Investors seeking cash dividends should not purchase our common stock. Our management and directors will be able to exert influence over our affairs. As of December 31, ~~2023~~ **2024** , our executive officers and directors beneficially owned approximately ~~5~~ **6** . ~~9~~ **3** % of our common stock. These stockholders, if they act together, may be able to influence our management and affairs and all matters requiring stockholder approval, including significant corporate transactions. This concentration of ownership may have the effect of delaying or preventing a change in control and might affect the market price of our common stock. The market price of our common stock has been volatile over the past year and may continue to be volatile. The market price and trading volume of our common stock has been volatile over

the past year, and it may continue to be volatile. During ~~2023~~ **2024**, our common stock has traded as low as $ 2. ~~36~~ **83** and as high as $ ~~9~~ **10**. ~~86~~ **69** per share. We cannot predict the price at which our common stock will trade in the future, and it may decline. The price at which our common stock trades may fluctuate significantly and may be influenced by many factors, including our financial results; developments generally affecting our industry; general economic, industry and market conditions; the depth and liquidity of the market for our common stock; investor perceptions of our business; reports by industry analysts; announcements by other market participants, including, among others, investors, our competitors, and our customers; regulatory action affecting our business; and the impact of other " Risk Factors " discussed herein and in our Annual Report. In addition, changes in the trading price of our common stock may be inconsistent with our operating results and outlook. The volatility of the market price of our common stock may adversely affect investors' ability to purchase or sell shares of our common stock. If securities or industry analysts do not publish research or publish inaccurate or unfavorable research about our business, our stock price could decline. The trading market for our common stock will depend in part on the research and reports that securities or industry analysts publish about us or our business. We currently only have limited securities and industry analysts providing research coverage of our Company and may never obtain additional research coverage by securities and industry analysts. If no additional securities or industry analysts commence coverage of our Company or if current securities analyst coverage of our Company ceases, the trading price for our stock could be negatively impacted. If the analysts downgrade our stock or publish inaccurate or unfavorable research about our business, our stock price would likely decline. If analysts cease coverage of us or fail to publish reports on us regularly, demand for our stock could decrease, which could cause our stock price and trading volume to decline. Risks Relating to Our Financial Position and Capital Requirements We will need substantial additional capital in the future. If additional capital is not available, we will have to delay, reduce or cease operations. We will need to raise additional capital to continue to fund our operations. Our future capital requirements may be substantial and will depend on many factors including: ● market conditions for raising capital, particularly for life science companies; ● current and future clinical trials for our product candidates, including for LPCN 1154, LPCN **2401, LPCN** 2101, LPCN 2203 and LPCN 1148; ● regulatory actions of the FDA; ● the scope, size, rate of progress, results and costs of completing ongoing clinical trials and development plans with our product candidates; ● the cost, timing and outcomes of our efforts to obtain marketing approval for our product candidates in the United States; ● payments received under any current or future license agreements, strategic partnerships or collaborations; ● the cost of filing, prosecuting and enforcing patent claims; ● the costs associated with commercializing our product candidates if we receive marketing approval for product candidates other than TLANDO, including the cost and timing of developing internal sales and marketing capabilities or entering into strategic collaborations to market and sell our products; ● the costs of on- going and future litigation; and ● funding additional product line expansions. We believe that our existing capital resources, together with interest thereon, will be sufficient to meet our projected operating requirements through at least March 31, ~~2025~~ **2026**. We have based this estimate on assumptions that may prove to be wrong, and we could utilize our available capital resources sooner than we currently expect. While we believe we have sufficient liquidity and capital resources to fund our projected operating requirements through at least March 31, ~~2025~~ **2026**, we will need to raise additional capital at some point through the equity or debt markets or through out- licensing activities, either before or after March 31, ~~2025~~ **2026**, to support our operations, the on- going clinical development of our product candidates, and compliance with regulatory requirements. If the Company is unsuccessful in raising additional capital, its ability to continue as a going concern will become a risk. Further, our operating plan may change, and we may need additional funds to meet operational needs and capital requirements for product development, regulatory compliance, and clinical trial activities sooner than planned. In addition, our capital resources may be consumed more rapidly if we pursue additional clinical studies for LPCN 1154, LPCN **2401, LPCN** 2101, LPCN 2203, LPCN 1148, LPCN 1144, and LPCN 1107. Conversely, our capital resources could last longer if we reduce expenses, reduce the number of activities currently contemplated under our operating plan or if we terminate or suspend on- going clinical studies. Funding may not be available to us on favorable terms, or at all. Also, market conditions may prevent us from accessing the debt and equity capital markets, including sales of our common stock through the ATM Offering (as defined below). If we are unable to obtain adequate financing when needed, we may have to delay, reduce the scope of or suspend one or more of our clinical studies, research and development programs or, if any of our product candidates other than TLANDO receive approval from the FDA, commercialization efforts. We may seek to raise any necessary additional capital through a combination of public or private equity offerings, including the ATM Offering, debt financings, collaborations, strategic alliances, licensing arrangements and other marketing and distribution arrangements. These arrangements may not be available to us or available on terms favorable to us. To the extent that we raise additional capital through marketing and distribution arrangements, other collaborations, strategic alliances or licensing arrangements with third parties, we may have to relinquish valuable rights to our product candidates, future revenue streams, research programs or product candidates or grant licenses on terms that may not be favorable to us. If we do raise additional capital through public or private equity offerings, the ownership interest of our existing stockholders will be diluted, and the terms of these securities may include liquidation or other preferences, warrants or other terms that adversely affect our stockholders' rights or further complicate raising additional capital in the future. If we raise additional capital through debt financing, we may be subject to covenants limiting or restricting our ability to take specific actions, such as incurring additional debt, making capital expenditures or declaring dividends. If we are unable, for any reason, to raise needed capital, we will have to reduce costs, delay research and development programs, liquidate assets, dispose of rights, commercialize products or product candidates earlier than planned or on less favorable terms than desired, or reduce or cease operations. Raising additional capital may cause dilution to our existing stockholders, restrict our operations, or require us to relinquish rights. We may seek additional capital through a combination of private and public equity offerings, debt financings, collaborations, and strategic and licensing arrangements. To the extent that we raise additional capital through the sale of common stock or securities convertible or exchangeable into common stock, current stockholders' ownership interest in the Company will be

diluted. In addition, the terms may include liquidation or other preferences that materially adversely affect their rights as a 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 additional funds through collaboration, strategic alliance and licensing arrangements with third parties, we may have to relinquish valuable rights to our product candidates, our intellectual property, future revenue streams or grant licenses on terms that are not favorable to us. We cannot predict when we will generate product revenues and may never achieve or maintain profitability. Our ability to become profitable depends upon our ability to generate revenue from product sales and / or licensing agreements. To date, we have not generated any significant revenue from product sales of TLANDO or our other drug candidates in the current pipeline, and we do not know when, or if, we will generate significant revenue from product sales. Our ability to generate revenue depends on a number of factors, including, but not limited to, our ability to: ● other than for TLANDO in the U. S., obtain U. S. and foreign marketing approval for our product candidates; ● commercialize our product candidates by developing a sales force and / or entering into licensing agreements or collaborations with partners / third parties, either before or after obtaining marketing approval for our product candidates; and ● achieve market acceptance of our product candidates in the medical community and with third- party payors. Even if our product candidates other than TLANDO are approved for commercial sale, we expect to incur significant costs as we prepare to commercialize them. Even if we receive FDA approval for our product candidates, they may not be commercially successful drugs. We may not achieve profitability soon after generating product sales, if ever. If we are unable to generate product revenue, we will not become profitable and may be unable to continue operations without continued funding. Accordingly, the likelihood of our success must be evaluated in light of many potential challenges and variables associated with an early- stage drug development company, many of which are outside of our control, and past operating or financial results should not be relied on as an indication of future results. If one or more of our product candidates is approved for commercial sale and we retain commercial rights, we anticipate incurring significant costs associated with commercializing any such approved product candidate. Therefore, even if we are able to generate revenues from the sale of any approved product, we may never become profitable. Because of the numerous risks and uncertainties associated with pharmaceutical product development, we are unable to predict the timing or amount of expenses and when we will be able to achieve or maintain profitability, if ever. We have incurred significant operating losses in most years since our inception and anticipate that we will incur continued losses for the foreseeable future. We have focused a significant portion of our efforts on developing TLANDO and more recently on our oral neuroactive steroids LPCN 1154 ~~and~~ **,** LPCN 2101, **and LPCN 2203, in addition to LPCN 2401, and** LPCN 1148 ~~, and LPCN 1144~~ . We have funded our operations to date through sales of our equity securities, debt, and payments received under our license and collaboration arrangements. We have incurred losses in most years since our inception. As of December 31, ~~2023~~ **2024** , we had an accumulated deficit of $ 199. 8 million. Substantially all of our operating losses resulted from costs incurred in connection with our research and development programs and from general and administrative costs associated with our operations. These 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 research and development expenses to increase in connection with clinical trials associated with our oral neuroactive steroids LPCN 1154, LPCN 2101, **and** LPCN 2203, and **possible trials associated with LPCN 2401 and / or** LPCN 1148 ~~, and LPCN 1144 and LPCN 1107~~ , if further clinical trials are initiated. As a result, we expect to continue to incur significant operating losses for the foreseeable future as we evaluate further clinical development of LPCN 1154, LPCN **2401, LPCN** 2101, LPCN 2203, **and** LPCN 1148 ~~, LPCN 1144, and LPCN 1107~~ and our other programs and continued research efforts. Because of the numerous risks and uncertainties associated with developing pharmaceutical products, we are unable to predict the extent of any future losses or when we will become profitable, if at all. Our operating results may fluctuate significantly, and any failure to meet financial expectations may disappoint securities analysts or investors and result in a decline in the price of our securities. We have a history of operating losses. Our operating results have fluctuated in the past and are likely to do so in the future. These fluctuations could cause our share price to decline. Due to fluctuations in our operating results, we believe that period- to- period comparisons of our results are not indicative of our future performance. It is possible that in some future quarter or quarters, our operating results will be above or below the expectations of securities analysts or investors. In this case, the price of our securities could decline. Risks Relating to Our Intellectual Property Our success depends in part on our ability to protect our intellectual property. It is difficult and costly to protect our proprietary rights and technology, and we may not be able to ensure their protection. Our commercial success will depend in large part on obtaining and maintaining patent, trademark and trade secret protection of our product candidates, their respective formulations, methods used to manufacture them and methods of treatment, as well as successfully defending these patents against third party challenges. Our ability to stop unauthorized third parties from making, using, selling, offering to sell, or importing our product candidates, once commercialized, is dependent upon the extent to which we have rights under valid and enforceable patents or trade secrets that cover these products and activities. The patent positions of pharmaceutical, biopharmaceutical and related companies can be highly uncertain and involve complex legal and factual questions for which important legal principles remain unresolved. No consistent policy regarding the breadth of claims allowed in patents in these fields has emerged to date in the United States. There have been changes regarding how patent laws are interpreted, and both the United States Patent and Trademark Office (" USPTO ") and Congress have enacted radical changes to the patent system. We cannot accurately predict future changes in the interpretation of patent laws or changes to patent laws which might be enacted into law. Those changes may materially affect our patents, our ability to obtain patents and / or the patents and applications of our collaborators and licensors. The patent situation in these fields outside the United States is even more uncertain. Changes in either the patent laws or in interpretations of patent laws in the United States and other countries may diminish the value of our intellectual property or narrow the scope of our patent protection. Accordingly, we cannot predict the breadth of claims that may be allowed or enforced in the patents we own or which we license or third- party patents. The degree of future protection for our

proprietary rights is uncertain because legal means afford only limited protection and may not adequately protect our rights or permit us to gain or keep a competitive advantage. For example: ● others may be able to make or use compounds that are the same or similar to the pharmaceutical compounds used in our product candidates but that are not covered by the claims of our patents; ● the Active Pharmaceutical Ingredients (“ APIs ”) in our licensed product TLANDO and current product candidates LPCN 1154 **, LPCN 2401** , LPCN 1148, LPCN 1144, LPCN 1111, and LPCN 1107 are, or may soon become, commercially available in generic drug products, and no patent protection may be available without regard to formulation or method of use; ● we may not be able to detect infringement against our owned or licensed patents, which may be especially difficult for manufacturing processes or formulation patents; ● we might not have been the first to make the inventions covered by our issued patents or pending patent applications or those we license; ● we might not have been the first to file patent applications for these inventions; ● others may independently develop similar or alternative technologies or duplicate any of our technologies; ● it is possible that our pending patent applications or those of our licensor will not result in issued patents; ● it is possible that there are dominating patents to any of our product candidates of which we are not aware; ● it is possible that there are prior public disclosures that could invalidate our patents, or parts of our patents, of which we are not aware; ● it is possible that others may circumvent our owned or licensed patents; ● it is possible that there are unpublished applications or other patent applications maintained in secrecy that may issue later than our patents / applications but may have priority dates that are earlier than our priority dates and may have claims covering our products or technology similar to ours; ● the laws of foreign countries may not protect our proprietary rights to the same extent as the laws of the United States; ● the claims of our owned or licensed issued patents or patent applications, if and when issued, may not cover our product candidates; ● our issued patents or those of our licensor may not provide us with any competitive advantages, or may be narrowed in scope, be held invalid or unenforceable as a result of legal challenges by third parties; ● our licensor or licensees as the case may be, who have access to our patents, may attempt to enforce our owned or licensed patents, which if unsuccessful, may result in narrower scope of protection of our owned or licensed patents or our owned or licensed patents becoming invalid or unenforceable; ● we may not develop additional proprietary technologies for which we can obtain patent protection; or ● the patents of others may have an adverse effect on our business. We also may rely on trade secrets to protect our technology, especially where we do not believe patent protection is appropriate or obtainable. However, trade secrets are difficult to protect, and we have limited control over the protection of trade secrets used by our collaborators and suppliers. Although we use reasonable efforts to protect our trade secrets, our employees, consultants, contractors, outside scientific collaborators and other advisors may unintentionally or willfully disclose our information to competitors. Enforcing a claim that a third party illegally obtained and is using for any of our trade secrets is expensive and time consuming, and the outcome is unpredictable. In addition, courts outside the United States are sometimes less willing to protect trade secrets. Moreover, our competitors may independently develop equivalent knowledge, methods, and know- how. If our confidential or proprietary information is divulged to or acquired by third parties, including our competitors, our competitive position in the marketplace will be harmed and our ability to successfully penetrate our target markets could be severely compromised. If any of our owned or licensed patents are found to be invalid or unenforceable, or if we are otherwise unable to adequately protect our rights, it could have a material adverse impact on our business and our ability to commercialize or license our technology and products. Additionally, we currently do not have patent protection for some of our product candidates in many countries, including large territories such as India, Russia, and China, and we will be unable to prevent unauthorized third parties from using our intellectual property in those countries unless we can file patent applications and obtain patents in those countries that cover our product candidates. Likewise, our United States patents covering certain technology used in our product candidates, including TLANDO, are expected to expire on various dates through ~~2041~~ **2042** . Upon the expiration of these patents, we will lose the right to exclude others from practicing these inventions to the extent that at those times we have no additional issued patents to protect our product candidates, including TLANDO. Additionally, if these are our only patents listed in the FDA Orange Book, should we have an FDA- approved and marketed product at that time, their expiration will mean that we lose certain advantages that come with Orange Book listing of patents. The expiration of these patents could also have a similar material adverse effect on our business, results of operations, financial condition and prospects. Moreover, if we are unable to commence or continue any action relating to the defense of our patents, we may be unable to protect our product candidates. If we do not obtain additional protection under the Drug Price Competition and Patent Term Restoration Act and similar foreign legislation by extending the patent terms and obtaining data exclusivity for our product candidates, our business may be materially harmed. Depending upon the timing, duration and specifics of FDA marketing approval of our product candidates, one or more of our U. S. patents may be eligible for limited patent term restoration under the Drug Price Competition and Patent Term Restoration Act of 1984, referred to as the Hatch- Waxman Act. The Hatch- Waxman Act permits a patent restoration term of up to five years as compensation for patent term lost during product development and the FDA regulatory review process. However, we may not be granted an extension because of, for example, failing to apply within applicable deadlines, failing to apply prior to expiration of relevant patents or competitor’ s prior product launch or otherwise failing to satisfy applicable requirements. Moreover, the applicable time period or the scope of patent protection afforded could be less than we request. If we are unable to obtain patent term extension or restoration or the term of any such extension is less than we request, our competitors may obtain approval of competing products following our patent expiration, and our ability to generate revenues could be materially adversely affected. We may incur substantial costs as a result of litigation or other proceedings relating to patent and other intellectual property rights, and we may be unable to protect our rights to our products and technology. If we or our collaborators choose to go to court to stop a third party from using the inventions claimed in our owned or licensed patents, that third party may ask a court to rule that the patents are invalid and should not be enforced against that third party. These lawsuits are expensive and would consume time and other resources, including financial resources, even if we were successful in stopping the infringement of these patents. In addition, there is a risk that a court will decide that these patents are not valid or not enforceable and that we do not have the right to stop others from using the

inventions. There is also the risk that, even if the validity of these patents is not challenged or is upheld, the court will refuse to stop the third party on the ground that such third- party' s activities do not infringe on our owned or licensed patents. In addition, the U. S. Supreme Court has changed and continues to change some standards relating to the granting of patents and assessing the validity of patents. As a consequence, issued patents may be found to contain invalid claims according to the newly revised standards. Some of our owned or licensed patents may be subject to challenge and subsequent invalidation or significant narrowing of claim scope in a reexamination or other proceeding before the USPTO, or during litigation, under the revised criteria which make it more difficult to obtain or maintain patents. While our in- licensed patents and applications are not currently used in our product candidates, should we develop other product candidates that are covered by this intellectual property, we may rely on our licensor to file and prosecute patent applications and maintain patents and otherwise protect the intellectual property we license from them. Our licensor has retained the first right, but not the obligation, to initiate an infringement proceeding against a third- party infringer of the intellectual property licensed to us, and enforcement of our in- licensed patents or defense of any claims asserting the invalidity or unenforceability of these patents would also be subject to the control or cooperation of our licensor. It is possible that our licensor' s defense activities may be less vigorous than had we conducted the defense ourselves. We also license our patent portfolio, including U. S. and foreign patents and patent applications that cover TLANDO and our other product candidates, to third parties for their respective products and product candidates. Under our agreements with our licensees, we have the right, but not the obligation, to enforce our current and future licensed patents against infringers of our licensees. In certain cases, our licensees may have primary enforcement rights and we have the obligation to cooperate. In the event of an enforcement action against infringers of our licensees, our licensees might not have the interest or resources to successfully preserve the patents, the infringers may countersue, and as a result our patents may be found invalid or unenforceable or of a narrower scope of coverage and leave us with no patent protection for TLANDO and our other product candidates. We may be subject to a third- party pre- issuance submission of prior art to the USPTO, or become involved in opposition, derivation, reexamination, inter partes review, post- grant review or interference proceedings challenging our owned or licensed patent rights or the patent rights of others. An adverse determination in any such submission, proceeding or litigation could reduce the scope of, or invalidate, our owned or licensed patent rights, allow third parties to commercialize our technology or products and compete directly with us, without payment to us, or result in our inability to manufacture or commercialize products without infringing third party patent rights. In addition, if the breadth or strength of protection provided by our patents and patent applications is threatened, it could dissuade companies from collaborating with us to license, develop or commercialize current or future product candidates and impair our ability to raise needed capital. If we are required to defend patent infringement actions brought by other third parties, or if we sue to protect our own patent rights or otherwise to protect our proprietary information and to prevent its disclosure, we may be required to pay substantial litigation costs and managerial attention and financial resources may be diverted from business operations even if the outcome is in our favor. If we are sued for infringing intellectual property rights of third parties, it will be costly and time consuming, and an unfavorable outcome in that litigation would have a material adverse effect on our business. Our commercial success depends upon our ability and the ability of our collaborators to develop, manufacture, market and sell our product candidates and use our proprietary technologies without infringing the proprietary rights of third parties. Numerous U. S. and foreign patents and pending patent applications, which are owned by third parties, exist in the fields relating to our product candidates. As the biotechnology, pharmaceutical, and related industries expand and more patents are issued, the risk increases that others may assert that our product or product candidates infringe the patent rights of others. Moreover, it is not always clear to industry participants, including us, which patents cover various types of drugs, products or their formulations or methods of use. Thus, because of the large number of patents issued and patent applications filed in our fields, there may be a risk that third parties may allege they have patent rights encompassing our product, product candidates, technology, or methods. For example, on November 2, 2015, Clarus Therapeutics Holdings, Inc. (Clarus) filed a complaint against us in the United States District Court for the District of Delaware alleging that TLANDO would infringe the Clarus 428 Patent, and the complaint sought damages, declaratory and injunctive relief. On October 6, 2016, United States District Court of the District of Delaware granted our motion to dismiss the lawsuit filed by Clarus, because at the time there was no actionable infringement on Clarus' 428 patent. In addition, there may be issued patents of third parties of which we are currently unaware, that are infringed or are alleged to be infringed by our product candidates or proprietary technologies. Because some patent applications in the United States may be maintained in secrecy until the patents are issued, because patent applications in the United States and many foreign jurisdictions are typically not published until eighteen months after filing, and because publications in the scientific literature often lag behind actual discoveries, we cannot be certain that others have not filed patent applications for technology covered by our or our licensor' s patents or our pending applications, or that we were the first to invent the technology. Our competitors may have filed, and may in the future file, patent applications covering our products or technology similar to ours. Any such patent application may have priority over our owned or licensed patent applications or patents, which could further require us to obtain rights to issued patents covering such technologies. If another party has filed a U. S. patent application on inventions similar to those owned or licensed by us, we may have to participate in an interference proceeding declared by the USPTO to determine priority of invention in the United States. If another party has an allowed reason to question the validity of our owned or licensed U. S. patents, the third party can request that the USPTO reexamine the patent claims, which may result in a loss of scope of some claims or a loss of the entire patent. In addition to potential infringement claims, interference and reexamination proceedings, we may become a party to patent opposition proceedings in the European Patent Office or post- grant proceedings in the United States where either our patents are challenged, or we are challenging the patents of others. The costs of these proceedings could be substantial, and it is possible that such efforts would be unsuccessful, for example if the other party had independently arrived at the same or similar invention prior to our invention, resulting in a loss of our U. S. patent position with respect to such inventions. We may be exposed to, or threatened with, future litigation by third parties having patent or other

intellectual property rights alleging that our product candidates and / or proprietary technologies infringe their intellectual property rights. These lawsuits are costly and could adversely affect our results of operations and divert the attention of managerial and technical personnel. There is a risk that a court would decide that we or our commercialization partners are infringing the third party' s patents and would order us or our partners to stop the activities covered by the patents. In addition, there is a risk that a court will order us or our partners to pay the other party damages for having violated the other party' s patents. If a third- party' s patent was found to cover our product candidates, proprietary technologies or their uses, we or our collaborators could be enjoined by a court and required to pay damages and could be unable to commercialize any one or more of our product candidates or use our proprietary technologies unless we or they obtain a license to the patent. A license may not be available to us or our collaborators on acceptable terms, if at all. In addition, during litigation, the patent holder could obtain a preliminary injunction or other equitable relief which could prohibit us from making, using or selling our products, technologies or methods pending a trial on the merits, which could be years away. There is a substantial amount of litigation involving patent and other intellectual property rights in the biotechnology, pharmaceutical, and related industries generally. If a third- party claims that we or our collaborators infringe its intellectual property rights, we may face a number of issues, including, but not limited to: ● infringement and other intellectual property claims which, regardless of merit, may be expensive and time- consuming to litigate and may divert our management' s attention from our core business; ● substantial damages for infringement, which we may have to pay if a court decides that the product at issue infringes on or violates the third party' s rights, and if the court finds that the infringement was willful, we could be ordered to pay treble damages and the patent owner' s attorneys' fees; ● a court prohibiting us from selling or licensing the product unless the third- party licenses its product rights to us, which it is not required to do; ● if a license is available from a third party, we may have to pay substantial royalties, upfront fees and / or grant cross- licenses to intellectual property rights for our products; and ● redesigning our products or processes so they do not infringe, which may not be possible or may require substantial monetary expenditures and time. Some of our competitors may be able to sustain the costs of complex patent litigation more effectively than we can because they have substantially greater resources. In addition, any uncertainties resulting from the initiation and continuation of any litigation could have a material adverse effect on our ability to raise the funds necessary to continue our operations or otherwise have a material adverse effect on our business, results of operations, financial condition, and prospects. Although we own worldwide rights to our product candidates, we do not have patent protection for the product candidates in a significant number of countries, and we will be unable to prevent infringement in those countries. Our patent portfolio related to our product candidates includes patents in the United States and other foreign countries. The covered technology and the scope of coverage varies from country to country. For those countries where we do not have granted patents, we have no ability to prevent the unauthorized use of our intellectual property, and third parties in those countries may be able to make, use, or sell products identical to, or substantially similar to our product candidates. Obtaining and maintaining our patent protection depends on compliance with various procedural, document submission, fee payment and other requirements imposed by governmental patent agencies, and our patent protection could be reduced or eliminated for non- compliance with these requirements. Periodic maintenance / annuity fees on our owned or licensed patents and patent applications are due to be paid to respective patent offices in several stages over the lifetime of the patents and applications. In addition, the USPTO and various foreign governmental patent agencies require compliance with a number of procedural, documentary, fee payment and other similar provisions during the patent application process. There are situations in which noncompliance can result in abandonment or lapse of the patent or patent application, resulting in partial or complete loss of patent rights in the relevant jurisdiction. In such an event, our competitors might be able to enter the market and this circumstance would have a material adverse effect on our business. We also may rely on trade secrets and confidentiality agreements to protect our technology and know- how, especially where we do not believe patent protection is appropriate or obtainable. However, trade secrets are difficult to protect, and we have limited control over the protection of trade secrets used by our collaborators and suppliers. Although we use reasonable efforts to protect our trade secrets, our employees, consultants, contractors, outside scientific collaborators, and other advisors may unintentionally or willfully disclose our information to competitors. Enforcing a claim that a third party illegally obtained and is using any of our trade secrets is expensive and time consuming, and the outcome is unpredictable. In addition, courts outside the United States are sometimes less willing to protect trade secrets. Moreover, our competitors may independently develop equivalent knowledge, methods, and know- how. If our confidential or proprietary information is divulged to or acquired by third parties, including our competitors, our competitive position in the marketplace will be harmed and our ability to successfully generate revenues from our product candidates, if approved by the FDA or other regulatory authorities, could be adversely affected. We may be subject to claims that our employees have wrongfully used or disclosed alleged trade secrets of their former employers. As is common in the biotechnology, pharmaceutical and related industries, we employ individuals who were previously employed at other biotechnology or pharmaceutical companies, including our competitors or potential competitors. Although no claims against us are currently pending, we may be subject to claims that these employees or we have inadvertently or otherwise used or disclosed trade secrets or other proprietary information of their former employers. Litigation may be necessary to defend against these claims. Even if we are successful in defending against these claims, litigation could result in substantial costs and be a distraction to management, which would adversely affect our financial condition. ITEM 1B. UNRESOLVED STAFF COMMENTS None. ITEM 1C. CYBERSECURITY Risk Management and Strategy We regularly assess risks from cybersecurity threats, monitor our information systems for potential vulnerabilities, and test those systems pursuant to our cybersecurity policies, processes, and practices, which are integrated into our overall risk management program. To protect our information systems from cybersecurity threats, we use various security tools that are designed to help identify, escalate, investigate, resolve, and recover from security incidents in a timely manner. Our board of directors assesses risks based on probability and potential impact to key business systems and processes as part of our overall risk management program overseen by the board of directors. Risks that are considered high are incorporated into our overall risk management program. We

collaborate with third parties to assess the effectiveness of our cybersecurity prevention and response systems and processes and to assist in the identification, verification, and validation of cybersecurity risks, as well as to support associated mitigation plans when necessary. We have also developed a third- party cybersecurity risk management process to conduct due diligence on external entities, including those that perform cybersecurity services. Cybersecurity threats, including those resulting from any previous cybersecurity incidents, have not materially affected our Company, including our business strategy, results of operations, or financial condition. Refer to the risk factor captioned " Cyber security risks and the failure to maintain the integrity of company, employee or guest data could expose us to data loss, litigation and liability, and our reputation could be significantly harmed " in Part I, Item 1A. " Risk Factors " for additional details regarding cybersecurity risks and potential impacts on our business. ~~Governance~~ **GovernanceOur** ~~Our~~ board of directors oversees our risk management process, including as it pertains to cybersecurity risks, which focuses on the most significant risks we face in the short-, intermediate-, and long-term timeframe. Management is responsible for the operational oversight of company- wide cybersecurity strategy, policy, and standards across relevant departments to assess and help prepare us to address cybersecurity risks. Meetings of our board of directors include discussions and presentations from management regarding specific risk areas throughout the year, including, among others, those relating to cybersecurity threats, and reports from management on our enterprise risk profile on an annual basis. The board of directors reviews our cybersecurity risk profile with management on a periodic basis using key performance and / or risk indicators. These key performance indicators are metrics and measurements designed to assess the effectiveness of our cybersecurity program in the prevention, detection, mitigation, and remediation of cybersecurity incidents. We take a risk-based approach to cybersecurity and have implemented cybersecurity policies throughout our operations that are designed to address cybersecurity threats and incidents. ITEM 2. PROPERTIES Our corporate headquarters are located in a leased facility in Salt Lake City, Utah. Our lease expires on February 28, ~~2025~~ **2026** . We believe that our existing facility is suitable and adequate and that we have sufficient capacity to meet our current anticipated needs. ITEM 3. LEGAL PROCEEDINGS ~~On April 2, 2019, we filed a lawsuit against Clarus in the United States District Court for the District of Delaware alleging that Clarus' s JATENZO ® product infringes six of Lipocine' s issued U. S. patents: 9, 034, 858; 9, 205, 057; 9, 480, 690; 9, 757, 390; 6, 569, 463; and 6, 923, 988. However, on February 11, 2020, we voluntarily dismissed allegations of patent infringement for expired U. S. Patent Nos. 6, 569, 463 and 6, 923, 988 in an effort to streamline the issues and associated costs for dispute. Clarus answered the complaint and asserted counterclaims of non- infringement and invalidity. We answered Clarus' s counterclaims on April 29, 2019. The Court held a scheduling conference on August 15, 2019, a claim construction hearing on February 11, 2020, and a summary judgment hearing on January 15, 2021. In May 2021, the Court granted Clarus' motion for summary judgment, finding the asserted claims of Lipocine' s U. S. patents 9, 034, 858; 9, 205, 057; 9, 480, 690; and 9, 757, 390 invalid for failure to satisfy the written description requirement of 35 U. S. C. § 112. Clarus still had remaining claims before the Court. On July 13, 2021, we entered into the Global Agreement with Clarus which resolved all outstanding claims of this litigation as well as the on- going United States Patent and Trademark Office (" USPTO ") Interference No. 106, 128 between the parties (as described below). Under the terms of the Global Agreement, Lipocine agreed to pay Clarus $ 4. 0 million payable as follows: $ 2. 5 million immediately, $ 1. 0 million on July 13, 2022, and $ 500, 000 on July 13, 2023. On July 15, 2021, the Court dismissed with prejudice Lipocine' s claims and Clarus' counterclaims. In April 2022, we agreed to an amendment to Section 3. 1 of the Global Agreement with Clarus pursuant to which we agreed to settle the payments due in July 2022 and 2023 for $ 1, 250, 000 rather than the $ 1, 500, 000 total future payments due. No future royalties are owing from either party.~~ On November 14, 2019, we and certain of our officers were named as defendants in a purported shareholder class action lawsuit, Solomon Abady v. Lipocine Inc. et al., 2: 19- cv- 00906- PMW, filed in the United District Court for the District of Utah. The complaint ~~alleges~~ **alleged** that the defendants made false and / or misleading statements and / or failed to disclose that our filing of the NDA for TLANDO to the FDA contained deficiencies and as a result the defendants' statements about our business and operations were false and misleading and / or lacked a reasonable basis in violation of federal securities laws. The lawsuit ~~seeks~~ **sought** certification as a class action (for a purported class of purchasers of the Company' s securities from March 27, 2019, through November 8, 2019), compensatory damages in an unspecified amount, and unspecified equitable or injunctive relief. We have insurance that covers claims of this nature. The retention amount payable by us under our policy is $ 1. ~~25~~ **5** million. On April 14, 2023, a judgment was issued ordering the case dismissed with prejudice and closure of the action. **We are not currently a party to any material litigation or other material legal proceedings. We may, from time to time, be involved in various legal proceedings arising from the normal course of business activities, and, while the Company has insurance that covers claims of this nature, unfavorable resolution of any of these matters could materially affect our future results of operations, cash flows, or financial position.** ITEM 4. MINE SAFETY DISCLOSURES Not Applicable. PART ~~II ITEM~~ **IIITEM** 5. MARKET FOR THE REGISTRANT' S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES Market Information Our common stock is quoted on The ~~NASDAQ~~ **Nasdaq** Capital Market under the symbol " LPCN **.** " ~~.~~ Holders As of March ~~5~~ **11** , ~~2024~~ **2025** , there were approximately 87 holders of record of our common stock. This number does not include an undetermined number of stockholders whose stock is held in " street " or " nominee " name. Dividends We do not anticipate paying any cash dividends on our common stock in the foreseeable future. We intend to retain any future earnings to finance growth and development and therefore do not anticipate paying cash dividends in the foreseeable future. ~~ITEM~~ **Recent Sales of Unregistered Securities Issuer Purchases of Equity SecuritiesITEM** 6. **[** RESERVED **]** ITEM 7. MANAGEMENT' S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS The following discussion of our financial condition and results of operations should be read in conjunction with our consolidated financial statements and the related notes thereto and other financial information included elsewhere in this **Annual** ~~report~~ **Report** . As used in the discussion below, " we, " " our, " and " us " refers to the historical financial results of Lipocine. Forward Looking Statements This section and other parts of this report contain forward- looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of

the Securities Exchange Act of 1934, as amended, that involve risks and uncertainties. Forward- looking statements provide current expectations of future events based on certain assumptions and include any statement that does not directly relate to any historical or current fact. Forward- looking statements may refer to such matters as products, product benefits, pre- clinical and clinical development timelines, clinical and regulatory expectations and plans, anticipated financial performance, future revenues or earnings, business prospects, projected ventures, new products and services, anticipated market performance, future expectations for liquidity and capital resources needs and similar matters. Such words as " may ", " will ", " expect ", " continue ", " estimate ", " project ", and " intend " and similar terms and expressions are intended to identify forward looking statements. Forward- looking statements are not guarantees of future performance and our actual results may differ significantly from the results discussed in the forward- looking statements. Factors that might cause such differences include, but are not limited to, those discussed in Part I, Item 1A (Risk Factors) of this Form 10- K. Except as required by applicable law, we assume no obligation to revise or update any forward- looking statements for any reason. Overview of Our Business We are a biopharmaceutical company focused on leveraging our proprietary Lip' ral platform to develop differentiated products through the oral delivery of previously difficult to deliver molecules ~~, focused on treating Central Nervous System (" CNS ") disorders~~. Our proprietary delivery technologies are designed to improve patient compliance and safety through orally available treatment options. Our primary development programs are based on oral delivery solutions for poorly bioavailable drugs. We have a portfolio of differentiated innovative product candidates that target high unmet needs for neurological and psychiatric CNS disorders, liver diseases, and hormone supplementation for men and women. We entered into a license agreement for the development and commercialization our product candidate, TLANDO ®, an oral testosterone replacement therapy ~~(" TRT ")~~ comprised of testosterone undecanoate ~~(" TU "). On January 12, 2024, we entered into a license agreement (the " Verity License Agreement ") with Verity Pharmaceuticals, Inc. (" Verity " or our " Licensee "), pursuant to which we granted to Verity an exclusive, royalty- bearing, sublicensable right and license to develop and commercialize the TLANDO product for TRT in the U. S. and Canada. Any FDA required post- marketing studies will also be the responsibility of our Licensee, Verity~~. On March 28, 2022, the FDA approved TLANDO as a TRT in adult males for conditions associated with a deficiency of endogenous testosterone, also known as hypogonadism. On June 7, 2022, our former commercial partner Antares (a wholly owned subsidiary of Halozyme) announced the commercial launch of TLANDO **. On January 12** , **2024, we entered into the Verity License Agreement with Verity, pursuant to which we granted to Verity** an ~~oral treatment indicated~~ **exclusive, royalty- bearing, sublicensable right and license to develop and commercialize the TLANDO product** for **TRT** ~~testosterone replacement therapy~~ in ~~adult males~~ **the Licensed Verity Territory. Any FDA post- marketing studies required will also be the responsibility of our Licensee, Verity. In September 2024, we entered into the SPC License Agreement** for ~~conditions associated~~ **the development and commercialization of TLANDO** with **SPC, pursuant to which the Company granted to SPC** a ~~deficiency~~ **non- transferable, exclusive, royalty- bearing license to commercialize** ~~or~~ **our** ~~absence of endogenous testosterone (primary~~ **TLANDO product in the SPC Territory. In October 2024, we entered into the Pharmalink Distribution Agreement with Pharmalink granting a non- transferable, exclusive, license to commercialize** ~~or~~ **our** ~~hypogonadotropic hypogonadism)~~ **TLANDO product in the Pharmalink Territory. Our ex- U. S. commercialization partners are planning to file marketing approval applications in Canada, the GCC countries, and South Korea in 2025** . Additional clinical development pipeline candidates include: LPCN 1154 for ~~postpartum depression (" PPD~~ **,** ~~");~~ LPCN 2101 for epilepsy **,** ~~; and~~ LPCN 2203 for essential tremor **and LPCN 2401 for improved body composition in obesity management** . In addition to our ~~CNS~~ **clinical development** product candidates, we have assets for which we expect to seek partnerships to enable further development including TLANDO for territories outside of North America, **South Korea, and the GCC,** LPCN 1148 comprising a novel prodrug of testosterone, and ~~testosterone laurate (" TL ")~~, for the management of ~~decompensated~~ cirrhosis, LPCN 1144, an oral prodrug of androgen receptor modulator for the treatment of non- cirrhotic ~~non- alcoholic steatohepatitis (" NASH~~ **MASH** ~~")~~ which has completed Phase 2 testing ~~;~~ **,** and LPCN 1107, potentially the first oral ~~hydroxy progesterone caproate (" HPC ")~~ product indicated for the prevention of recurrent ~~preterm birth (" PTB ")~~, which has completed a dose finding clinical study in pregnant women and has been granted orphan drug designation by the FDA. To date, we have funded our operations primarily through the sale of equity securities, debt and convertible debt and through up- front payments, research funding and royalty and milestone payments from our license and collaboration arrangements. We have not generated any revenues from product sales and while we expect to generate royalties from our Licensee' s sales of TLANDO, we do not expect to generate revenue from product sales from our other product candidates unless and until approval. We have incurred losses in most years since our inception. As of December 31, ~~2023~~ **2024** , we had an accumulated deficit of **approximately** $ 199. 8 million. Income and losses fluctuate year to year, primarily depending on the nature and timing of research and development occurring on our product candidates. Our net ~~loss~~ **income** was **approximately** $ **8, 000** ~~16. 4 million~~ for the year ended December 31, ~~2023~~ **2024** , compared to **approximately** $ ~~10~~ **16** . ~~8~~ **4** million for the year ended December 31, ~~2022~~ **2023** . Substantially all of our operating losses resulted from expenses incurred in connection with our product candidate development programs, our research activities and general and administrative costs associated with our operations. We expect to continue to incur significant expenses and operating losses for the foreseeable future as we: ● subject to resource availability, conduct further development of our other product candidates, including LPCN 1154, LPCN 2101, LPCN 2203, and LPCN ~~1148~~ **2401** ; ● continue our research efforts; ● research new products or new uses for our existing products; ● maintain, expand and protect our intellectual property portfolio; and ● provide general and administrative support for our operations. To fund future long- term operations, including the potential commercialization of any of our product candidates, we will need to raise additional capital. The amount and timing of future funding requirements will depend on many factors, including capital market conditions, regulatory requirements and commercial success of TLANDO, regulatory requirements related to our other product development programs, the timing and results of our ongoing development efforts, the potential expansion of our current development programs, potential new development programs, our ability to license and / or partner our products to third parties, the pursuit of

various potential commercial activities and strategies associated with our development programs and related general and administrative support. We anticipate that we will seek to fund our operations through public or private equity or debt financings or other sources, such as potential license, partnering and collaboration agreements. We cannot be certain that anticipated additional financing will be available to us on favorable terms, in amounts sufficient to fund our operations, or at all. Although we have previously been successful in obtaining financing through public and private equity securities offerings and our license and collaboration agreements, there can be no assurance that we will be able to do so in the future. Corporate Strategy Our goal is to become a leading biopharmaceutical company focused on leveraging our proprietary Lip' ral drug delivery technology platform to develop differentiated products through oral delivery of previously difficult to deliver molecules ~~for CNS disorders~~ . The key components of our strategy are to: Advance LPCN 1154 and other CNS product candidates. We intend to focus on the development of ~~endogenous neuroactive steroids (" NAS~~ **NASs** ~~")~~ which have broad applicability in treating various CNS conditions where we can leverage our technology platform to develop highly differentiated oral therapeutics. Our priority is on the development of LPCN 1154, a fast- acting oral antidepressant for ~~postpartum depression (" PPD ")~~ with potential for outpatient use. Support our ~~Licensee~~ **licensees , Verity, SPC, and Pharmalink** in commercialization **and / or** of our licensed oral TRT ~~option~~ **product** . We believe the TRT market needs a differentiated, convenient oral option. We have exclusively licensed rights to TLANDO to Verity for commercialization of TLANDO in the ~~U. S.~~ **Licensed Verity Territory, to SPC for commercialization in the SPC Territory,** and ~~Canada~~ **to Pharmalink in the Pharmalink Territory** . We plan to support ~~our Licensee~~ **Verity' s, SPC' s and Pharmalink** ' s efforts to effectively enable the availability of TLANDO to patients in a timely manner, in addition to receiving milestone ~~and~~ **payments,** royalty payments **, and / or payments for product sales** associated with TLANDO commercialization as agreed to in the Verity License Agreement **, the SPC License Agreement and the Pharmalink Distribution Agreement** . Develop partnership (s) to continue the advancement of ~~non- core~~ pipeline assets. We continuously strive to prioritize our resources in seeking partnerships of our pipeline assets. We are currently exploring ~~partnering of~~ **partnerships for** our liver programs LPCN 1144, our candidate for treatment of non- cirrhotic ~~NASH~~ **MASH** and LPCN 1148 for the management of ~~decompensated~~ cirrhosis ~~,~~ **, including prevention of the recurrence of overt hepatic encephalopathy; LPCN 2401 for improved body composition in obesity management as an adjunct therapy to or as a monotherapy post cessation of incretin mimetics use;** and LPCN 1107, our candidate for prevention of pre- term birth. We are exploring the possibility of licensing ~~LPCN 1021 (known as~~ TLANDO ~~in the United States) and LPCN 1111~~ to third parties outside **of** the ~~United States and Canada~~ **Currently Licensed TLANDO Territories** , although **as of the date of this Annual Report,** no **additional** licensing ~~agreement~~ **agreements** ~~has~~ **have** been entered into by the Company **in any other territories** . Financial Operations Overview ~~Revenue~~ **RevenueTo** ~~To~~ date, we have not generated any revenues from product sales and do not expect to do so until **our FDA approved product receives regulatory approval in the SPC Territory or the Pharmalink Territory or until** one of our **other** product candidates receives approval from the FDA. Revenues to date have been generated substantially from license fees, royalty and milestone payments and research support from our licensees. Since our inception through December 31, ~~2023~~ **2024** , we have generated $ ~~41~~ **53** . ~~9~~ **1** million in revenue under our various license and collaboration arrangements and from government grants. We have entered into the Verity License **Agreement, the SPC License Agreement and the Pharmalink Distribution** Agreement with the potential for revenue from future milestones ~~and~~ **,** royalties **, and / or product sales** , but we may never generate revenues from any of our clinical or preclinical development programs or licensed products as we may never succeed in obtaining regulatory approval or commercializing any of these product candidates. Research and Development Expenses Research and development expenses consist primarily of salaries, benefits, stock- based compensation and related personnel costs, fees paid to external service providers such as contract research organizations and contract manufacturing organizations, contractual obligations for clinical development, clinical sites, manufacturing and scale- up for late ~~-~~ -stage clinical trials, formulation of clinical drug supplies, and expenses associated with regulatory submissions. Research and development expenses also include an allocation of indirect costs, such as those for facilities, office expense **,** and depreciation of equipment based on the ratio of direct labor hours for research and development personnel ~~to total direct labor hours for all personnel~~ . We expense research and development expenses as incurred. Since our inception, we have spent approximately $ ~~147~~ **154** . ~~2~~ **6** million in research and development expenses through December 31, ~~2023. On January 12,~~ 2024 ~~, we entered into the Verity License Agreement, pursuant to which we granted to Verity an exclusive, royalty- bearing, sublicensable right and license to develop and commercialize our TLANDO product for TRT in the U. S. and Canada. Any FDA required post- marketing studies will also be the responsibility of our Licensee, Verity. On March 28, 2022, TLANDO was approved by the FDA as a TRT in adult males for conditions associated with a deficiency of endogenous testosterone, also known as hypogonadism. On January 31, 2024, our license agreement with former licensee, Antares Pharma, Inc. (" Antares "), was terminated and the transition of the U. S. commercial rights for TLANDO from Antares to Verity was completed on February 1, 2024, for the distribution, marketing and sale of TLANDO. The Verity License Agreement also provides Verity with a license to develop and commercialize TLANDO XR (LPCN 1111), the Company' s potential next generation, once daily oral product candidate for testosterone replacement therapy comprised of testosterone tridecanoate (" TT "), in the U. S. and Canada~~ . We expect to continue to incur significant costs **in** ~~as we develop our other product candidates, including our CNS product candidates as well as~~ the development of ~~any~~ future pipeline product candidates. In general, the cost of clinical trials may vary significantly over the life of a project as a result of uncertainties in clinical development, including, among others: ● the number of sites included in the trials; ● the length of time required to enroll suitable subjects; ● the duration of subject follow- ups; ● the length of time required to collect, analyze and report trial results; ● the cost, timing and outcome of regulatory review; and ● potential changes by the FDA in clinical trial and NDA filing requirements. Future research and development expenditures are subject to numerous uncertainties regarding timing and cost to completion, including, among others: ● the timing and outcome of regulatory filings and FDA reviews and actions for product candidates; ● our dependence on third- party manufacturers for the production of satisfactory finished product for registration

and launch should regulatory approval be obtained on any of our product candidates; ● the potential for future license or co-promote arrangements for our product candidates, when such arrangements will be secured, if at all, and to what degree such arrangements would affect our future plans and capital requirements; and ● the effect on our product development activities of actions taken by the FDA or other regulatory authorities. A change of outcome for any of these variables with respect to the development of our product development candidates could mean a substantial change in the costs and timing associated with these efforts, could require us to raise additional capital, and may require us to reduce operations. Given the stage of clinical development and the significant risks and uncertainties inherent in the clinical development, manufacturing and regulatory approval process, we are unable to estimate with any certainty the time or cost to complete the development of LPCN 1154, LPCN **2401, LPCN** 2101, LPCN 2203, LPCN 1148, LPCN 1144 ~~, LPCN 1111~~, LPCN 1107 and other product candidates. Clinical development timelines, the probability of success and development costs can differ materially from expectations and results from our clinical trials may not be favorable. If we are successful in progressing LPCN 1154 **, LPCN 2401** , LPCN 2101, LPCN 2203 or other future product candidates into later stage development, we will require additional capital. The amount and timing of our future research and development expenses for these product candidates will depend on the pre-clinical and clinical success of both our current development activities and potential development of new product candidates, as well as ongoing assessments of the commercial potential of such activities. We will continue efforts to enter into partnership arrangements for the continued development and / or marketing of LPCN 1144, LPCN 1148, LPCN **2401, LPCN** 1107 ~~and ,~~ for **the development and commercialization of** TLANDO **outside of the United States, Canada, South Korea, and the GCC countries** and LPCN 1111 outside of the **United States** ~~U. S.~~ and Canada. We expect **to incur significant** research and development expenses ~~to increase~~ in the future ~~as we complete on- going clinical studies, including the studies for our CNS product candidates and~~ as we conduct future clinical studies, including when and if we conduct Phase 2 clinical studies with our development product candidates and when and if we conduct Phase 3 clinical studies with LPCN 1144, LPCN 1148, and LPCN 1107. We are **also** exploring the possibility of licensing LPCN 1144, LPCN 1148, **LPCN 2401** and LPCN 1107, although we have not entered into a licensing agreement and no assurance can be given that any license agreement will be completed, or, if an agreement is completed, that such an agreement would be on terms favorable to us. If we are unable to raise additional capital or obtain non- dilutive financing, we may need to reduce research and development expenses in order to extend our ability to continue as a going concern. General and Administrative Expenses General and administrative expenses consist primarily of salaries and related benefits, including stock- based compensation **and outside consulting services** related to our executive, finance, business development, and **administrative** support functions. Other general and administrative expenses include rent and utilities, travel expenses, **and** professional fees for auditing, tax, legal and various other services. General and administrative expenses also include expenses for the cost of preparing, filling and prosecuting patent applications and maintaining, enforcing and defending intellectual property- related claims. We expect that general and administrative expenses will increase in the future as we continue as a public company ~~,~~ **. These fees** ~~including~~ **include** legal and consulting fees, accounting and audit fees, director fees, directors' and officers' insurance premiums, fees for investor relations services and enhanced business and accounting systems, litigation costs, professional fees and other costs. However, if we are unable to raise additional capital, we may need to reduce general and administrative expenses in order to extend our ability to continue as a going concern. Other **Income and** Expense ~~(Income), Net~~ Other **income and** expense ~~(income), net~~ consists primarily of interest income earned on our cash, cash equivalents and marketable investment securities, imputed interest on minimum royalties under the ~~license agreement we had with~~ Antares **Licensing Agreement in** ~~, which was terminated January 31, 2024~~ **2023** , **and** gains on our warrant ~~liability and gains on our litigation~~ liability. Results of Operations Comparison of the Years Ended December 31, **2024, and** 2023 ~~and 2022~~ The following table summarizes our results of operations for the years ended December 31, **2024 and** 2023 ~~and 2022~~ : Years Ended December 31, **2024** 2023 ~~2022~~ Variance Revenue $ **11, 198, 144 $** (2, 850, 818) $ ~~500~~ **14** , **048** ~~000 $ (3~~ , **962** ~~350, 818)~~ Research and development expenses **7, 351, 753** 10, 175, 251 ~~8~~ **(2** , ~~556~~ **823** , **498)** ~~888 1, 618, 363~~ General and administrative expenses **5, 001, 426** 4, 904, 888 ~~4~~ **96** , **538** ~~062, 487 842, 401~~ Interest and investment income 1, **146, 902 1,** 366, 940 ~~572, 578 794, 362 Interest expense~~ (~~27~~ **220** , ~~098~~ **038**) ~~27, 098~~ Unrealized gain on warrant liability **17, 166** 212, 690 ~~565, 940~~ (~~353~~ **195** , **524** ~~250) Gain on litigation settlement- 250, 000 (250, 000~~) Income tax expense (~~755) (~~ 681) (**755)** 74 ~~)~~ We recognized ~~a net reversal of variable consideration~~ revenue of $ **11.** 2 ~~. 9~~ million during the year ended December 31, ~~2023~~ **2024** , compared to **a net reversal of variable consideration** revenue of $ ~~500, 000~~ **2. 9 million** during the year ended December 31, ~~2022~~ **2023 . Revenue in 2024 primarily consisted of revenue from our licensees, Verity, SPC and Pharmalink and royalty revenue from TLANDO sales** . Net reversal of variable consideration revenue in **fiscal year ended December 31,** 2023 was mainly attributable to the reversal of variable consideration revenue recognized for minimum guaranteed royalties in 2021 under the license agreement with Antares, offset by $ 110, 000 in license revenue payments received from Spriaso under a licensing agreement in the cough and cold field. **The** ~~License revenue in 2022 was related to a non- refundable cash fee of $ 500, 000 received from Antares for consideration of a 90- day extension to exercise its option to license LPCN 1111. On June 30, 2022, Antares' option to license TLANDO XR expired and was not exercised. On October 2, 2023, the Company received notice from Antares of Antares' termination of the~~ Antares License Agreement **was** ~~which stated that the Antares License Agreement will terminate~~ **terminated** effective January 31, 2024. On January 12, 2024, **we** ~~the Company~~ entered into the Verity License Agreement with Verity. Upon termination of the Antares License Agreement, all rights and licenses granted by **us** ~~the Company~~ to Antares under the Antares License Agreement terminated and all rights in TLANDO were transferred to **our** ~~the Company' s~~ new licensing partner, Verity. We recorded research and development expenses of $ **7. 4 million and $** 10. 2 ~~million and $ 8. 6~~ million, respectively, for the years ended December 31, **2024 and** 2023 ~~and 2022~~ . The ~~increase~~ **decrease** in research and development expenses during the year ended December 31, ~~2023~~ **2024** was primarily due to a $ **3.** 1 ~~.~~ **million decrease related to the completion of our LPCN 1148 Phase** 2 ~~million~~ **POC study in male patients with cirrhosis in 2023, a $ 584, 000 decrease in TLANDO related costs, and a $ 348, 000 decrease in personnel**

related costs. These decreases were offset by a $ 996, 000 increase in ~~contract research organization expense related to our~~ LPCN 1154 clinical studies, a $ ~~591~~ **188** , 000 increase in ~~TLANDO manufacturing related~~ **other lab supplies and research** costs, **and** a $ ~~560~~ **46** , 000 increase ~~related to our Phase 2 POC study~~ in ~~male patients with cirrhosis with~~ LPCN **2401** ~~1148, and a $ 537, 000 increase in personnel expense primarily resulting from additional headcount. These increases are offset by a $ 600, 000 decrease related to LPCN 1111 scale up~~ costs ~~in 2022, a $ 416, 000 decrease in contract research organization expense and outside consulting costs related to the LPCN 1144 LiFT Phase 2 clinical study in NASH subjects, a $ 144, 000 decrease in our LPCN 1107 clinical study, and a $ 123, 000 decrease in other research and development activities~~ . We recorded general and administrative expenses of $ ~~4~~ **5** . ~~9~~ **0** million and $ 4. ~~1~~ **9** million, respectively, for the years ended December 31, **2024 and** 2023 ~~and 2022~~ . The increase in general and administrative expenses during the year ended December 31, ~~2023~~ **2024** was primarily due to a $ ~~374~~ **800** , 000 increase in business development and strategic advisory services related expenses ~~,~~ **and** a $ ~~217~~ **53** , 000 increase in **intellectual property** ~~legal fees relating to corporate matters such as our reverse stock split, potential licensing partnerships,~~ and **patent** ~~corporate strategy, a $ 219, 000 increase in personnel related costs, a $ 188, 000 increase in franchise taxes resulting from our increase in authorized shares and reverse stock split, a $ 133, 000 increase in director fees, a $ 41, 000 increase in other general and administrative~~ expenses ~~and a $ 22~~ , ~~000 increase in royalty expense relating to the net sales of TLANDO. These increases were~~ offset by a $ 222, 000 decrease in corporate insurance expense, a $ ~~138~~ **208** , 000 decrease **in personnel** related **costs** ~~to the recruitment of two additional directors~~ , ~~and~~ a $ ~~8~~ **161** , 000 decrease in **professional fees relating to** our **annual shareholder' s meeting and subsequent decision to enact a reverse stock split, a $ 146, 000 decrease in other** various consulting and professional fees **, and a $ 20, 000 decrease in other general and administrative expenses** . Interest and Investment Income The ~~increase~~ **decrease** in interest and investment income **of approximately $ 220, 000** during the year ended December 31, ~~2023~~ **2024** was due to ~~higher interest rates in 2023 compared to 2022, despite~~ declining cash and marketable investment securities balances ~~quarter over quarter~~ in **fiscal** ~~2023. Interest Expense The decrease in interest expense during the~~ year ended December 31, **2024 compared to** 2023 ~~is due to a decrease in interest expense on our Loan and Security Agreement with SVB, mainly as a result of lower principal balances in 2023 compared to 2022 as the SVB loan matured and was paid in full in June of 2022~~ . Unrealized ~~Loss (~~ Gain ~~)~~ on Warrant Liability We recorded gains of $ **17, 000 and $** 213 ~~, 000 and $ 566~~ , 000, respectively, on warrant liability during the **fiscal** years ended December 31, **2024 and** 2023 ~~and 2022~~ related to the change in the fair value of outstanding common stock warrants issued in **November 2019. The gain in fiscal year ended December 31, 2024 was attributable to the expiration in November 2024 of the warrant issued in** the November 2019 Offering. The ~~gains~~ **gain** in **fiscal year ended** ~~2023 and 2022 were attributable to a decrease in the value of warrants outstanding as of~~ December 31, 2023 ~~as~~ **was the result of** ~~compared to December 31, 2022, and~~ a ~~decrease~~ **decreased** ~~in the value of warrants outstanding as of December 31, 2022 as compared to December 31, 2021. These decreases in value were due to a decrease in our~~ stock price and ~~a~~ shorter term remaining on the ~~outstanding~~ warrants **as compared to the stock price and remaining term of the warrants as of December 31, 2022** . There were no common stock warrants from the November 2019 Offering exercised during **fiscal years ended December 31, 2024 or** 2023 ~~or 2022~~ . The warrants ~~are~~ **were** classified as a liability due to a provision contained within the warrant agreement which ~~allows~~ **allowed** the warrant holder the option to elect to receive an amount of cash equal to the value of the warrants as determined in accordance with the Black-Scholes option pricing model with certain defined assumptions upon a change of control. ~~The warrant liability will continue to fluctuate in the future based on inputs to the Black- Scholes model including our current stock price, the remaining life of the warrants, the volatility of our stock price, the risk- free interest rate and the number of common stock warrants outstanding. Litigation Settlement During the year ended December 31, 2022, we recorded a gain on the settlement of litigation liability of $ 250, 000 as a result of the April 2022 Amendment to Global Agreement with Clarus (" Amended Settlement Agreement "). The Amended Settlement Agreement settled the payments due in July 2022 and 2023 for $ 1, 250, 000 rather than the $ 1, 500, 000 total future payments due under the terms of the Global Agreement agreed to in 2021. Under the terms of the Global Agreement we entered into in 2021, we had agreed to pay Clarus $ 4. 0 million payable as follows: $ 2. 5 million which was paid in July 2021, $ 1. 0 million which was to be paid on July 13, 2022 and $ 500, 000 which was to be paid on July 13, 2023. No future royalties are owing from either party. On July 15, 2021, the Court dismissed with prejudice the Company' s claims and Clarus' counterclaims.~~ Liquidity and Capital Resources Since our inception, our operations have been primarily financed through sales of our equity securities, debt and payments received under our license and collaboration arrangements. We have devoted our resources to funding research and development programs, including discovery research, preclinical and clinical development activities. We have incurred operating losses in most years since our inception and we expect to continue to incur operating losses into the foreseeable future as we advance clinical development of LPCN 1154, LPCN 2101, LPCN 2203 **, LPCN 2401** and any other product candidate, including continued research efforts. As of December 31, ~~2023~~ **2024** , we had $ ~~22~~ **21** . ~~0~~ **6** million of unrestricted cash, cash equivalents and marketable investment securities compared to $ ~~32~~ **22** . ~~5~~ **0** million ~~at~~ **as of** December 31, ~~2022~~ **2023 . In October 2024, we entered into the Pharmalink Distribution Agreement with Pharmalink, pursuant to which we granted to Pharmalink a non- transferable, exclusive, license to commercialize our TLANDO product in the Pharmalink Territory. Pharmalink paid us a one- time non- refundable, non- creditable upfront fee. We are eligible to receive additional payments in regulatory authorization milestones related to the marketing approval in countries in the Pharmalink Territory under the Pharmalink Distribution Agreement and we have agreed to supply TLANDO to Pharmalink at a specified transfer price. In September 2024, we entered into the SPC License Agreement with SPC. Under the terms of the SPC License Agreement, SPC paid us a non- refundable, non- creditable upfront fee in October 2024. We also received an additional payment for a non- refundable, non- creditable prepayment in consideration for TLANDO product inventory, and are eligible to receive additional payments for various marketing authorization and sales milestones and will supply TLANDO to SPC and receive a supply price. In addition, we will receive royalties on net sales in the SPC Territory under the SPC License Agreement. Our ability to realize benefits from**

the SPC License Agreement, including milestone, product sale and royalty payments, is subject to a number of risks. We may not realize milestone, product sale or royalty payments in anticipated amounts, or at all . On January 12, 2024, we entered into the Verity License Agreement with Verity, pursuant to which we granted to Verity an exclusive, royalty- bearing, sublicensable right and license to develop and commercialize our TLANDO product with respect to TRT in the **Licensed Verity Territory** ~~U. S. and Canada~~ . Upon execution of the Verity License Agreement in January 2024 and upon transition of the commercialization of TLANDO from Antares to Verity in February 2024, Verity paid to us **an** initial ~~payments~~ **payment** of $ 2. 5 million **,** and **subsequent payments of** $ 5 million **and $ 2. 5 million in February 2024 and December 2024** , respectively. Verity has also agreed to make **an** additional ~~payments~~ **payment** to us of ~~$ 2. 5 million before January 1, 2025 and~~ $ 1 million before January 1, 2026. The Verity License Agreement also provides Verity with a license to develop and commercialize TLANDO XR (**“** LPCN 1111 **”**), **our** ~~the Company' s~~ potential next generation, once daily oral product candidate for testosterone replacement therapy comprised of testosterone tridecanoate ~~(“ TT ”)~~ , in the **Licensed Verity Territory** ~~U. S. and Canada~~ . We are also eligible to receive milestone payments of up to $ 259 million in the aggregate, depending on the achievement of certain development milestones and sales milestones in a single calendar year with respect to all products licensed by Verity under the Verity License Agreement. In addition, we receive tiered royalty payments at rates ranging from percentages of 12 % up to 18 % of net sales of all products licensed to Verity in the **Licensed Verity Territory** ~~United States and Canada~~ . Our ability to realize benefits from the Verity License Agreement, including milestone and royalty payments, is subject to a number of risks. We may not realize milestone or royalty payments in anticipated amounts, or at all. ~~On~~ **Previously on** March 6, 2017, we entered into a sales agreement (“ **Cantor** Sales Agreement ”) with Cantor Fitzgerald & Co. (“ Cantor ”) **under which we agreed to sell shares of our common stock, having registered up to $ 50. 0 million for sale under the Cantor Sales Agreement. During the year ended December 31, 2024, we sold 32, 110 shares of our common stock under the Cantor Sales Agreement at a weighted- average sales price of $ 6. 77 per share, resulting in net proceeds of approximately $ 209, 000, which is net of approximately $ 8, 000 in expenses. During the year ended December 31, 2023, we sold 81, 000 shares of our common stock under the Cantor Sales Agreement at a weighted- average sales price of $ 5. 36 per share, resulting in net proceeds of approximately $ 405, 000, which is net of approximately $ 24, 000 in expenses. On April 24, 2024, we terminated the Cantor Sales Agreement. From the inception to the termination of the Cantor Sales Agreement, we sold in aggregate 996, 821 shares of our common stock for $ 33. 5 million. On April 26, 2024, we entered into a sales agreement (the “ A. G. P. Sales Agreement ”) with A. G. P. / Alliance Global Partners (“ A. G. P. ”)** pursuant to which we may issue and sell, from time to time, shares of our common stock having an aggregate offering price of up to the amount we ~~have~~ registered on an effective registration statement pursuant to which the offering is being made. We currently have registered up to $ ~~50. 0 million~~ **10, 616, 169 of shares of common shares** for sale under the **A. G. P.** Sales Agreement, pursuant to ~~our~~ **the** Registration Statement on Form S- 3 **, as amended (File No. 333- 275716)** (the “ Form S- 3 ”), through ~~Cantor~~ **A. G. P.** as ~~our~~ sales agent. ~~Cantor~~ **A. G. P.** may sell our common stock by any method permitted by law deemed to be an “ at the market offering ” as defined in Rule 415 (a) (4) of the Securities Act ~~of 1933, as amended~~ , including sales made directly on or through the ~~NASDAQ~~ **Nasdaq** Capital Market or any other existing trade market for our common stock, in negotiated transactions at market prices prevailing at the time of sale or at prices related to prevailing market prices, or any other method permitted by law. ~~Cantor~~ **A. G. P. will** ~~uses~~ **use** its commercially reasonable efforts consistent with its normal trading and sales practices and applicable law and regulations to sell ~~these~~ shares **under the A. G. P. Sales Agreement** . We **will** pay ~~Cantor~~ **A. G. P.** 3. 0 % of the aggregate gross proceeds from each sale of shares under the **A. G. P.** Sales Agreement. ~~We~~ **In addition, we** have also provided ~~Cantor~~ **A. G. P.** with customary indemnification rights. **Our shares of common stock to be sold under the A. G. P. Sales Agreement will be sold and issued pursuant to the Form S- 3, as amended, which was previously declared effective by the SEC, and the related prospectus and one or more prospectus supplements.** We are not obligated to make any sales of our common stock under the **A. G. P.** Sales Agreement. The offering of ~~our~~ common stock pursuant to the **A. G. P.** Sales Agreement will terminate upon the termination of the **A. G. P.** Sales Agreement as permitted therein. We and ~~Cantor~~ **A. G. P.** may each terminate the **A. G. P.** Sales Agreement at any time upon ten days' prior notice. As of December 31, ~~2023~~ **2024** , we had **not** sold ~~an~~ **any** ~~aggregate of 964, 711~~ shares ~~at a weighted- average sales price of $ 34. 52 per share~~ under the **A** ~~At the Market Offering (the “ ATM Offering ”) for aggregate gross proceeds of $ 33~~ . **G** ~~3 million and net proceeds of $ 32~~ . **P** ~~1 million, after deducting sales agent commission and discounts and our other offering costs~~ . ~~During the year ended December 31, 2023, we sold 81, 000 shares of our common stock pursuant to the ATM Offering at a weighted- average sales price of $ 5. 36 per share, resulting in net proceeds of approximately $ 405, 000, under the~~ Sales Agreement ~~which is net of approximately $ 24, 000 in expenses. During the year ended December 31, 2022, we did not sell any shares of our common stock pursuant to the ATM Offering. As of December 31, 2023, we had $ 40. 8 million available for sale under the Sales Agreement. However, as of November 22, 2023, we are subject to General Instruction I. B. 6 of Form S- 3 which limits the amounts that we may sell under the registration statement. As a result of such limitations, we have currently registered the offer and sale of shares of common stock pursuant to the Sales Agreement having an aggregate offering price of up to $ 5. 3 million~~ . We believe that our existing capital resources, together with interest thereon, will be sufficient to meet our projected operating requirements through at least March 31, ~~2025~~ **2026** which include **a** ~~on- going~~ clinical ~~studies~~ **study** for LPCN 1154 **,** ~~and / or LPCN 2101 or LPCN 2203 and~~ research and development activities and compliance with regulatory requirements. We have based this estimate on assumptions that may prove to be wrong, and we could utilize our available capital resources sooner than we currently expect if additional activities are performed by us including new clinical studies for LPCN **2401, LPCN 2101, LPCN** 1148, LPCN 1144, and / or LPCN 1107. While we believe we have sufficient liquidity and capital resources to fund our projected operating requirements through at least March 31, ~~2025~~ **2026** , we will need to raise additional capital at some point through the equity or debt markets or through additional out- licensing activities, either before or after March 31, ~~2025~~ **2026** , to support our operations. If we are unsuccessful in raising additional capital as necessary, our

ability to continue as a going concern will be limited. Further, our operating plan may change, and we may need additional funds to meet operational needs and capital requirements for product development, regulatory compliance and clinical trial activities sooner than planned. In addition, our capital resources may be consumed more rapidly if we pursue additional clinical studies for LPCN 1154, LPCN **2401, LPCN** 2101, LPCN 2203, LPCN 1148, LPCN 1144, and / or LPCN 1107. Conversely, our capital resources could last longer if we reduce expenses, reduce the number of activities currently contemplated under our operating plan or if we terminate, modify or suspend on- going **and / or planned** clinical studies. We can raise capital pursuant to the **A. G. P.** Sales Agreement but may choose not to issue common stock if our market price is too low to justify such sales in our discretion. There are numerous risks and uncertainties associated with the development and, subject to approval by the FDA, commercialization of our product candidates. There are numerous risks and uncertainties impacting our ability to enter into collaborations with third parties to participate in the development and potential commercialization of our product candidates. We are unable to precisely estimate the amounts of increased capital outlays and operating expenditures associated with our anticipated or unanticipated clinical studies and ongoing development efforts. All of these factors affect our need for additional capital resources. To fund future operations, we will need to ultimately raise additional capital and our requirements will depend on many factors, including the following: ● the scope, rate of progress, results and cost of our clinical studies, **pre-** ~~preclinical~~ -- **clinical** testing and other related activities for all of our product candidates ~~,~~ including LPCN 1154, LPCN **2401, LPCN** 2101 ~~and ,~~ LPCN 2203, LPCN 1148, LPCN 1144, **and** LPCN 1107; ● the cost of manufacturing clinical supplies, and establishing commercial supplies, of our product candidates and any products that we may develop; ● the cost and timing of establishing sales, marketing and distribution capabilities, if any; ● the terms and timing of any collaborative, licensing, settlement and other arrangements that we may establish; ● the number and characteristics of product candidates that we pursue; ● the cost, timing and outcomes of regulatory approvals; ● the timing, receipt and amount of sales, profit sharing or royalties, if any, from our potential products; ● the cost of preparing, filing, prosecuting, defending and enforcing any patent claims and other intellectual property rights; ● the extent to which we acquire or invest in businesses, products or technologies, although we currently have no commitments or agreements relating to any of these types of transactions; and ● the extent to which we grow significantly in the number of employees or the scope of our operations. Funding may not be available to us on favorable terms, or at all. Also, market conditions may prevent us from accessing the debt and equity capital markets, including sales of our common stock through the **A. G. P.** Sales Agreement. If we are unable to obtain adequate financing when needed, we may have to delay, reduce the scope of or suspend one or more of our clinical studies, research and development programs or, if any of our product candidates receive approval from the FDA, commercialization efforts. We may seek to raise any necessary additional capital through a combination of public or private equity offerings, including the **A. G. P.** Sales Agreement, debt financings, collaborations, strategic alliances, licensing arrangements and other marketing and distribution arrangements. These arrangements may not be available to us or available on terms favorable to us. To the extent that we raise additional capital through marketing and distribution arrangements, other collaborations, strategic alliances or licensing arrangements with third parties, we may have to relinquish valuable rights to our product candidates, future revenue streams, research programs or product candidates or grant licenses on terms that may not be favorable to us. If we do raise additional capital through public or private equity offerings, the ownership interest of our existing stockholders will be diluted, and the terms of these securities may include liquidation or other preferences, warrants or other terms that adversely affect our stockholders' rights or further complicate raising additional capital in the future. If we raise additional capital through debt financing, we may be subject to covenants limiting or restricting our ability to take specific actions, such as incurring additional debt, making capital expenditures or declaring dividends. If we are unable, for any reason, to raise needed capital, we will have to reduce costs, delay research and development programs, liquidate assets, dispose of rights, commercialize products or product candidates earlier than planned or on less favorable terms than desired or reduce or cease operations. Sources and Uses of Cash The following table provides a summary of our cash flows for the years ended December 31, **2024 and** 2023 **.** ~~and 2022:~~ Years Ended December 31, **2024** 2023 ~~2022~~ Cash used in operating activities $ (~~11~~ **1** , ~~865~~ **221** , ~~991~~ **233**) $ (11, ~~968~~ **865** , ~~819~~ **991**) Cash provided by investing activities **2, 446, 061** 13, 084, 686 ~~14, 293, 707~~ Cash provided by ~~(used in)~~ financing activities **209, 340** 404, 567 ~~(2, 126, 944)~~ Net Cash Used in Operating Activities During each of the years ended December 31, **2024 and** 2023 ~~and 2022~~ , net cash used in operating activities was $ **1. 2 million and $** 11. 9 ~~and $ 12. 0~~ million, respectively. Net cash used in operating activities during ~~2023~~ **2024** ~~and 2022~~ was primarily attributable to cash outlays to support on- going operations, including research and development expenses **primarily related to our LPCN 1154 clinical studies** and **manufacturing scale up, in addition to** general and administrative expenses **. These cash outlays were offset by cash provided by the licensee and distribution agreements we entered into during 2024 of $ 11. 2 million** . During 2023, we were performing activities mainly related to our LPCN 1154 clinical studies and our LPCN 1148 Phase 2 POC Study in male subjects with cirrhosis ~~. During 2022, we were performing activities related to our Phase 2 POC study in male subjects with cirrhosis with LPCN 1148, our PK and food effect studies with LPCN 1154 and LPCN 1107, and the LPCN 1111 manufacturing scale up~~ . Net Cash Provided by Investing Activities During the ~~year~~ **years** ended December 31, **2024 and** 2023, net cash ~~provided by~~ **used in** investing activities was $ **2. 4 million and $** 13. 1 ~~million and during the year ended December 31, 2022, net cash used in investing activities was $ 14. 3~~ million. Net cash provided by investing activities during **2024 and** 2023 ~~and 2022~~ was primarily the result of the maturity of marketable investment securities ~~, net~~ of **$ 35. 4 million and** $ 36. 0 million ~~and~~ **, respectively offset by the purchase of marketable investment securities of** $ ~~59~~ **32** . ~~5~~ **9 million and $ 22. 9** million, respectively. There were $ **90, 000 and $** 13 ~~, 000 and $ 134~~ , 000 in capital expenditures for the years ended December 31, **2024 and** 2023 ~~and 2022~~ , respectively. Net Cash Provided by ~~(Used In)~~ Financing Activities During the ~~year~~ **years** ended December 31, **2024 and** 2023, net cash provided by financing activities was $ **209, 000 and $** 405, 000 ~~and during the year ended December 31~~ , **respectively, and** ~~2022 net used in financing activities~~ was ~~$ 2. 1 million~~ **the result of proceeds from the sales of our common stock under the Cantor Sales Agreement** . Net cash provided by financing activities during the year ended December 31, **2024 and** 2023,

was related to the sale of **32, 110 shares of our common stock for net proceeds of $ 209, 000 and** 81, 000 shares of our common stock **for net proceeds of $ 405, 000, respectively,** under ~~our ATM Offering~~ **the Cantor Sales Agreement**, less associated costs. ~~Net cash used in financing activities during the year ended December 31, 2022 was mainly due to loan repayments of $ 1. 7 million and payment of the Final Payment Charge of $ 650, 000 related to the SVB Loan and Security Agreement, offset by $ 211, 000 in cash provided by proceeds from stock option exercises.~~ Contractual Commitments and Contingencies ~~Long- Term Debt Obligations and Interest on Debt On January 5, 2018, we entered into a Loan and Security Agreement with SVB pursuant to which SVB agreed to lend us $ 10. 0 million. The principal borrowed under the Loan and Security Agreement bore interest at a rate equal to the Prime Rate plus one percent per annum, which interest was payable monthly. The loan matured on June 1, 2022 and the outstanding principal, interest and Final Payment Charge were paid in full.~~ Purchase Obligations We enter into contracts and issue purchase orders in the normal course of business with clinical research organizations for clinical trials and clinical and commercial supply manufacturing and with vendors for preclinical research studies, research supplies and other services and products for operating purposes. These contracts generally provide for termination on notice and are cancellable obligations. Operating Leases In August 2004, we entered into an agreement to lease our facility in Salt Lake City, Utah consisting of office and laboratory space which serves as our corporate headquarters. On ~~January 24~~ **December 2**, 2024, we modified and extended the lease through February 28, ~~2025~~ **2026**. Critical Accounting Policies and Significant Judgments and Estimates Our management' s discussion and analysis of our financial condition and results of operations is based on our financial statements which we have prepared in accordance with U. S. ~~generally accepted accounting principles (" GAAP ")~~. In preparing our financial statements, we are required to make estimates and assumptions that affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting periods **. Our estimates are based on our historical experience and on various other factors that we believe are reasonable under the circumstances, the results of which form the basis for making judgments about the carrying value of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions. We concluded that licensing revenue recognized in conjunction with the Verity License Agreement, the SPC License Agreement and the Pharmalink Distribution Agreement met the requirements under ASC 606, Revenue from Contracts with Customers. We evaluate the measure of progress each reporting period and, if necessary, adjust the measure of performance and related revenue recognition. License revenue from payments to be received in the future will be recognized when it is probable that we will receive license payments under the terms of the Verity License Agreement, the SPC License Agreement or the Pharmalink Distribution Agreement**. We have identified the following accounting policies that we believe require application of management' s most subjective judgments, often requiring the need to make estimates about the effect of matters that are inherently uncertain and may change in subsequent periods. Our actual results could differ from these estimates and such differences could be material. While our significant accounting policies are described in more detail in Note 2 of our annual financial statements included in this filing, we believe the following accounting policies to be critical to the judgments and estimates used in the preparation of our financial statements. Revenue Recognition In May 2014, the Financial Accounting Standards Board (" FASB ") issued Accounting Standards Update (" ASU ") No. 2014- 09, Revenue from Contracts with Customers (Topic 606) with amendments in 2015 (ASU 2015- 14) and 2016 (ASU 2016- 8, ASU 2016- 10, ASU 2016- 12 and ASU 2016- 20). The updated standard is a new comprehensive revenue recognition model that requires revenue to be recognized in a manner that depicts the transfer of goods or services to a customer at an amount that reflects the consideration expected to be received in exchange for those goods or services. The guidance also requires disclosures regarding the nature, amount, timing and uncertainty of revenue and cash flows arising from contracts with customers. We adopted this pronouncement effective January 1, 2017. We recognized **license and royalty** ~~net reversal of variable consideration~~ revenue of $ **11.** 2 ~~. 9~~ million during the year ended December 31, ~~2023~~ **2024** ~~,~~ and ~~license~~ **a net reversal of variable consideration** revenue of $ ~~500, 000~~ **2. 9 million** during the year ended December 31, ~~2022~~ **2023**. Net reversal of variable consideration revenue in 2023 was mainly attributable to the reversal of variable consideration revenue recognized for minimum guaranteed royalties in 2021 under the license agreement with Antares, offset by $ 110, 000 in license revenue payments received from Spriaso under a licensing agreement in the cough and cold field. ~~License revenue in 2022 was related to a non- refundable cash fee of $ 500, 000 received from Antares for consideration of a 90- day extension to exercise its option to license LPCN 1111. On June 30, 2022, Antares' option to license TLANDO XR expired and was not exercised.~~ We may provide research and development services under collaboration arrangements to advance the development of jointly owned products. We record the expenses incurred and reimbursed on a net basis in research and development expense. As of December 31, ~~2023~~ **2024**, we do not have any active collaboration agreements. ~~Research and Development Expenses~~ We make estimates of our accrued expenses as of each balance sheet date in our financial statements based on the facts and circumstances known to us at that time. Our expense accruals for contract research, contract manufacturing and other contract services are based on estimates of the fees associated with services provided by the contracting organizations. Payments under some of the contracts we have with such parties depend on factors such as successful enrollment of patients, site initiation and the completion of clinical trial milestones. In accruing service fees, we estimate the time period over which services will be performed and the level of effort to be expended in each period. If possible, we obtain information regarding unbilled services directly from these service providers. However, we may be required to estimate these services based on other information available to us. If we underestimate or overestimate the activity or fees associated with a study or service at a given point in time, adjustments to research and development expenses may be necessary in future periods. Subsequent changes in estimates may result in a material change in our accruals. Stock- Based Compensation We recognize stock- based compensation expense for grants of stock option awards, restricted stock units and restricted stock under our Incentive Plan to employees, nonemployees and nonemployee members of our board of directors based on the grant- date fair value of those awards. The grant- date fair value of

an award is generally recognized as compensation expense over the award' s requisite service period. In addition, in the past we have granted performance- based stock option awards and restricted stock grants, which vest based upon our satisfying certain performance conditions. Potential compensation cost, measured on the grant date, related to these performance options will be recognized only if, and when, we estimate that these options will vest, which is based on whether we consider the options' performance conditions to be probable of attainment. Our estimates of the number of performance- based options that will vest will be revised, if necessary, in subsequent periods. We use the Black- Scholes model to compute the estimated fair value of stock option awards. Using this model, fair value is calculated based on assumptions with respect to (i) expected volatility of our common stock price, (ii) the periods of time over which employees and members of the board of directors are expected to hold their options prior to exercise (expected term), (iii) expected dividend yield on the common stock, and (iv) risk- free interest rates. Stock- based compensation expense also includes an estimate, which is made at the time of grant, of the number of awards that are expected to be forfeited. This estimate is revised, if necessary, in subsequent periods if actual forfeitures differ from those estimates. As of December 31, ~~2023~~ **2024** , there was $ ~~455~~ **440** , 000 of total unrecognized compensation cost related to unvested share- based compensation arrangements granted under the Company' s stock option plan. Warrant Liability In connection with the November 2019 public offering, we issued warrants to purchase common stock. The warrants **would have** ~~require~~ **required** us to pay such holders an amount of cash in the event of a fundamental transaction, as defined in the warrant agreement. As the cash payment ~~is~~ **was** at the option of the warrant holder, we ~~account~~ **accounted** for the common stock warrants as a liability, which ~~is~~ **was** adjusted to fair value each reporting period as well as upon exercise of such warrants. The Company ~~estimates~~ **estimated** the fair value of the warrant liability based on a hypothetical payout associated with a fundamental transaction. The fair value estimate ~~utilizes~~ **utilized** a pricing model and unobservable inputs. Unlike the fair value of other assets and liabilities which are readily observable and therefore more easily independently corroborated, the warrants ~~are~~ **were** not actively traded, and fair value ~~is~~ **was** determined based on significant judgments regarding models, unobservable inputs and valuation methodologies. ~~As~~ **The warrants issued under the November 2019 public offering expired in November 2024, and there were no warrants from the November 2019 offering outstanding as** of December 31, **2024. As of December 31, 2024 and** 2023 ~~and 2022~~ , the warrant liability was $ **0 and $** 17, 000 ~~and $ 230, 000~~ , respectively. ~~Accounting Standards Issued Not Adopted~~ ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK ~~Not applicable~~ **As a " smaller reporting company, " this item is not required** . ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTAL DATA LIPOCINE INC. INDEX TO FINANCIAL STATEMENTS Page Audited Financial Statements of Lipocine Inc. for the Years ended December 31, **2024 and** 2023 ~~and 2022~~ Report of Independent Registered Public Accounting Firm (PCAOB ID No. 270) Consolidated Balance Sheets Consolidated Statements of Operations and Comprehensive Loss Consolidated Statements of Changes in Stockholders' Equity Consolidated Statements of Cash Flows Notes to Consolidated Financial Statements Report of Independent Registered Public Accounting Firm To the Board of Directors and Stockholders Lipocine Inc. Opinion on the Consolidated Financial Statements We have audited the accompanying consolidated balance sheets of Lipocine Inc. and subsidiaries (the Company) as of December 31, **2024 and** 2023 ~~and 2022~~ , the related consolidated statements of operations and comprehensive **income (** loss **)** , changes in stockholders' equity, and cash flows for the years then ended, and the related notes (collectively, the consolidated financial statements). In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the consolidated financial position of the Company as of December 31, **2024 and** 2023 ~~and 2022~~ , and the consolidated results of its operations and its cash flows for years then ended, in conformity with accounting principles generally accepted in the United States of America. Basis for Opinion These consolidated financial statements are the responsibility of the Company' s management. Our responsibility is to express an opinion on the Company' s consolidated financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with the U. S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB. We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audits, we are required to obtain an understanding of internal control over financial reporting, but not for the purpose of expressing an opinion on the effectiveness of the Company' s internal control over financial reporting. Accordingly, we express no such opinion. Our audits included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. We believe that our audits provide a reasonable basis for our opinion. Critical Audit ~~Matter~~ **Matters** ~~The critical~~ **Critical** audit ~~matter~~ **matters are** ~~communicated below is a matter~~ **matters** arising from the current period audit of the ~~consolidated~~ financial statements that ~~was~~ **were** communicated or required to be communicated to the audit committee and that ~~:~~ (1) ~~relates~~ - **relate** to accounts or disclosures that are material to the ~~consolidated~~ financial statements and (2) involved our especially challenging, subjective, or complex judgments. ~~The communication of~~ **We determined that there are no** critical audit matters ~~does not alter in any way our opinion on the consolidated financial statements, taken as a whole, and we are not, by communicating the critical audit matters below, providing a separate opinion on the critical audit matter or on the accounts or disclosures to which is relates. The Company entered into a license agreement during 2021 that includes a license fee, guaranteed minimum royalties, ongoing sales royalties, milestone payments and transfer of materials. On October 2, 2023, the licensee provided notice that the contract would be terminated effective January 31, 2024, resulting in a reversal of a portion of the variable consideration revenue that had been~~

~~previously recognized. Management is required to determine the transaction price and allocate the transaction price to the performance obligations in the license agreement. Management is also required to make estimates of when achievement of a particular milestone becomes probable. Milestone payments are included in the transaction price when it becomes probable that such inclusion would not result in a significant revenue reversal. A reversal of variable consideration is recorded in the period that the change becomes known. We identified revenue recognition as a critical audit matter because of the significant judgment by management in determining the transaction price and allocating the transaction price to the performance obligations as well as the accounting treatment of the constrained revenue resulting from the termination of the license agreement. This in turn led to a high degree of auditor judgment and effort in performing procedures and evaluating audit evidence related to the judgments made by management. Our audit procedures for auditing revenue included the following procedures, among others: ● We obtained and read the material license and royalty agreements. ● We tested management' s determination of the transaction price and the allocation of the transaction price to the performance obligations. ● We evaluated the reasonableness of management' s judgments and estimates~~ . / s / Tanner LLC We have served as the Company' s auditor since 2018 Salt Lake City, Utah March ~~7~~ **12** , ~~2024~~ **2025** LIPOCINE INC. AND SUBSIDIARIES Consolidated Balance Sheets December 31, December 31, **2024** 2023 ~~2022~~ Assets Current assets: Cash and cash equivalents $ **6, 205, 926 $** 4, 771, 758 ~~$ 3, 148, 496~~ Marketable investment securities **15, 427, 385** 17, 263, 788 ~~29, 381, 410~~ Accrued interest income **120, 447** 52, 254 ~~80, 427~~ ~~Contract asset- current portion- 579, 428~~ Prepaid and other current assets **567, 915** 773, 424 ~~945, 319~~ Total current assets 22, **321, 673 22,** 861, 224 ~~34, 135, 080~~ ~~Contract asset- non- current portion- 3, 252, 500~~ Property and equipment, net of accumulated depreciation of $ 1, ~~182~~ **223** , ~~191~~ **297** and $ 1, ~~153~~ **182** , ~~530~~ **191** respectively **165, 075** 116, 095 ~~131, 589~~ Other assets 23, 753 23, 753 Total assets $ **22, 510, 501 $** 23, 001, 072 ~~$ 37, 542, 922~~ Liabilities and Stockholders' Equity Current liabilities: Accounts payable $ **271, 696 $** 1, 395, 977 ~~$ 600, 388~~ Accrued expenses **921, 240** 1, 218, 486 ~~1~~ **Deferred revenue 320** , **000-** ~~077, 738~~ Warrant liability- ~~current portion~~ 17, 166 ~~--~~ Total current liabilities **1, 512, 936** 2, 631, 629 ~~1, 678, 126~~ ~~Warrant liability- 229, 856~~ Total liabilities **1, 512, 936** 2, 631, 629 ~~1, 907, 982~~ Commitments and contingencies (notes 8, 9 and 11) ~~--~~ Stockholders' equity: Common stock, par value $ 0. 0001 per share, 200, 000, 000 shares authorized; 5, **348, 276 and 5,** 316 ~~, 166 and 5, 235~~ , 166 issued and 5, **347, 940 and 5,** 315 ~~, 830 and 5, 234~~ , 830 outstanding **, respectively** 8, **863 8,** 860 ~~8, 852~~ Additional paid- in capital 220, **789, 138 220,** 171, 250 ~~219, 112, 164~~ Treasury stock at cost, 336 shares (40, 712) (40, 712) Accumulated other comprehensive gain ~~(loss)~~ **9, 138** 7, 259 ~~(20, 321)~~ Accumulated deficit (199, ~~777~~ **768** , ~~214~~ **862**) (~~183~~ **199** , ~~425~~ **777** , ~~043~~ **214**) Total stockholders' equity 20, **997, 565 20,** 369, 443 ~~35, 634, 940~~ Total liabilities and stockholders' equity $ **22, 510, 501 $** 23, 001, 072 ~~$ 37, 542, 922~~ See accompanying notes to consolidated financial statements Consolidated Statements of Operations and Comprehensive **Income (** Loss **) 2024** 2023 ~~2022~~ Years Ended December 31, **2024** 2023 ~~2022~~ Revenues: License **and royalty** revenue $ **11, 198, 144 $** 109, 987 ~~$ 500, 000~~ Minimum guaranteed royalties revenue (reversal of variable consideration) **-** (2, 960, 805) ~~--~~ Total revenues (reversal of variable consideration), net **11, 198, 144** (2, 850, 818) ~~500, 000~~ Operating expenses: Research and development **7, 351, 753** 10, 175, 251 ~~8~~ **General and administrative 5** , ~~556~~ **001, 426 4, 904** , 888 ~~General and administrative 4, 904, 888 4, 062, 487~~ Total operating expenses **12, 353, 179** 15, 080, 139 ~~12, 619, 375~~ Operating loss (~~17~~ **1** , ~~930~~ **155** , ~~957~~ **035**) (~~12~~ **17** , ~~119~~ **930** , ~~375~~ **957**) Other income ~~(expense)~~ : Interest and investment income 1, **146, 902 1,** 366, 940 ~~572, 578~~ ~~Interest expense- (27, 098)~~ Unrealized gain on warrant liability **17, 166** 212, 690 ~~565, 940~~ ~~Gain on litigation settlement liability- 250, 000~~ Total other income ~~, net~~ 1, **164, 068 1,** 579, 630 **Income (** ~~1, 361, 420~~ ~~Loss~~ **loss)** before income tax expense **9, 033** (16, 351, 327 ~~) (10, 757, 955~~) Income tax expense (**681) (** 755) **Net income** (~~681~~ **loss**) ~~Net loss~~ **8, 352** (16, 352, 082 ~~) (10, 758, 636~~) Issuance of Series B preferred stock dividend **-** (89) ~~--~~ Net **gain (** loss **)** ~~attributable to common shareholders Net loss~~ attributable to common shareholders $ **8, 352 $** (16, 352, 171) ~~$~~ **Basic income** (**loss** ~~10, 758, 636~~) ~~Basic loss~~ per share attributable to common stock $ **- $** (3. 10 ~~) $ (2. 06~~) Weighted average common shares outstanding, basic 5, **338, 957 5,** 269, 671 ~~5, 231, 681~~ Diluted **income (** loss **)** per share attributable to common stock $ **- $** (3. 14 ~~) $ (2. 15~~) Weighted average common shares outstanding, diluted 5, **422, 604 5,** 269, 671 ~~5, 256, 169~~ Comprehensive **income (** loss **)** : Net **income (** loss **) $ 8, 352** $ (16, 352, 082 ~~) $ (10, 758, 636~~) Net unrealized gain **on available- for- sale securities 1, 879 27, 580 Comprehensive gain** (loss) **$ 10** ~~on available- for- sale securities 27~~ , **231** ~~580 (2, 305) Comprehensive loss~~ $ (16, 324, 502 ~~) $ (10, 760, 941~~) Consolidated Statements of Changes in Stockholders' Equity For the Years Ended December 31, **2024 and** 2023 ~~and 2022~~ Number of Shares ~~Amount~~ Amount Number of Shares Amount Number of Shares Amount Paid- In Capital Comprehensive Loss Accumulated Deficit Stockholders' Equity Mezzanine Equity Stockholder' s Equity Series B Preferred Stock Common Stock Treasury Stock Additional Accumulated Other Total Number of Shares Amount Number of Shares Amount Number of Shares Amount Paid- In Capital Comprehensive Loss Accumulated Deficit Stockholders' Equity Balances at December 31, ~~2021~~ **2022** - $- ~~--~~ 5, ~~221~~ **234** , ~~883~~ **830** $ 8, ~~830~~ **852** 336 $ (40, 712) $ ~~218~~ **219** , ~~286~~ **112** , ~~323~~ **164** $ (~~18~~ **20** , ~~016~~ **321**) $ (~~172~~ **183** , ~~666~~ **425** , ~~407~~ **043**) $ ~~45~~ **35** , ~~570~~ **634** , **940** ~~018 Mezzanine equity, balance, shares~~ ~~--~~ Net loss~~-------~~ ~~--~~ (~~10~~ **16** , ~~758~~ **352** , ~~636~~ **082**) (~~10~~ **16** , ~~758~~ **352** , ~~636~~ **082**) ~~--~~ Unrealized net ~~loss~~ **gain** on marketable investment ~~--~~ securities~~-------~~ **27** ~~(2~~ , **580** ~~305)~~ - **27** ~~(2~~ , **580** ~~305)~~ - Stock- based compensation~~------~~ ~~636~~ **654** , ~~140~~ **438** -- ~~636~~ **654** , **438-** ~~140 Mezzanine equity,~~ Issuance of Series B preferred stock dividend **88** , ~~value Mezzanine equity, Issuance~~ **511 9~~----~~ 80-- 80 Redemption** of Series B preferred stock ~~dividend~~ **(88** , ~~share Mezzanine equity, Redemption of Series B preferred~~ **511) (9) 9 (89) (80)- Common** stock **sold through** ~~, value Mezzanine equity, Redemption of Series B preferred stock, share- Option exercises-- 12, 947 22-- 211, 401-- 211, 423- Costs associated with~~ ATM ~~Offering~~ **offering** -- **81** ~~----~~ ~~(21~~ , ~~700)~~ **000 8** -- **404** ~~(21~~ , ~~700)~~ **559-- 404, 567** Balances at December 31, ~~2022~~ **2023** - $- ~~--~~ 5, ~~234~~ **315** , 830 $ 8, ~~852~~ **860** 336 $ (40, 712) $ ~~219~~ **220** , ~~112~~ **171** , ~~164~~ **250 $ 7, 259** $ (~~20~~ **199** , ~~321~~ **777, 214**) $ **20** ~~(183~~ , ~~425~~ **369** , **443** ~~043) $ 35, 634, 940 Mezzanine equity, balance, shares- Number of Shares Amount Amount Number of Shares Amount Number of Shares Amount Paid- In Capital Comprehensive Loss Accumulated Deficit Stockholders' Equity~~ Mezzanine Equity Stockholder' s Equity Series B Preferred Stock Common Stock Treasury Stock Additional Accumulated Other Total Number of Shares Amount Number of Shares Amount Number of Shares Amount Paid- In Capital Comprehensive Loss Accumulated Deficit Stockholders' Equity Balances at December 31, ~~2022~~ **2023** - $- ~~--~~ 5, ~~234~~ **315** ,

830 $ 8, ~~852~~ **860** 336 $ (40, 712) $ ~~219~~ **220** , ~~112~~ **171** , ~~164~~ **250 $ 7, 259** $ (~~20~~ **199** , ~~321~~ **777, 214**) $ **20** ~~(183~~ , ~~425~~ **369** , ~~043)~~ **443 Balance-** $ ~~35, 634, 940 Balances, value- $-~~ 5, ~~234~~ **315** , 830 $ 8, ~~852~~ **860** 336 $ (40, 712) $ ~~219~~ **220** , ~~112~~ **171** , ~~164~~ **250 $ 7, 259** $ (~~20~~ **199** , ~~321~~ **777, 214**) $ **20, 369, 443 Net income-------- 8, 352 8, 352 Net income** (**loss** ~~183, 425, 043~~) ~~$ 35, 634, 940 Net loss~~ -------- **8** ~~- (16~~ , 352 **8** ~~, 082) (16~~ , 352 ~~, 082)~~ Unrealized net gain on marketable investment securities------- ~~27~~ **1** , ~~580~~ **879** - ~~27~~ **1** , ~~580~~ **879** Stock- based compensation------ ~~654~~ **408** , ~~438~~ **551** -- ~~654~~ **408** , **551** ~~438 Issuance of Series B preferred stock dividend 88, 511 9--- 80- 80 Redemption of Series B preferred stock (88, 511) (9)---- 9- (89) (80)~~ Common stock sold through ATM offering-- ~~81~~ **32** , ~~000 8~~ **110 3** -- ~~404~~ **209** , ~~559~~ **337** -- ~~404~~ **209** , ~~567~~ **340** Balances at December 31, ~~2023~~ **2024** - $- ~~-~~5, ~~315~~ **347** , ~~830~~ **940** $ 8, ~~860~~ **863** 336 $ (40, 712) $ 220, ~~171~~ **789** , ~~250~~ **138** $ ~~7~~ **9** , ~~259~~ **138** $ (199, ~~777~~ **768** , ~~214~~ **862**) $ 20, ~~369~~ **997** , ~~443~~ **565** ~~Balances~~ **Balance** ~~, value~~ $- ~~-~~5, ~~315~~ **347** , ~~830~~ **940** $ 8, ~~860~~ **863** 336 $ (40, 712) $ 220, ~~171~~ **789** , ~~250~~ **138** $ ~~7~~ **9** , ~~259~~ **138 #** $ (199, ~~777~~ **768** , ~~214~~ **862**) $ 20, ~~369~~ **997** , **565** ~~443 See accompanying notes to consolidated financial statements~~ Consolidated Statements of Cash Flows **2024** 2023 ~~2022~~ Years Ended December 31, **2024** 2023 ~~2022~~ Cash flows from operating activities: Net **income (** loss **) $ 8, 352** $ (16, 352, 082) ~~$ (10, 758, 636)~~ Adjustments to reconcile net **income (** loss **)** to cash used in operating activities: Depreciation expense **41, 106** 28, 661 ~~9, 453~~ Stock- based compensation expense **408, 551** 654, 438 ~~636, 140 Non- cash interest expense- 5, 842~~ Non- cash gain on change in fair value of warrant liability (~~212~~ **17** , ~~690~~ **166**) (~~565~~ **212** , **690** ~~940) Gain on settlement of litigation liability- (250, 000~~) Amortization of discounts on marketable investment securities (~~952~~ **697** , ~~651~~ **865**) (~~122~~ **952** , ~~048~~ **651**) Write off of contract asset due to variable consideration revenue reversal **-** 2, 960, 805 ~~-~~ Changes in operating assets and liabilities: Accrued interest income **(68, 193)** 28, 173 ~~166, 826~~ Contract asset **-** 709, 933 ~~218, 072~~ Prepaid and other current assets **205, 509** 333, 085 ~~569, 146~~ Accounts payable **(1, 124, 281)** 795, 589 ~~(688, 954)~~ Accrued expenses **(297, 246)** 140, 748 **Deferred revenue 320** ~~61, 280 Litigation settlement liability- (1, 250~~ , 000 ~~)~~ ~~-~~ Cash used in operating activities (~~11~~ **1** , ~~865~~ **221** , ~~991~~ **233**) (11, ~~968~~ **865** , ~~819~~ **991**) Cash flows from investing activities: Purchase of property and equipment (~~13~~ **90** , ~~167~~ **086**) (~~133~~ - **13** , ~~831~~ **167**) Purchases of marketable investment securities (~~22~~ **32** , ~~902~~ **863** , ~~147~~ **853**) (~~45~~ **22** , ~~074~~ **902** , ~~462~~ **147**) Maturities of marketable investment securities **35, 400, 000** 36, 000 ~~, 000 59, 502~~ , 000 Cash provided by investing activities **2, 446, 061** 13, 084, 686 ~~14, 293, 707~~ Cash flows from financing activities: ~~Debt repayments- (1, 666, 667) End of loan payment- (650, 000)~~ Net proceeds from sale of common stock through ATM **209, 340** 404, 567 ~~(21, 700) Proceeds from stock option exercises- 211, 423~~ Cash provided by ~~(used in)~~ financing activities **209, 340** 404, 567 ~~(2, 126, 944)~~ Net increase in cash and cash equivalents 1, **434, 168 1,** 623, 262 ~~197, 944~~ Cash and cash equivalents at beginning of period **4, 771, 758** 3, 148, 496 ~~2, 950, 552~~ Cash and cash equivalents at end of period $ **6, 205, 926 $** 4, 771, 758 ~~$ 3, 148, 496~~ Supplemental disclosure of cash flow information: ~~Interest paid $- $ 21, 256~~ Income taxes paid $ **681** 225 ~~200~~ Supplemental disclosure of non- cash investing and financing activity: Net unrealized gain ~~(loss)~~ on available- for- sale securities $ **1, 879 $** 27, 580 ~~$ (2, 305) Accrued final payment charge on debt $- $ 5, 842~~ Issuance of Series B preferred stock $ **-** **$** 89 ~~$-~~ **LIPOCINE INC. AND SUBSIDIARIES** NOTES TO CONSOLIDATED FINANCIAL STATEMENTS DECEMBER 31, **2024 and** 2023 ~~and 2022~~ (1) Description of Business Lipocine Inc. (“ Lipocine ” or the “ Company ”), a clinical- stage biopharmaceutical company ~~focused on central nervous system (“ CNS ”) disorders~~ , is engaged in research and development for the delivery of drugs using its proprietary delivery technology. The Company’ s principal operation is to provide oral delivery solutions for existing drugs. Lipocine develops its own drug candidates or it develops drug candidates on behalf of or in collaboration with corporate partners. The Company has funded operating costs primarily through collaborative license, milestone and research arrangements, through federal grants, through the sale of equity securities and through debt. The Company is incorporated under the laws of the State of Delaware. (2) Summary of Significant Accounting Policies (a) Use of Estimates The preparation of financial statements in conformity with U. S. generally accepted accounting principles (“ US GAAP ”) requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates. Significant items subject to such estimates and assumptions include those related to the timing and amount of revenue recognized from licensing agreements, stock- based compensation ~~;~~ **,** income tax uncertainties ~~;~~ **,** the fair value of the warrant liability **,** and the useful lives of property and equipment. (b) Cash and Cash Equivalents The Company considers all highly liquid investments with original maturities to the Company of three months or less to be cash equivalents. Although the Company may deposit its cash and cash equivalents with multiple financial institutions, its deposits, at times, may exceed federally insured limits. Cash and cash equivalents were $ **6. 2 million and** 4. 8 million **as of** ~~and $ 3. 1 million at~~ December 31, **2024 and** 2023 ~~and 2022~~ **, respectively** . (c) Receivables Accounts receivable are recorded at the invoiced amount and do not bear interest. The Company maintains an allowance for doubtful accounts for estimated losses. In establishing the allowance, management considers historical losses adjusted to take into account current market conditions and their customers’ financial condition, the amount of receivables in dispute, and the current receivables aging and current payment patterns. The Company had no write- offs in **2024 and** 2023 ~~and 2022~~ and the Company did not record an allowance for doubtful accounts as of December 31, **2024 and** 2023 ~~and 2022~~ as there were no accounts receivable outstanding. The Company does not have any off- balance- sheet credit exposure related to its customers. (d) Revenue Recognition The Company generates most of its revenue from license and royalty arrangements. At the inception of each contract, the Company identifies the goods and services that have been promised to the customer and each of those that represent a distinct performance obligation, determines the transaction price including any variable consideration, allocates the transaction price to the distinct performance obligations and determines whether control transfers to the customer at a point in time or over time. Variable consideration is included in the transaction price to the extent that it is probable that a significant reversal in the amount of cumulative revenue recognized will not occur or when the uncertainty associated with the variable consideration is subsequently resolved. The Company reassesses its reserves for variable consideration at each reporting date and makes adjustments, if necessary, which may affect revenue and earnings in periods in which any such changes become known. (2) Summary of Significant Accounting Policies – (continued) Disaggregation of Revenue. In the following tables,

revenues reported for the years ended December 31, **2024 and** 2023 ~~and 2022~~, under Topic 606, are disaggregated by type of revenue. Schedule of Disaggregation of Revenue Type of Revenue **2024** 2023 ~~2022~~ License $ **10, 900, 000 $** 109, 987 ~~$ 500~~ **Royalties 298** , ~~000~~ **144-** Minimum guaranteed royalties revenue (reversal of variable consideration) **-** (2, 960, 805) ~~-~~ Revenue **$ 11, 198, 144** $ (2, 850, 818) ~~$ 500, 000~~ Under Topic 606, all revenue has been recognized as point in time for the years ended December 31, **2024 and** 2023 ~~and 2022~~. See Note 4 for a description of the **Verity** ~~license agreement with Antares Pharma, Inc. (the " Antares~~ License Agreement ~~")~~ **, the SPC License Agreement and the Pharmalink Supply and Distribution Agreement** . See Note 12 for a description of the agreement with Spriaso **, a related party** . License Fees. For distinct license performance obligations, upfront license fees are recognized when the Company satisfies the underlying performance obligation. ~~This generally occurs upon transfer~~ **Performance obligations under these licenses, which consist** of the right to use the Company' s **proprietary technology, are satisfied at a point in time corresponding with delivery of the under lying technology rights to the licensee, which is generally upon transfer of the** licensed technology **/ product** to the customer. In addition, license arrangements may include contingent milestone payments, which are due following achievement by our licensee of specified sales or regulatory milestones and ~~for which~~ the licensee and / or Company must fulfill its performance obligation prior to achievement of these milestones. Because of the uncertainty of the milestone achievement, and / or the dependence on sales of our licensee, variable consideration for contingent milestones is fully constrained and is not recognized as revenue until the milestone is achieved by our licensee, to the extent collectability is reasonably certain. Royalties. Royalties revenue consists of sales- based and minimum royalties earned under licenses agreements for our products. ~~Performance obligations under these licenses, which consist of the right to use the Company' s proprietary technology, are satisfied at a point in time corresponding with delivery of the underlying technology rights to the licensee, which is generally upon transfer of the licensed technology / product to the customer.~~ Sales- based royalties revenue represents variable consideration under ~~the~~ license agreements and is recognized in the period a customer sells products incorporating the Company' s licensed technologies / products. The Company estimates sales- based royalties revenue earned but unpaid at each reporting period using information provided by the licensee. The Company' s license arrangements may also provide for minimum royalties, which the Company recognizes upon the satisfaction of the underlying performance obligation, which generally occurs with delivery of the underlying technology rights to the licensee. Sales- based and minimum royalties are generally due within 45 days after the end of each quarter in which they are earned. ~~Contract Assets Contract assets consist of minimum royalty revenue earned in relation to the license agreement but not yet payable based on the terms of the contract. On October 2, 2023, the Company received notice from Antares of Antares' termination of the Antares License Agreement which stated that the Antares License Agreement will terminate effective January 31, 2024. The Company received approximately $ 902, 000 from Antares during the year ended December 31, 2023 under the terms of our license agreement, of which approximately $ 710, 000 was applied to the contract asset and $ 192, 000 was applied to imputed interest receivable. Based on the termination notice, the Company recorded a non- cash revenue reversal of variable consideration relating to the minimum guaranteed royalties recorded as part of the Antares License Agreement of approximately $ 3. 0 million for the balance of the contract asset that is not expected to be received. The contract asset as of December 31, 2023 and 2022, was zero and $ 3, 832, 000, respectively and is related to the Antares License Agreement.~~ Revenue Concentration A major partner is considered to be one that comprises more than 10 % of the Company' s total revenues. ~~The~~ **In 2024, the Company recognized 91. 4 %, or $ 10. 2 million of its revenue from the Verity License Agreement, which consisted of $ 10. 0 million in licensing revenue and $ 232, 000 in TLANDO sales- based royalties. In 2023, the** Company recognized a reversal of revenue relating to variable consideration of the Antares License Agreement of $ ~~3~~ **2** . ~~0~~ **9** million ~~and revenue of $ 500, 000 for the years ended December 31, 2023, and 2022, respectively~~ . The reversal of revenue in 2023 ~~is~~ **was** due to the write off of the contract asset resulting in a reversal of variable consideration recognized in 2021 for minimum guaranteed royalties which resulted from **the** termination of the Antares License Agreement. ~~License revenue recognized in 2022 was 100 % from one major customer, Antares. (2) Summary of Significant Accounting Policies -- (continued)~~ (e) Property and Equipment Property and equipment are recorded at cost, less accumulated depreciation. Maintenance and repairs that do not extend the life or improve the asset are expensed in the year incurred. Depreciation is computed using the straight- line method over the estimated useful lives of the assets, which are five years for laboratory and office equipment, three years for computer equipment and software, and seven years for furniture and fixtures. (f) Accounting for Impairment of Long- Lived Assets Long- lived assets are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. Recoverability of assets held and used is measured by a comparison of the carrying amount of an asset to future net cash flows (undiscounted) expected to be generated by the asset. If such assets are considered to be impaired, the impairment to be recognized is measured as the amount by which the carrying amount of the assets exceeds the fair value of the assets. Assets held for sale are reported at the lower of the carrying amount, or fair value, less costs to sell. (g) Income Taxes Income taxes are accounted for under the asset and liability method. 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 deferred tax assets and liabilities of a change in tax rates is recognized in income in the period that includes the enactment date. A valuation allowance is provided against net deferred tax assets if, based upon the available evidence, it is more likely than not that some or all of the net deferred tax assets will not be realized. The Company recognizes the effect of income tax positions only if those positions are more likely than not of being sustained. Recognized income tax positions are measured at the largest amount that is greater than 50 percent likely of being realized. Changes in recognition or measurement are reflected in the period in which the change in judgment occurs. The Company records interest and penalties related to unrecognized tax benefits as a component of its income tax expense. (h) Share Based Payments The Company recognizes stock- based compensation

expense for grants of stock option awards, restricted stock units and restricted stock under the Company' s Incentive Plan to employees, nonemployees and nonemployee members of the Company' s board of directors based on the grant- date fair value of those awards. The grant- date fair value of an award is generally recognized as compensation expense over the award' s requisite service period. In addition, ~~in the past~~ the Company has granted performance- based stock option awards and restricted stock units, which vest based upon the Company satisfying certain performance conditions. Potential compensation cost, measured on the grant date, related to these performance options will be recognized only if, and when, the Company estimates that these options or units will vest, which is based on whether the Company considers the performance conditions to be probable of attainment. The Company' s estimates of the number of performance- based options or units that will vest will be revised, if necessary, in subsequent periods. The Company uses the Black- Scholes model to compute the estimated fair value of stock option awards. Using this model, fair value is calculated based on assumptions with respect to (i) expected volatility of the Company' s common stock price, (ii) the periods of time over which employees, nonemployees and members of the board of directors are expected to hold their options prior to exercise (expected term), (iii) expected dividend yield on the common stock, and (iv) risk- free interest rates. Stock- based compensation expense also includes an estimate, which is made at the time of grant, of the number of awards that are expected to be forfeited. This estimate is revised, if necessary, in subsequent periods if actual forfeitures differ from those estimates. Stock- based compensation cost **for stock option awards and restricted stock units** that ~~has~~ **have** been expensed in the statements of operations amounted to **approximately $ 409, 000 and** $ 654 ~~, 000 and $ 636~~, 000 for the years ended December 31, **2024 and** 2023 ~~and 2022~~, allocated as follows: Schedule of Employee Service Share- based Compensation, Allocation of Recognized Period Costs Years Ended December 31, **2024** 2023 ~~2022~~ Research and development $ **222, 596 $** 358, 352 **General and administrative 185, 955 296, 086** $ ~~338~~ **408** , **551** ~~018 General and administrative 296, 086 298, 122~~ $ 654, 438 ~~$ 636, 140~~ The Company issued ~~26~~ **84** , ~~467~~ **715** stock options and ~~74~~ **26** , ~~334~~ **467** stock options during the years ended December 31, **2024 and** 2023 **, respectively. The Company issued 21, 762 restricted stock units** and **0 restricted stock units during the years ended December 31,** ~~2022~~ **2024 and 2023** , respectively. Key assumptions used in the determination of the fair value of stock options granted are as follows: Expected Term: The expected term represents the period that the stock- based awards are expected to be outstanding. **The** ~~Due to limited historical experience of similar awards, the~~ expected term was estimated using the simplified method in accordance with the provisions of Staff Accounting Bulletin (" SAB ") No. 107, Share- Based Payment, for awards with stated or implied service periods. The simplified method defines the expected term as the average of the contractual term and the vesting period of the stock option. For awards with performance conditions, and that have the contractual term to satisfy the performance condition, the contractual term was used. Risk- Free Interest Rate: The risk- free interest rate used was based on the implied yield currently available on U. S. Treasury issues with an equivalent remaining term. Expected Dividend: The expected dividend assumption is based on management' s current expectation about the Company' s anticipated dividend policy. The Company does not anticipate declaring dividends in the foreseeable future. Expected Volatility: The volatility factor is based solely on the Company' s trading history. For options granted in **2024 and** 2023 ~~and 2022~~, the Company calculated the fair value of each option grant on the respective dates of grant using the following weighted average assumptions: Schedule of Key Assumption of Fair Value of Stock Options Granted **2024** 2023 ~~2022~~ Expected term 5. ~~73~~ **81** years 5. ~~82~~ **73** years Risk- free interest rate ~~3~~ **4** . ~~73~~ **41** % 3. ~~06~~ **73** % Expected dividend yield — — Expected volatility 98. **76 % 98.** 97 ~~% 99. 31~~ % FASB Accounting Standards Codification (" ASC ") 718, Stock Compensation, requires the Company to recognize compensation expense for the portion of options that are expected to vest. Therefore, the Company applied estimated forfeiture rates that were derived from historical employee termination behavior. If the actual number of forfeitures differs from those estimated by management, additional adjustments to compensation expense may be required in future periods. As of December 31, ~~2023~~ **2024** , there was $ ~~455~~ **440** , 000 of total unrecognized compensation cost related to unvested share- based compensation arrangements granted under the Company' s stock option plan **, of which $ 368, 000 relates to unvested stock options and $ 72, 000 relates to unvested restricted stock units** . ~~That cost~~ **Share- based compensation related to options** is expected to be recognized over a weighted average period of 1. ~~4~~ **2** years ~~and~~ **. The cost** will be adjusted for subsequent changes in estimated forfeitures. The weighted average fair value of **stock options** ~~share- based compensation awards~~ granted during the years ended December 31, **2024 and** 2023 ~~and 2022~~ was approximately $ **3. 80 and $** 6. 19 ~~per share and $ 11. 50~~ per share, respectively. (i) Fair Value The Company utilizes valuation techniques that maximize the use of observable inputs and minimize the use of unobservable inputs to the extent possible. The Company determines fair value based on assumptions that market participants would use in pricing an asset or liability in the principal or most advantageous market. When considering market participant assumptions in fair value measurements, the following fair value hierarchy distinguishes between observable and unobservable inputs, which are categorized in one of the following levels: ● Level 1 Inputs: Quoted prices for identical instruments in active markets. ● Level 2 Inputs: Quoted prices for similar instruments in active markets, quoted prices for identical or similar instruments in markets that are not active, and model- derived valuation in which all significant inputs and significant value drivers are observable in active markets. ● Level 3 Inputs: Valuations derived from valuation techniques in which one or more significant inputs or significant value drivers are unobservable. All of the Company' s financial instruments are valued using quoted prices in active markets or based on other observable inputs. For accrued interest income, prepaid and other current assets, accounts payable, and accrued expenses, the carrying amounts approximate fair value because of the short maturity of these instruments. The following table presents the placement in the fair value hierarchy of assets and liabilities that are measured at fair value on a recurring basis ~~at~~ **as of** December 31, **2024 and** 2023 ~~and 2022~~ : Schedule of Fair Value, Assets and Liabilities Measured on Recurring Basis Fair value measurements at reporting date using December 31, **2024 Level 1 inputs Level 2 inputs Level 3 inputs Assets: Cash equivalents- money market funds $ 6, 155, 167 $ 6, 155, 167 $- $- Government treasury bills 15, 427, 385 15, 427, 385-- $ 21, 582, 552 $ 21, 582, 552 $- $- Liabilities: Warrant liability $- $- $- $- $ 21, 582, 552 $ 21, 582, 552 $- $- Fair value measurements at reporting date using Deember 31,** 2023 Level 1 inputs Level 2 inputs Level 3 inputs Assets: Cash

equivalents- money market funds $ 4, 695, 491 $ 4, 695, 491 $- $- Government treasury bills 14, 281, 104 14, 281, 104-- ~~US~~ **U** . **S.** ~~Government~~ **government** agency securities 2, 982, 684- 2, 982, 684- $ 21, 959, 279 $ 18, 976, 595 $ 2, 982, 684 $- Liabilities: Warrant liability $ 17, 166 $- $- $ 17, 166 $ 21, 976, 445 $ 18, 976, 595 $ 2, 982, 684 $ 17, 166 ~~Fair value measurements at reporting date using December 31, 2022 Level 1 inputs Level 2 inputs Level 3 inputs Assets: Cash equivalents- money market funds $ 2, 694, 434 $ 2, 694, 434 $- $- Government treasury bills 5, 959, 000 5, 959, 000-- Commercial paper 14, 586, 930- 14, 586, 930- Corporate bonds and notes 5, 454, 690- 5, 454, 690- U. S. government agency securities 3, 380, 790- 3, 380, 790- $ 32, 075, 844 $ 8, 653, 434 $ 23, 422, 410 $- Liabilities: Warrant liability $ 229, 856 $- $- $ 229, 856 $ 32, 305, 700 $ 8, 653, 434 $ 23, 422, 410 $ 229, 856~~ The following methods and assumptions were used to determine the fair value of each class of assets and liabilities recorded at fair value in the balance sheets: Cash equivalents: Cash equivalents primarily consist of highly rated money market funds and treasury bills with original maturities to the Company of three months or less and are purchased daily at par value with specified yield rates. Cash equivalents related to money market funds and treasury bills are classified within Level 1 of the fair value hierarchy because they are valued using quoted market prices or broker or dealer quotations for similar assets. **U. S.** ~~Government~~ **government agency securities** ~~bonds and notes~~ : The Company uses a third- party pricing service to value these investments. **U** ~~United States bonds and notes are classified within Level 1 of the fair value hierarchy because they are valued using quoted market prices for identical assets and reportable trades~~ . **S** ~~Corporate bonds, notes, and commercial paper: The Company uses a third- party pricing service to value these investments~~ . **government agency securities** ~~Corporate bonds, notes and commercial paper~~ are classified within Level 2 of the fair value hierarchy because they are valued using broker / dealer quotes, bids and offers, benchmark yields and credit spreads and other observable inputs. **Government treasury bills: The Company uses a third- party pricing service to value these investments. United States treasury bills are classified within Level 1 of the fair value hierarchy because they are valued using quoted market prices in active markets for identical assets and reportable trades.** Warrant liability: The warrant liability (which relates to warrants to purchase shares of common stock) ~~is~~ **was** marked- to- market each reporting period with the change in fair value recorded to other income (expense) in the accompanying statements of operations until the warrants ~~are~~ **were** exercised, ~~expire~~ **expired** or other facts and circumstances ~~lead~~ **led** the warrant liability to be reclassified to stockholders' equity. The fair value of the warrant liability is estimated using a Black- Scholes option- pricing model. **All outstanding warrants required to be classified as a liability had expired by December 31, 2024, therefore no liability existed at the end of the year.** The significant assumptions used in preparing the option pricing model for valuing the warrant liability as of December 31, 2023, include (i) volatility of 100 %, (ii) risk free interest rate of 4. 79 %, (iii) strike price of $ 8. 50, (iv) fair value of common stock of $ 2. 79, and (v) expected life of 0. 9 years. The ~~significant assumptions used in preparing the option pricing model for valuing the warrant liability as of December 31, 2022, include (i) volatility of 100 %, (ii) risk free interest rate of 4. 41 %, (iii) strike price of $ 8. 50, (iv) fair value of common stock of $ 6. 77, and (v) expected life of 1. 9 years. The~~ Company' s accounting policy is to recognize transfers between levels of the fair value hierarchy on the date of the event or change in circumstances that caused the transfer. There were no transfers into or out of Level 1, Level 2 or Level 3 for the years ended December 31, **2024 and** 2023 ~~and December 31, 2022~~ . (j) Earnings (Loss) per Share Basic earnings (loss) per share is calculated by dividing net income (loss) available to common shareholders by the weighted average number of common shares outstanding during the period. Diluted earnings (loss) per share is based on the weighted average number of common shares outstanding plus, where applicable, the additional potential common shares that would have been outstanding related to dilutive options, warrants, and unvested restricted stock units to the extent such shares are dilutive. (2) Summary of Significant Accounting Policies – (continued) The following table sets forth the computation of basic and diluted earnings (loss) per share of common stock for the years ended December 31, **2024 and** 2023 ~~and 2022~~ . Schedule of Computation of Basic and Diluted Earnings (Loss) Per Share of Common Stock **2024** 2023 ~~2022~~ Years Ended December 31, **2024** 2023 ~~2022~~ Basic **earnings (** loss **)** per share attributable to common stock: Numerator Net **earnings (** loss **) $ 8, 352** $ (16, 352, 171 ~~) $ (10, 758, 636~~) Denominator Weighted avg. common shares outstanding 5, **338, 957 5,** 269, 671 ~~5, 231, 681~~ Basic **earnings (** loss **)** per share attributable to common stock $ **- $** (3. 10) ~~$~~ **Diluted earnings** (**loss** ~~2. 06~~) ~~Diluted loss~~ per share attributable to common stock: Numerator Net **earnings (** loss **) $ 8, 352** $ (16, 352, 171 ~~) $ (10, 758, 636~~) Effect of dilutive securities on net **earnings (** loss **)** : Common stock warrants **17, 166** 212, 690 ~~565, 940~~ Total net loss for purpose of calculating diluted net loss per common share $ (~~16~~ **8** , **814** ~~564, 861~~) $ (~~11~~ **16** , ~~324~~ **564** , ~~576~~ **861**) Denominator Weighted avg. common shares outstanding 5, **338, 957 5,** 269, 671 ~~5, 231, 681~~ Weighted average effect of dilutive securities: ~~Common stock~~ **Stock options 83** ~~warrants- 24~~ , ~~488~~ **647-** Total shares for purpose of calculating diluted net **earnings (** loss **)** per common share 5, **422, 604 5,** 269, 671 ~~5, 256, 169~~ Diluted **earnings (** loss **)** per share attributable to common stock $ **- $** (3. 14 ~~) $ (2. 15~~) The computation of diluted earnings per share for the years ended December 31, **2024 and** 2023 ~~and 2022~~ does not include the following stock options or warrants to purchase shares in the computation of diluted earnings per share because these instruments were antidilutive: Schedule of Anti- dilutive Securities Excluded from Computation of Earnings Per Share **2024 2023** December 31, **2024** 2023 ~~2022~~ Stock options **251, 611** 262, 247 ~~277~~ **Unvested restricted stock units 21** , ~~225~~ **762-** Warrants **49, 433 49, 433 Antidilutive Securities** 49, 433 49, 433 (k) Segment Information The Company is a single reportable segment engaged in research and development for the delivery of drugs using its proprietary delivery technology. Operating segments are identified as components of an enterprise for which separate discrete financial information is available for evaluation by the chief operating decision maker in making decisions regarding resource allocation and assessing performance. The chief operating decision maker made such decisions and assessed performance at the company level, as one segment. (l) Principles of Consolidation The consolidated financial statements include the accounts of the Company and all subsidiaries. The Company eliminates all intercompany accounts and transactions in consolidation. (3) Marketable Investment Securities The Company has classified its marketable investment securities as available- for- sale securities, all of which are debt securities. These securities are carried at fair value with unrealized holding gains and losses, net of the related tax effect, included in accumulated other comprehensive income (loss) in stockholders'

equity until realized. Gains and losses on investment security transactions are reported on the specific- identification method. Dividend income is recognized on the ex- dividend date and interest income is recognized on an accrual basis. The amortized cost, gross unrealized holding gains, gross unrealized holding losses, and fair value for available- for- sale securities by major security type and class of security ~~at~~ **as of** December 31, **2024 and** 2023 ~~and 2022~~ were as follows: Schedule of Available for Sale SecuritiesDecember 31, **2024 Amortized Cost Gross Unrealized Holding Gains Gross Unrealized Holding Losses Aggregate Fair Value Government treasury bills $ 15, 418, 247 $ 9, 138 $- $ 15, 427, 385 $ 15, 418, 247 $ 9, 138 $- $ 15, 427, 385 December 31,** 2023 Amortized Cost Gross ~~unrealized~~ **Unrealized** ~~holding~~ **Holding** ~~gains~~ **Gains** Gross ~~unrealized~~ **Unrealized** ~~holding~~ **Holding** ~~losses~~ **Losses** Aggregate ~~fair~~ **Fair** ~~value~~ **Value** Government treasury bills $ 14, 272, 530 $ 8, 574 $- $ 14, 281, 104 U. S. government agency securities 2, 983, 999- (1, 315) 2, 982, 684 $ 17, 256, 529 $ 8, 574 $ (1, 315) $ 17, 263, 788 ~~December 31, 2022 Amortized Cost Gross unrealized holding gains Gross unrealized holding losses Aggregate fair value Government treasury bills $ 5, 973, 087 $- $ (14, 087) $ 5, 959, 000 Commercial paper 20, 052, 505- (10, 885) 20, 041, 620 U. S. government agency securities 3, 376, 139 4, 651- 3, 380, 790 $ 29, 401, 731 $ 4, 651 $ (24, 972) $ 29, 381, 410~~ (3) Marketable Investment Securities- (continued) Maturities of debt securities classified as available- for- sale securities ~~at~~ **as of** December 31, ~~2023~~ **2024** are as follows: Schedule of Maturities of Debt Securities Classified as Available- for- Sale SecuritiesDecember 31, ~~2023~~ **2024** Amortized Cost Aggregate ~~fair~~ **Fair** ~~value~~ **Value** Due within one year $ ~~17~~ **15** , ~~256~~ **418** , ~~529~~ **247** $ ~~17~~ **15** , ~~263~~ **427** , ~~788~~ **385** $ ~~17~~ **15** , ~~256~~ **418** , ~~529~~ **247** $ ~~17~~ **15** , ~~263~~ **427** , ~~788~~ **385** There were no sales of marketable investment securities during the years ended December 31, **2024 and** 2023 ~~and 2022~~ and therefore no realized gains or losses. Additionally, $ **35. 4 million and $** 36. 0 ~~million and $ 59. 5~~ million of marketable investment securities matured during the years ended December 31, **2024 and** 2023 ~~and 2022~~, respectively. The Company determined there were no other- than- temporary impairments for the years ended December 31, **2024 and** 2023 ~~and 2022~~. (4) Contractual Agreements (a **) Verity Pharmaceuticals, Inc. On January 12, 2024, the Company entered into the Verity License Agreement with GSL and Verity Pharma, pursuant to which the Company granted to GSL (an affiliate of Verity Pharma) an exclusive, royalty- bearing, sublicensable right and license to commercialize the Company' s TLANDO product with respect to testosterone replacement therapy in males for conditions associated with a deficiency or absence of endogenous testosterone, as indicated in NDA No. 208088, treatment of Klinefelter syndrome, and pediatric indications relating to testosterone replacement therapy in males for conditions associated with a deficiency or absence of endogenous testosterone (the " Field "), in each case within the United States and Canada (the " Licensed Verity Territory "). The Verity License Agreement also provides GSL with a license to develop and commercialize TLANDO XR (LPCN 1111), the Company' s potential once- daily oral product candidate for testosterone replacement therapy in the Licensed Verity Territory. Under the Verity License Agreement, the Company retains rights to TLANDO and TLANDO XR in applications outside of the Field and to the development and commercialization rights outside of the United States and Canada. Upon execution of the Verity License Agreement, GSL agreed to pay the Company a license fee of $ 11. 0 million consisting of an initial payment of $ 2. 5 million which was received on signing of the Verity License Agreement, $ 5. 0 million which was received on February 1, 2024, $ 2. 5 million which was received on December 30, 2024, and $ 1. 0 million which is to be paid no later than January 1, 2026. The Company is also eligible to receive development and sales milestone payments of up to $ 259. 0 million in the aggregate, depending primarily on the achievement of certain sales milestones in a single calendar year with respect to all products licensed by GSL under the Verity License Agreement. Under the Verity License Agreement, GSL is generally responsible for expenses relating to the development (including the conduct of any clinical trials) and commercialization of licensed products in the Field in the Licensed Verity Territory, while the Company is generally responsible for expenses relating to development activities outside of the Field and / or the Licensed Verity Territory. The Company concluded that licensing revenue recognized in conjunction with the Verity License Agreement met the requirements under ASC 606, Revenue from Contracts with Customers. The Company evaluates the measure of progress each reporting period and, if necessary, adjusts the measure of performance and related revenue recognition. License revenue from payments to be received in the future will be recognized when it is probable that we will receive license payments under the terms of the Verity License Agreement. During 2024 the Company recognized $ 10. 0 million in licensing revenue and approximately $ 232, 000 in sales- based royalty revenue under the Verity License Agreement. (4) Contractual Agreements – (continued) (b) SPC KoreaIn September 2024, the Company entered into a Distribution and License Agreement (the " SPC License Agreement ") with SPC Korea Limited (" SPC "), pursuant to which the Company granted to SPC a non- transferable, exclusive, royalty- bearing license to commercialize the Company' s TLANDO product with respect to the Field, specific to the country of South Korea (the " SPC Territory "). SPC paid the Company a one- time non- refundable, non- creditable upfront fee in October 2024. The Company also received an additional payment for a non- refundable, non- creditable prepayment in consideration for TLANDO product inventory, and is eligible to receive additional payments for various marketing authorization and sales milestones, and the Company will supply TLANDO to SPC and receive a supply price. In addition, the Company will receive royalties on net sales in the SPC Territory. (c) PharmalinkIn October 2024, the Company entered into a distribution and supply agreement (the " Pharmalink Distribution Agreement ") with Pharmalink, pursuant to which the Company granted to Pharmalink a non- transferable, exclusive, license to commercialize the Company' s TLANDO product with respect to the Field, specific to the Gulf Cooperation Council Countries (" GCC "), including Saudi Arabia, Kuwait, the United Arab Emirates (" UAE "), Qatar, Bahrain, and Oman (the " GCC Territory "). Pharmalink paid the Company a one- time non- refundable, non- creditable upfront fee. The Company is eligible to receive additional payments in regulatory authorization milestones related to the marketing approval in countries in the GCC Territory under the Pharmalink Distribution Agreement and the Company will supply TLANDO to Pharmalink at an agreed transfer price. (d) Antares Pharma, Inc. On October 14, 2021, the Company entered into a license agreement (" License**

Agreement ”) with Antares Pharma, Inc. (“ Antares ”) pursuant to which the Company granted to Antares an exclusive, royalty- bearing, sublicensable right and license to develop and commercialize, upon final approval of TLANDO ® from the U. S. Food and Drug Administration (“ FDA ”), the Company’ s TLANDO product with respect to testosterone replacement therapy in males for conditions associated with a deficiency or absence of endogenous testosterone, as indicated in NDA No. 208088, treatment of Klinefelter syndrome, and pediatric indications relating to testosterone replacement therapy in males for conditions associated with a deficiency or absence of endogenous testosterone, in each case within the United States. TLANDO received FDA approval on March 29, 2022. Upon execution of the Antares License Agreement, Antares paid the Company an initial payment of $ 11. 0 million. Antares agreed to make additional payments of $ 5. 0 million to the Company on each of January 1, 2025, and January 1, 2026, provided that certain conditions were satisfied. The Company was also eligible to receive milestone payments of up to $ 160. 0 million in the aggregate, depending on the achievement of certain sales milestones in a single calendar year with respect to all products licensed by Antares under the Antares License Agreement. In addition, upon commercialization, the Company was to receive tiered royalty payments at rates ranging from percentages in the mid- teens to up to 20 % of net sales of TLANDO in the United States, subject to certain minimum royalty obligations. On October 2, 2023, the Company received notice from Antares of Antares’ termination of the License Agreement. In accordance with the terms of the License Agreement, the License Agreement was terminated effective January 31, 2024. On January 12, 2024, the Company entered into the “ Verity License Agreement ” with Verity Pharmaceuticals Inc. Upon termination of the Antares License Agreement, all rights and licenses granted by the Company to Antares under the Antares License Agreement terminated and all rights to TLANDO in the Field and Licensed Verity Territory transferred to the Company’ s new licensing partner, Verity. During the year ended December 31, 2024, the Company recognized royalty revenue of $ 67, 000 and during the year ended December 31, 2023 and recorded a reversal of variable consideration revenue under the Antares License Agreement of $ 2. 9 million. (e) Abbott Products, Inc. On March 29, 2012, the Company terminated its collaborative agreement with Solvay Pharmaceuticals, Inc. (later acquired by Abbott Products, Inc.) for TLANDO. As part of the termination, the Company reacquired the rights to the intellectual property from Abbott. All obligations under the prior license agreement have been completed except that Lipocine will owe Abbott a perpetual 1 % royalty on net sales. Such royalties are limited to $ 1. 0 million in the first two calendar years following product launch, after which period there is not a cap on royalties and no maximum aggregate amount. If generic versions of any such product are introduced, then royalties are reduced by 50 %. The Company incurred royalty expense of $ **24, 000 and $** 34 ~~, 000 and $ 12~~ , 000 in the years ended December 31, **2024 and** 2023 ~~and 2022~~ , respectively. (**f** ~~b) Antares Pharma, Inc. On October 14, 2021, the Company entered into a license agreement (“ License Agreement ”) with Antares Pharma, Inc. (“ Antares ”) pursuant to which the Company granted to Antares an exclusive, royalty- bearing, sublicensable right and license to develop and commercialize, upon final approval of TLANDO ® from the U. S. Food and Drug Administration (“ FDA ”), the Company’ s TLANDO product with respect to testosterone replacement therapy in males for conditions associated with a deficiency or absence of endogenous testosterone, as indicated in NDA No. 208088, treatment of Klinefelter syndrome, and pediatric indications relating to testosterone replacement therapy in males for conditions associated with a deficiency or absence of endogenous testosterone (the “ Field ”), in each case within the United States. TLANDO received FDA approval on March 29, 2022. Upon execution of the Antares License Agreement, Antares paid to the Company an initial payment of $ 11. 0 million. Antares agreed to make additional payments of $ 5. 0 million to the Company on each of January 1, 2025, and January 1, 2026, provided that certain conditions were satisfied. The Company was also eligible to receive milestone payments of up to $ 160. 0 million in the aggregate, depending on the achievement of certain sales milestones in a single calendar year with respect to all products licensed by Antares under the Antares License Agreement. In addition, upon commercialization, the Company was to receive tiered royalty payments at rates ranging from percentages in the mid- teens to up to 20 % of net sales of TLANDO in the United States, subject to certain minimum royalty obligations. On October 2, 2023, the Company received notice from Antares of Antares’ termination of the License Agreement. In accordance with the terms of the License Agreement, the License Agreement will terminate effective January 31, 2024. On January 12, 2024, the Company entered into a license agreement (the “ Verity License Agreement ”) with Verity (4) Contractual Agreements – (continued) Pharmaceuticals Inc. (Verity). See Note 4 (e) for a description of the Verity License Agreement. Upon termination of the Antares License Agreement, all rights and licenses granted by the Company to Antares under the Antares License Agreement will terminate and all rights in TLANDO will be transferred to the Company’ s new licensing partner, Verity. Under the Antares License Agreement, the Company retained development and commercialization rights in the rest of the world, and with respect to applications outside of the Field inside or outside the United States. The License Agreement also provided Antares with an option, exercisable on or before March 31, 2022, to license TLANDO XR (LPCN 1111), the Company’ s potential once- daily oral product candidate for testosterone replacement therapy. On April 1, 2022, the Company entered into the First Amendment to the License Agreement (the “ Amendment ”), pursuant to which the License Agreement was amended to extend the deadline by which Antares was to exercise its option to license TLANDO XR to June 30, 2022. As consideration for the Company agreeing to enter into the Amendment, in April 2022 Antares paid the Company a non- refundable cash fee of $ 500, 000. On June 30, 2022, Antares’ option to license TLANDO XR expired and was not exercised. Lipocine retains all development and commercialization rights to TLANDO XR. The Company recognized a reversal of variable consideration revenue under the Antares License Agreement of $ 3. 0 million during the year ended December 31, 2023 and license revenue $ 500, 000 during the years ended December 31, 2022. (c) Verity Pharmaceuticals, Inc. On January 12, 2024, the Company entered into a License Agreement (the “ License Agreement ”) with Gordon Silver Limited (“ GSL ”) and Verity Pharmaceuticals, Inc. (“ Verity Pharma ”), pursuant to which the Company granted to GSL (an affiliate of Verity Pharma) an exclusive, royalty- bearing, sublicensable right and license to commercialize the Company’ s TLANDO product with respect to testosterone replacement therapy in males for conditions associated with a~~

~~deficiency or absence of endogenous testosterone, as indicated in NDA No. 208088, treatment of Klinefelter syndrome, and pediatric indications relating to testosterone replacement therapy in males for conditions associated with a deficiency or absence of endogenous testosterone (the " Field "), in each case within the United States and Canada. The License Agreement also provides GSL with a license to develop and commercialize TLANDO XR, the Company' s potential once- daily oral product candidate for testosterone replacement therapy. The Company retains development and commercialization rights outside of the United States and Canada, and with respect to applications outside of the Field inside or outside the United States and Canada. Upon execution of the License Agreement, GSL agreed to pay the Company a license fee of $ 11. 0 million with an initial payment of $ 2. 5 million which was received on signing of the License Agreement, $ 5. 0 million received on February 1, 2024, $ 2. 5 million to be paid no later than January 1, 2025, and $ 1. 0 million to be paid no later than January 1, 2026. The Company is also eligible to receive development and sales milestone payments of up to $ 259. 0 million in the aggregate, depending primarily on the achievement of certain sales milestones in a single calendar year with respect to all products licensed by GSL under the License Agreement. In addition, the Company is eligible to receive tiered royalty payments at rates ranging from 12 % up to 18 % of net sales of licensed products in the United States and Canada. Pursuant to the terms of the License Agreement, GSL is generally responsible for expenses relating to the development (including the conduct of any clinical trials) and commercialization of licensed products in the Field in the United States and Canada, while the Company is generally responsible for expenses relating to development activities outside of the Field and / or the United States and Canada. (d)~~ Contract Research and ~~Development~~ **DevelopmentThe** ~~The~~ Company has entered into agreements with various contract organizations that conduct preclinical, clinical, analytical and manufacturing development work on behalf of the Company as well as a number of independent contractors, primarily clinical researchers, who serve as advisors to the Company. The Company incurred expenses of $ **4. 1 million and $** 6. 7 ~~million and $ 5. 6~~ million under these agreements in **2024 and** 2023 ~~and 2022~~ and has recorded these expenses in research and development expenses. (5) ~~Loan and Security Agreement Silicon Valley Bank Loan On January 5, 2018, the Company entered into a Loan and Security Agreement (the " Loan and Security Agreement ") with Silicon Valley Bank (" SVB ") pursuant to which SVB agreed to lend the Company $ 10. 0 million. The principal borrowed under the Loan and Security Agreement bore interest at a rate equal to the Prime Rate, as reported in the money rates section of The Wall Street Journal or any successor publication representing the rate of interest per annum then in effect, plus one percent per annum, which interest was payable monthly. Additionally on April 1, 2020, the Company entered into a Deferral Agreement with SVB. Under the Deferral Agreement, principal repayments were deferred by six months and the Company was only required to make monthly interest payments. The loan matured on June 1, 2022. The Company made a final payment at maturity equal to $ 650, 000 (the " Final Payment Charge ") at the time the loan matured. The expense of the final payment charge had been recognized over the term of the facility using the effective interest method. (6)~~ Property and Equipment Property and equipment consisted of the following: Schedule of Property and Equipment **2024** 2023 ~~2022~~ Years Ended December 31, **2024** 2023 ~~2022~~ Computer equipment and software $ **151, 533 $** 66, 830 ~~$ 53, 663~~ Lab and office equipment 1, ~~180~~ **185** , ~~052~~ **435** 1, 180, 052 Furniture and fixtures 51, 404 51, 404 Property and equipment, gross 1, **388, 372 1,** 298, 286 ~~1, 285, 119~~ Less accumulated depreciation (1, ~~182~~ **223** , ~~191~~ **297**) (1, ~~153~~ **182** , ~~530~~ **191**) Property and equipment, net $ **165, 075 $** 116, 095 ~~$ 131, 589~~ Depreciation expense for the years ended December 31, **2024 and** 2023 ~~and 2022~~ was approximately $ **41, 000 and $** 29, 000 ~~and~~ **, respectively. (6) Deferred Revenue In 2024, the Company recognized deferred revenue resulting from a distributor' s prepayment of** $ ~~9~~ **320** , ~~500, respectively~~ **000 for TLANDO inventory. Revenue related to the sale of inventory will be recognized once the inventory has shipped in accordance with the Company' s revenue recognition policy** . (7) Income Taxes (a) Income Tax Expense Income tax expense consists of: Schedule of Income Tax Expense **2024** 2023 ~~2022~~ December 31, **2024** 2023 ~~2022~~ U. S. federal $- $- State and local **681** 755 ~~681~~ Deferred-- Total $ **681 $** 755 ~~$ 681~~ (b) Tax Rate ~~Reconciliation~~ **ReconciliationIncome** ~~Income~~ tax expense was $ **681 and $** 755 ~~and $ 681~~ , respectively, for the years ended December 31, **2024 and** 2023 ~~and 2022 and~~ differed from the amounts computed by applying the U. S. federal income tax rate of 21 % for **2024 and** 2023 ~~and 2022~~ , respectively, to pretax income from continuing operations as a result of the following: Schedule of Pretax Income from Continuing Operations **2024** 2023 ~~2022~~ December 31, **2024** 2023 ~~2022~~ Computed " expected " tax expense (benefit) $ **1, 897 $** (3, 433, 893 ~~) $ (2, 259, 272~~) Increase (reduction) in income taxes resulting from: Change in valuation allowance **295, 361** 3, 619, 564 ~~2, 529, 547~~ State and local income taxes, net of federal income tax benefit **538** 596 ~~538~~ Stock expense **189, 209** 319, 214 ~~314, 186~~ Research and development tax credits (~~434~~ **480** , ~~858~~ **338**) (~~422~~ **434** , ~~495~~ **858**) Orphan drug tax credit (~~26~~ **2** , ~~245~~ **913**) (~~42~~ **26** , ~~976~~ **245**) Warrant Liability (**3, 605) (** 44, 665) ~~(118, 847)~~ Other, net **532** 1, 042 ~~-~~ Total $ **681 $** 755 ~~$ 681~~ (7) Income Taxes – (continued) (c) Significant Components of Deferred ~~Taxes~~ **TaxesThe** ~~The~~ tax effects of temporary differences that give rise to significant portions of the deferred tax assets and deferred tax liabilities ~~at~~ **as of** December 31, **2024 and** 2023 ~~and 2022~~ are presented below: Schedule of Deferred Tax Assets and Liabilities **2024** 2023 ~~2022~~ December 31, **2024** 2023 ~~2022~~ Deferred tax assets: Stock- based compensation $ 1, ~~188~~ **058** , ~~535~~ **082** $ 1, ~~428~~ **188** , ~~167~~ **535** Net operating loss carryforwards **34, 275, 198** 35, 108, 766 ~~35, 595, 940~~ Employee benefits **56, 813** 45, 592 ~~44, 602~~ Research and development tax credits 6, **694, 003 6,** 032, 559 ~~5, 491, 805~~ Orphan drug tax credits 1, **277, 891 1,** 274, 204 ~~1, 240, 982 Plant and equipment--~~ Sec. 174 Expenses **4, 780, 931** 3, 945, 862 ~~1, 997, 787~~ Other deductible temporary differences **88, 657** 167, 371 ~~69, 273~~ Total ~~gross deferred tax assets 47, 762, 889 45, 868, 556 Net~~ deferred tax assets $ **48, 231, 575 $** 47, 762, 889 ~~$ 45, 868, 556~~ Deferred tax liabilities: ~~Plant~~ **Property** and equipment (**8, 778) (** 7, 227) ~~(9, 052)~~ Total ~~gross deferred tax liabilities (7, 227) (9, 052) Net~~ deferred tax liabilities $ (~~7~~ **8** , ~~227~~ **778**) $ (~~9~~ **7** , ~~052~~ **227**) Deferred tax asset / deferred tax liability **48, 222, 797** 47, 755, 662 ~~45, 859, 504~~ Valuation allowance (~~47~~ **48** , ~~755~~ **222** , ~~662~~ **797**) (~~45~~ **47** , ~~859~~ **755** , ~~504~~ **662**) Net deferred tax asset $- $- The valuation allowance for deferred tax assets as of December 31, **2024 and** 2023 ~~and 2022~~ was $ **48. 2 million and $** 47. 8 million ~~and $ 45. 9 million, respectively~~ . The net change in the valuation allowance was an increase of $ **0. 5 million in 2024 and an increase of $** 1. 9 million in 2023 ~~and an increase of $ 2. 9 million in 2022~~ . A valuation allowance has been provided for the full amount of the Company' s net deferred

tax assets as the Company believes it is more likely than not that these benefits will not be realized. In assessing the realizability of deferred tax assets, management considers whether it is more likely than not that some portion or all of the deferred tax assets will not be realized. The ultimate realization of deferred tax assets is dependent upon the generation of future taxable income during the periods in which those temporary differences become deductible. Management considers the scheduled reversal of deferred tax liabilities (including the impact of available carryback and carryforward periods), projected future taxable income, and tax planning strategies in making this assessment. DECEMBER 31, **2024 and** 2023 ~~and 2022~~ **(7) Income Taxes – (continued)** During the year ended December 31, 2013, the Company experienced a change in ownership, as defined by the Internal Revenue Code, as amended (the " Code ") under Section 382. A change of ownership occurs when ownership of a company increases by more than 50 percentage points over a three- year testing period of certain stockholders. As a result of this ownership change, we determined that our annual limitation on the utilization of our federal net operating loss (" NOL ") and credit carryforwards is approximately $ 1. 1 million per year. We will only be able to utilize $ 9. 8 million of our pre- ownership change NOL carryforwards and will forgo utilizing $ 3. 3 million of our pre- ownership change NOL carryforwards and $ 1. 2 million of our pre- change credit carryforwards as a result of this ownership change. We do not account for forgone NOL and credit carryovers in our deferred tax assets and only account for the NOL and credit carryforwards that will not expire unutilized as a result of the restrictions of Code Section 382. As of December 31, ~~2023~~ **2024** , we had NOL and research and development credit carryforwards for U. S. federal income tax reporting purposes of approximately $ ~~138~~ **135** . ~~6~~ **2** million and $ ~~4~~ **5** . ~~4~~ **0** million, respectively. Approximately $ ~~33~~ **46** . ~~7~~ **6** million of the NOL will expire between ~~2024~~ **2025** and ~~2034~~ **2035** and $ ~~52~~ **36** . ~~4~~ **1** million of the NOL will expire ~~2035~~ **2036** through 2037. Pursuant to the Tax Cuts and Jobs Act of 2017, NOL' s generated in 2018 and subsequent years have an unlimited carryforward therefore the **2024,** 2023, 2022, 2020, 2019 and 2018 NOL of $ 52. 5 million can be carried forward indefinitely. The research and development credits will begin to expire in 2033 through ~~2043~~ **2044** . We have orphan drug credit carry forwards of approximately $ 1. 3 million which will expire if unused through ~~2043~~ **2044** . We also have state NOL and research and development credit carry forwards of approximately $ ~~128~~ **129** . ~~9~~ **5** million and $ 1. 7 million, respectively. The Company' s state NOL ~~of $ 31. 2 million~~ will **not** expire ~~between 2024 and 2029, and $ 97.~~ **but can be used until exhausted under Utah Code Section 59-** 7 **- 110** ~~million will expire in 2030 through 2037~~ . The state research and development credits expire in ~~2024~~ **2025** through 2038. The Company' s federal and state income tax returns for December 31, ~~2020~~ **2021** through ~~2023~~ **2024** are open tax years. A reconciliation of the beginning and ending amount of total unrecognized tax contingencies, excluding interest and penalties, for the years ended December 31, **2024 and** 2023 ~~and 2022~~ are as follows: Schedule of Reconciliation of the Beginning and Ending Amount of Total Unrecognized Tax Contingencies, Excluding Interest and Penalties December 31, **2024** 2023 ~~2022~~ Balance, beginning of year $- $- Balance, end of year $- $- (8) Leases The Company has a non- cancelable operating lease for office space and laboratory facilities in Salt Lake City, Utah. On ~~January 24~~ **December 2** , 2024, the term of the lease **was** ~~has been~~ extended through February 28, ~~2025~~ **2026** . Future minimum lease payments under the non- cancelable operating lease as of December 31, ~~2023~~ **2024** are: Schedule of Future Minimum Rental Payments for Operating Leases Operating ~~leases~~ **Lease** Year ending December 31: ~~2024~~ **2025** $ ~~366~~ **375** , ~~290~~ **745** ~~2025~~ **2026** ~~61~~ **62** , ~~346~~ **880** Total minimum lease payments $ ~~427~~ **438** , ~~636~~ **625** The Company' s rent expense was $ **366, 000 and $** 355 ~~, 000 and $ 341~~ , 000 for the years ended December 31, **2024 and** 2023 ~~and 2022~~ , respectively. (9) Stockholders' Equity On May 1, 2023, at the 2023 annual meeting of the stockholders, the Company' s stockholders approved an amendment to the Company' s Amended and Restated Certificate of Incorporation to effect a reverse stock split at a ratio not less than 1- for- 5 and not more than 1- for- 20, with the exact ~~ration~~ **ratio** to be set within that range at the discretion of the Board without further approval or authorization from stockholders. On May 10, 2023, the Company' s Board approved a reverse stock split of 1- for- 17. The Company filed the Amendment to its Certificate of Incorporation with the Secretary of the State of Delaware on May 10, 2023, and the Amendment became effective at 5: 00 pm Eastern Time on May 11, 2023. The Company' s shares began trading on a split- adjusted basis on the Nasdaq Capital Market commencing upon market open on May 12, 2023. All common stock share data and per share price data of the Company reflect the reverse stock split effective May 11, 2023. ~~On June 8~~ **The Company is authorized to issue up to 200** , **000, 000 shares of its common stock, par value $ 0. 0001. (a) Issuance of Common StockOn April 26,** ~~2022~~ **2024** , ~~at~~ the ~~2022 annual meeting of~~ **Company entered into a sales agreement with A. G. P. (** the ~~stockholders~~ **" A. G. P. Sales Agreement ") pursuant to which the Company may issue and sell** , **from time to time, shares of its common stock having an aggregate offering price of up to the amount the Company registered on an effective registration statement pursuant to which the offering is being made. The Company currently has registered $ 10, 616, 169 shares of common shares for sale under the Sales Agreement, pursuant to the Registration Statement on Form S- 3, as amended (File No. 333- 275716) (the " Form S- 3 "), through A. G. P. as** the Company' s **sales agent. A. G. P. may sell** ~~stockholders approved an amendment to the Company' s Amended and Restated Certificate of Incorporation to increase the number of authorized shares of~~ the Company' s common stock **by any method permitted by law deemed** ~~, par value $ 0. 0001, from 100, 000, 000 shares~~ to **be an " at** ~~200, 000, 000 shares. The Company filed~~ the **market offering " as defined in Rule 415** ~~amendment to the Restated Certificate with the Secretary of State of the State of Delaware on June 28, 2022. The amendment to the Restated Certificate became effective upon filing with the Secretary of State of the State of Delaware.~~ (a) ~~Issuance~~ **(4)** of **the Securities Act, including sales made directly on or through the Nasdaq Capital Market or any other existing trade market for our** ~~Common~~ **common** ~~StockOn~~ **The Company currently has registered up to $ 50.0 million for sale under the Sales Agreement,pursuant to the Registration Statement on Form S- 3 (File No.333- 250072) through Cantor as the Company' s sales agent.Cantor may sell the Company' s common stock by any method permitted by law deemed to be an " at the market offering " as defined in Rule 415 (a) (4) of the Securities Act,including sales made directly on or through the NASDAQ Capital Market or any other existing trade market for our common** stock,in negotiated transactions at market prices prevailing at the time of sale or at prices related to prevailing market prices,or any other method permitted by law. **Cantor** ~~A.G.P.will use~~ **uses** its commercially reasonable efforts consistent with its normal

trading and sales practices and applicable law and regulations to sell **these** shares ~~under the A~~. ~~G.P.Sales Agreement.~~ The Company ~~will pay~~ **pays Cantor** ~~A.G.P.~~ 3.0 % of the aggregate gross proceeds from each sale of shares under the ~~A.G.P.~~ Sales Agreement.In addition,the Company has also provided **Cantor** ~~A.G.P.~~ with customary indemnification rights.The ~~shares of the Company' s common stock to be sold under the A.G.P.Sales Agreement will be sold and issued pursuant to the Form S- 3,as amended,which was previously declared effective by the Securities and Exchange Commission,and the related prospectus and one or more prospectus supplements.The~~ Company is not obligated to make any sales of its common stock under the ~~A.G.P.~~ Sales Agreement.The offering of common stock pursuant to the ~~A.G.P.~~ Sales Agreement will terminate upon the termination of the ~~A.G.P.~~ Sales Agreement as permitted therein.The Company and **Cantor** ~~A.G.P.~~ may each terminate the ~~A.G.P.~~ Sales Agreement at any time upon ten days **' prior notice.(9) Stockholders' Equity – (continued)** March 6, 2017, the Company entered into a sales agreement (" Sales Agreement ") with Cantor Fitzgerald & Co. (" Cantor ") pursuant to which the Company ~~may~~ **could** issue and sell, from time to time, shares of its common stock having an aggregate offering price of up to the amount the Company registered on an effective registration statement pursuant to which the offering is being made. The Company currently has registered up to..... Stockholders' Equity – (continued) As of December 31, ~~2023~~ **2024** , we had sold an aggregate of ~~964~~ **996** , ~~711~~ **821** shares at a weighted- average sales price of $ ~~34~~ **33** . ~~52~~ **62** per share under the At the Market Offering (the " ATM Offering ") **Cantor Sales Agreement,** for aggregate gross proceeds of $ 33. ~~3~~ **5** million and net proceeds of $ 32. ~~1~~ **4** million, after deducting sales agent commission and discounts and our other offering costs. During the year ended December 31, ~~2023~~ **2024** , the Company sold ~~81~~ **32** , ~~000~~ **110** shares of its common stock pursuant to the **Cantor** ~~ATM offering at a weighted- average sales price of $ 5. 36 per share, resulting in net proceeds of approximately $ 405, 000 under the~~ Sales Agreement **. On April** ~~which is net of approximately $~~ 24, ~~000 in expenses. During the year ended December 31, 2022~~ **2024** , ~~the Company did not sell any shares of its common stock pursuant to the ATM Offering. As of December 31, 2023, the Company had $ 40. 8 million available for sale under the~~ Sales ~~Agreement~~ **agreement** ~~. However, as~~ **was terminated** ~~of November 22, 2023, the Company is now subject to General Instruction I. B. 6 of Form S- 3 which limits the amounts that we may sell under the registration statement. As a result of such limitations, the Company has currently registered the offer and sale of shares of the Company' s common stock pursuant to the Sales Agreement having an aggregate offering price of up to $ 5. 3 million~~ . (b) Series B Preferred ~~Stock~~ **StockOn** ~~On~~ March 7, 2023, the Board of the Company declared a dividend of one one- thousandth (1 / 1, 000th) of a share of Series B Preferred Stock, par value $ 0. 0001 per share (" Series B Preferred Stock "), for each outstanding share of common stock of the Company, to stockholders of record on March 24, 2023. The Certificate of Designation of Series B Preferred Stock (the " Certificate of Designation ") was filed with the Delaware Secretary of State and became effective on March 10, 2023. The dividend was based on the number of shares of outstanding common stock on March 24, 2023, and resulted in 88, 511 Series B Preferred shares being issued. Each whole share of Series B Preferred Stock entitled the holder thereof to 1, 000, 000 votes per share, and each fraction of a share of Series B Preferred Stock had a ratable number of votes. Thus, each one- thousandth of a share of Series B Preferred Stock was entitled to 1, 000 votes. The outstanding shares of Series B Preferred Stock were entitled to vote together with the outstanding shares of common stock as a single class exclusively with respect to any proposal to adopt an amendment to the Company' s Amended and Restated Certificate of Incorporation, as amended (the " Certificate of Incorporation "), to effect a reverse stock split of the outstanding shares of Common Stock at a ratio determined in accordance with the terms of such amendment (the " Reverse Stock Split "), and (ii) any proposal to adjourn any meeting of stockholders called for the purpose of voting on the Reverse Stock Split (the " Adjournment Proposal ") in conjunction with the Company' s 2023 annual meeting of stockholders. All shares of Series B Preferred Stock that were not present in person or by proxy at the 2023 annual meeting as of immediately prior to the opening of the polls (the " Initial Redemption Time ") were automatically redeemed by the Company without further action on the part of the Company or the holder of shares of Series B Preferred Stock (the " Initial Redemption "). The remaining shares of Series B Preferred Stock that were not redeemed pursuant to the Initial Redemption were redeemed automatically upon the effectiveness of the amendment to the Certificate of Incorporation implementing the Reverse Stock Split (the " Subsequent Redemption "). Each " beneficial owner " (as such terms are defined in the Certificate of Designation with respect to the Series B Preferred Stock) of shares of Series B Preferred Stock redeemed in the redemptions described above has the right to receive an amount equal to $ 0. 01 in cash for each ten whole shares of Series B Preferred Stock that were " beneficially owned " by the beneficial owner as of immediately prior to the applicable redemption time and redeemed pursuant to such redemption, payable upon receipt by the Company of a written request submitted by the applicable beneficial owner to the corporate secretary of the Company following the applicable redemption time. The Series B Preferred Stock was not convertible into, or exchangeable for, shares of any other class or series of stock or other securities of the Company. The Series B Preferred Stock had no stated maturity and was not subject to any sinking fund. The Series B Preferred Stock was not subject to any restriction on the redemption or repurchase of shares by the Company while there is any arrearage in the payment of dividends or sinking fund installments. **(9) Stockholders' Equity – (continued)** The Company was not solely in control of the redemption of the shares of Series B Preferred Stock prior to the annual meeting of stockholders since the holders had the option of deciding whether to vote in respect of the above- described Reverse Stock Split, which determined whether a given holder' s shares of Series B Preferred Stock was redeemed in the Initial Redemption or the Subsequent Redemption. Since the redemption of the Series B Preferred Stock was not solely in the control of the Company, the shares of Series B Preferred Stock were classified within the mezzanine equity in the Company' s unaudited consolidated statement of stockholder' s equity. Upon issuance, the shares of Series B Preferred Stock were measured at redemption value. **On May 10** ~~As of June 30~~ , 2023, all shares of Series B Preferred Stock had been redeemed by the Company ~~. The foregoing description of the Series B Preferred Stock does not purport to be complete and is qualified in its entirety by reference to the Certificate of Designation, which is filed as Exhibit 3. 2 to the Form 8- K filed with the SEC on March 10, 2023~~ . (c) Rights AgreementOn November 13, 2015, the Company and American Stock Transfer & Trust Company, LLC, as Rights Agent, entered into a Rights Agreement. Also on November 12, 2015, the board of directors of the Company

authorized and the Company declared a dividend of one preferred stock purchase right (each a " Right " and collectively, the " Rights ") for each outstanding share of common stock of the Company. The dividend was payable to stockholders of record as of the close of business on November 30, 2015 and entitles the registered holder to purchase from the Company one one-thousandth of a fully paid non- assessable share of Series A Junior Participating Preferred Stock of the Company at a price of $ 63. 96 per one- thousandth share (the " Purchase Price "). The Rights will generally become exercisable upon the earlier to occur of (i) 10 business days following a public announcement that a person or group of affiliated or associated persons has become an Acquiring Person (as defined below) or (ii) 10 business days (or such later date as may be determined by action of the board of directors prior to such time as any person or group of affiliated or associated persons becomes an Acquiring Person) following the commencement of, or announcement of an intention to make, a tender offer or exchange offer the consummation of which would result in the beneficial ownership by a person or group of 15 % or more of the outstanding common stock of the Company. Except in certain situations, a person or group of affiliated or associated persons becomes an " Acquiring Person " upon acquiring beneficial ownership of 15 % or more of the outstanding shares of common stock of the Company. In general, in the event a person becomes an Acquiring Person, then each Right not owned by such Acquiring Person will entitle its holder to purchase from the Company, at the Right' s then current exercise price, in lieu of shares of Series A Junior Participating Preferred Stock, common stock of the Company with a market value of twice the Purchase Price. In addition, if after any person has become an Acquiring Person, (a) the Company is acquired in a merger or other business combination, or (b) 50 % or more of the Company' s assets, or assets accounting for 50 % or more of its earning power, are sold, leased, exchanged or otherwise transferred (in one or more transactions), proper provision shall be made so that each holder of a Right (other than the Acquiring Person, its affiliates and associates and certain transferees thereof, whose Rights became void) shall thereafter have the right to purchase from the acquiring corporation, for the Purchase Price, that number of shares of common stock of the acquiring corporation which at the time of such transaction would have a market value of twice the Purchase Price. The Company will be entitled to redeem the Rights at $ 0. 001 per Right at any time prior to the time an Acquiring Person becomes such. The terms of the Rights are set forth in the Rights Agreement, which is summarized in the Company' s Current Report on Form 8- K dated November 13, 2015. The rights plan was originally set to expire on November 12, 2018; however, on November 5, 2018 our Board of Directors approved an Amended and Restated Rights Agreement pursuant to which the expiration date was extended to November 5, 2021 **. On** ~~and again on~~ November 1, 2021, the Company adopted a Second Amended and Restated Rights Agreement pursuant to which the expiration date was extended to November 1, 2024 **. On October 22, 2024, the Company adopted a Third Amended and Restated Rights Agreement extending the expiration until October 22, 2027** , unless the rights are earlier redeemed or exchanged by the Company. (d) Stock Option ~~Plan~~ **PlanIn** ~~In~~ April 2014, the ~~board~~ **Board** of ~~directors~~ **Directors** adopted the 2014 Stock and Incentive Plan (" 2014 Plan ") subject to shareholder approval which was received in June 2014. The 2014 Plan provides for the granting of nonqualified and incentive stock options, stock appreciation rights, restricted stock units, restricted stock and dividend equivalents. An aggregate of 58, 823 shares were authorized for issuance under the 2014 Plan. Additionally, 15, 994 remaining authorized shares under the 2011 Equity Incentive Plan (" 2011 Plan ") were issuable under the 2014 Plan at the time of the 2014 Plan adoption. Upon receiving shareholder approval in June 2016, the 2014 Plan was amended and restated to increase the authorized number of shares of common stock of the Company issuable under all awards granted under the 2014 Plan from 74, 817 to 145, 405. Additionally, upon receiving shareholder approval in June 2018, the 2014 Plan was further amended and restated to increase the authorized number of shares of common stock of the Company issuable under all awards granted under the 2014 Plan from 145, 405 to 189, 522. ~~Finally, upon~~ **Upon** receiving shareholder approval in June 2020, the 2014 Plan was further amended and restated to increase the authorized number of shares of common stock of the Company issuable under all awards granted under the 2014 Plan from 189, 522 to 336, 582. **In June 2024, the 2014 Plan was further amended and restated to increase the authorized number of shares of common stock of the Company issuable under all awards granted from 336, 582 to 600, 000.** The ~~board~~ **Board** of ~~directors~~ **Directors** , on an option- by- option basis, ~~determines~~ **approves** the number of shares, exercise price, term, and vesting period for options granted. Options granted generally have a ten- year contractual life. The Company issues shares of common stock upon the exercise of options with the source of those shares of common stock being either newly issued shares or shares held in treasury. An aggregate of ~~336~~ **600** , ~~582~~ **000** shares are authorized for issuance under the 2014 Plan, with ~~48~~ **217** , ~~422~~ **305** shares remaining available for grant as of December 31, ~~2023~~ **2024** . A summary of stock option activity is as follows: Schedule of Stock Option Activity Outstanding stock options Number of shares Weighted average exercise price Balance at December 31, 2022 277, 225 $ 38. 44 Options granted 26, 467 6. 19 Options exercised-- Options forfeited (7, 352) 6. 91 Options cancelled (34, 093) 52. 72 Balance at December 31, 2023 262, 247 34. 21 Options **granted 84, 715 4. 79 Options exercised-- Options forfeited (10, 209) 142. 99 Options cancelled (1, 495) 5. 23 Balance at December 31, 2024 335, 258 23. 59 Options** exercisable at December 31, ~~2023~~ **2024** ~~194~~ **232** , ~~228 42~~ **902 31** . ~~72~~ **62** (~~9~~ **d**) ~~Stockholders' Equity — Stock Option Plan-~~ (continued) The following ~~table~~ **tables** ~~summarizes~~ **summarize** information about stock options outstanding and exercisable ~~at~~ **as of December 31, 2024 and** December 31, 2023: Schedule of Share- based Compensation of Stock Options Outstanding and ~~ExercisableOptions~~ **ExercisableAs of December 31, 2024 Options outstanding Options exercisable Number outstanding Weighted average remaining contractual life (Years) Weighted average exercise price Aggregate intrinsic value Number exerciseable Weighted average remaining contractual life (Years) Weighted average exercise price Aggregate intrinsic value 335, 258 6. 75 $ 23. 59 $ 29, 299 232, 902 5. 61 $ 31. 62 $ 3, 175 As of December 31, 2023 Options** outstanding Options exercisable Number outstanding Weighted average remaining contractual life (Years) Weighted average exercise price Aggregate intrinsic value Number exerciseable Weighted average remaining contractual life (Years) Weighted average exercise price Aggregate intrinsic value 262, 247 6. 60 $ 34. 21 $- 194, 228 5. 84 $ 42. 72 $- The intrinsic value for stock options is defined as the difference between the current market value and the exercise price. **No** ~~The total intrinsic value of~~ stock options **were** exercised during the years ended December 31, **2024 and** 2023 ~~and~~ **. The aggregate intrinsic value of outstanding stock**

options as of December 31, ~~2022~~ **2024** ~~,~~ **and 2023** was **approximately $ 29, 000 and** $ 0 ~~and $ 173, 000, respectively. There were 0 and 12, 947 stock options exercised during the years ended December 31, 2023 and 2022~~, respectively. (e) Common Stock ~~Warrants~~ **WarrantsThe** ~~The~~ Company accounts for its common stock warrants under ASC 480, Distinguishing Liabilities from Equity, which requires any financial instrument, other than an outstanding share, that, at inception, embodies an obligation to repurchase the issuer' s equity shares, or is indexed to such an obligation, and requires or may require the issuer to settle the obligation by transferring assets, to be classified as a liability. In accordance with ASC 480, the Company' s outstanding warrants from the November 2019 Offering are classified as a liability. The liability is adjusted to fair value at each reporting period, with the changes in fair value recognized as gain (loss) on change in fair value of warranty liability in the Company' s consolidated statements of operations. The warrants issued in the November 2019 Offering ~~allow~~ **allowed** the warrant holder, if certain change in control events **had** ~~occur~~ **occurred**, the option to receive an amount of cash equal to the value of the warrants as determined in accordance with the Black- Scholes option pricing model with certain defined assumptions upon a fundamental transaction. As of December 31, ~~2023~~ **2024** ~~and 2022~~, the ~~Company had~~ 64, 362 warrants **that had been** outstanding from the November 2019 Offering to purchase an equal number of shares of common stock **had expired**. The fair value of these warrants on November 18, 2019 (closing date of November 2019 Offering) and December 31, 2023 **were** ~~and 2022 was~~ determined using the Black- Scholes option pricing model with the following Level 3 inputs (as defined in the November 2019 Offering): Schedule of Fair Value of Warrants December 31, 2023 ~~December 31, 2022~~ November 18, 2019 Expected life in years 0 ~~. 88 1~~. 88 5. 00 Risk- free interest rate 4. 79 ~~% 4. 41~~ % 1. 63 % Dividend yield — — ~~—~~ Volatility ~~100. 00 %~~ 100. 00 % 224. 47 % Stock price $ 2. 79 $ 6. ~~77 $ 6.~~ 89 During the years ended December 31, **2024 and** 2023 ~~and 2022~~, the Company recorded ~~a~~ non- cash ~~gain~~ **gains** of **$ 17, 000 and** $ 213 ~~, 000 and $ 566~~, 000, respectively, from the change in fair value of the November 2019 Offering warrants. The following table is a reconciliation of the warrant liability measured at fair value using level 3 inputs: Schedule of Reconciliation of Warrant Liability Warrant Liability Balance at December 31, 2022 $ 229, 856 Change in fair value of common stock warrants (212, 690) Balance at December 31, 2023 **17, 166 Change in fair value of common stock warrants (17, 166) Balance at December 31, 2024** $ ~~-~~ ~~17, 166~~ Additionally, in the February 2020 Offering, the Company issued 296, 593 common stock warrants. However, because these warrants do not provide the warrant holder the option to put the warrant back to the Company, the warrants are classified as equity. As of December 31, ~~2023~~ **2024**, there were 49, 433 warrants outstanding that were issued in the February 2020 Offering **which, if not exercised, will expire on February 27, 2025**. The following table summarizes the number of common stock warrants outstanding and the weighted average exercise price: Schedule of Number of Warrants Outstanding and the Weighted Average Exercise Price Warrants Weighted Average Exercise Price Outstanding at December 31, 2022 113, 795 $ 8. 72 Issued-- Exercised-- Expired-- Cancelled-- Forfeited-- **Outstanding at December 31, 2023 113, 795 $ 8. 72 Issued-- Exercised-- Expired (64, 362) 8. 50 Cancelled-- Forfeited--** Balance at December 31, ~~2023~~ **2024** ~~113~~ **49**, ~~795~~ **433** $ ~~8~~ **9**. **01** ~~72 During the years ended December 31, 2023 and 2022, zero common stock warrants to purchase one share of our common stock were exercised.~~ The following ~~table~~ **tables summarizes** ~~-~~ **summarize** information about common stock warrants outstanding ~~at~~ **as of December 31, 2024 and** December 31, 2023: Schedule of Common Stock Warrants ~~OutstandingWarrants~~ **OutstandingAs of December 31, 2024 Warrants outstanding Number exercisable Weighted average remaining contractual life (Years) Weighted average exercise price Aggregate intrinsic value 49, 433 0. 16 $ 9. 01 $- As of December 31, 2023 Warrants** outstanding Number exercisable Weighted average remaining contractual life (Years) Weighted average exercise price Aggregate intrinsic value 113, 795 1. 00 $ 8. 72 $- (10) 401 (k) Plan On January 1, 2002, the Company adopted a tax qualified employee savings and retirement plan (the " 401 (k) Plan ") covering eligible employees. Pursuant to the 401 (k) Plan, employees may elect to reduce current compensation by a percentage of eligible compensation, not to exceed legal limits, and contribute the amount of such reduction to the 401 (k) Plan. Beginning April 1, 2014, the 401 (k) Plan was amended to require matching contributions to the 401 (k) Plan by the Company on behalf of the participants of 100 percent Company match on up to four percent of an employee' s compensation computed on a per pay period basis. The Company contributed $ **109, 000 and $** 102 ~~, 000 and $ 94~~, 000, respectively, to the 401 (k) Plan during the years ended December 31, **2024 and** 2023 ~~and 2022~~. (11) Commitments and Contingencies The Company is involved in various lawsuits, claims and other legal matters from time to time that arise in the ordinary course of conducting business. The Company records a liability when a particular contingency is probable and estimable ~~. On April 2, 2019, the Company filed a lawsuit against Clarus in the United States District Court for the District of Delaware alleging that Clarus' s JATENZO ® product infringes six of Lipocine' s issued U. S. patents: 9, 034, 858; 9, 205, 057; 9, 480, 690; 9, 757, 390; 6, 569, 463; and 6, 923, 988. However, on February 11, 2020, the Company voluntarily dismissed allegations of patent infringement for expired U. S. Patent Nos. 6, 569, 463 and 6, 923, 988 in an effort to streamline the issues and associated costs for dispute. Clarus answered the complaint and asserted counterclaims of non- infringement and invalidity. The Company answered Clarus' s counterclaims on April 29, 2019. The Court held a scheduling conference on August 15, 2019, a claim construction hearing on February 11, 2020, and a summary judgment hearing on January 15, 2021. In May 2021, the Court granted Clarus' motion for Summary Judgment, finding the asserted claims of Lipocine' s U. S. patents 9, 034, 858; 9, 205, 057; 9, 480, 690; and 9, 757, 390 invalid for failure to satisfy the written description requirement of 35 U. S. C. § 112. Clarus still had remaining claims before the Court. On July 13, 2021, the Company entered into the Global Agreement with Clarus which resolved all outstanding claims of this litigation as well as the on- going United States Patent and Trademark Office (" USPTO ") Interference No. 106, 128 between the parties. Under the terms of the Global Agreement, the Company agreed to pay Clarus $ 4. 0 million payable as follows: $ 2. 5 million immediately, $ 1. 0 million on July 13, 2022 and $ 500, 000 on July 13, 2023. On April 29, 2022, the Company agreed to an amendment to Section 3. 1 of the Global Agreement, pursuant to which the Company agreed to pay Clarus $ 1, 250, 000 in May 2022, with no additional payments required thereafter. No future royalties are owing from either party. On July 15, 2021, the Court dismissed with prejudice the Company' s claims and Clarus' counterclaims~~. On November 14, 2019, the Company and certain of our officers were named as defendants in a purported

shareholder class action lawsuit, Solomon Abady v. Lipocine Inc. et al., 2: 19- cv- 00906- PMW, filed in the United District Court for the District of Utah. The complaint alleges that the defendants made false and / or misleading statements and / or failed to disclose that the Company' s filing of the NDA for TLANDO to the FDA contained deficiencies and as a result the defendants' statements about our business and operations were false and misleading and / or lacked a reasonable basis in violation of federal securities laws. The lawsuit seeks certification as a class action (for a purported class of purchasers of the Company' s securities from March 27, 2019 through November 8, 2019), compensatory damages in an unspecified amount, and unspecified equitable or injunctive relief. The Company has insurance that covers claims of this nature. On April 14, 2023, a judgment was issued ordering the case dismissed with prejudice and closure of the action. ~~(11) Commitments and Contingencies (continued)~~ Management does not currently believe that any other matter, individually or in the aggregate, will have a material adverse effect on our financial condition, liquidity or results of operations. Guarantees and Indemnifications In the ordinary course of business, the Company enters into agreements, such as lease agreements, licensing agreements, clinical trial agreements, and certain services agreements, containing standard guarantee and / or indemnifications provisions. Additionally, the Company has indemnified its directors and officers to the maximum extent permitted under the laws of the State of Delaware. (12) Agreement with Spriaso, LLC The Company has a license and a services agreement with Spriaso, a related- party that is majority- owned by certain current and former directors of Lipocine Inc. and their affiliates. Under the license agreement, the Company assigned and transferred to Spriaso all of the Company' s rights, title and interest in its intellectual property to develop products for the cough and cold field. In addition, Spriaso received all rights and obligations under the Company' s product development agreement with a third- party. In exchange, the Company will receive a royalty of 20 percent of the net proceeds received by Spriaso, up to a maximum of $ 10. 0 million. Spriaso also granted back to the Company an exclusive license to such intellectual property to develop products outside of the cough and cold field. The Company also agreed to continue providing up to 10 percent of the services of certain employees to Spriaso for a period of time. The agreement to provide services expired in 2021; however, it may be extended upon written agreement of Spriaso and the Company. The Company did not receive any reimbursements from Spriaso for the years ended December 31, **2024 or** 2023 ~~and 2022, respectively~~. Additionally, during the years ended December 31, **2024 and** 2023 ~~and 2022~~, the Company received $ **0 and $** 110, 000 ~~and $ 0~~, respectively, in royalty revenue from Spriaso. Spriaso filed its first NDA and as an affiliated entity of the Company, it used up the one- time waiver for user fees for a small business submitting its first human drug application to the FDA. Spriaso is considered a variable interest entity under the FASB ASC Topic 810- 10, Consolidations, however the Company is not the primary beneficiary and has therefore not consolidated Spriaso. (13) ~~Subsequent Events On January 12~~ **Segment Reporting Operating segments are defined as components of an entity for which separate financial information is available and that is regularly reviewed by the Chief Operating Decision Maker (" CODM ") in deciding how to allocate resources to an individual segment and in assessing performance. The Company operates as a single reporting segment, focused on leveraging its proprietary technology platform to augment therapeutics through effective oral delivery of products and product candidates. The Company' s measure of segment profit or loss is net income (loss). The CODM is the chief executive officer (" CEO "). The CODM manages and allocates resources to the operations of the Company on a total company basis. Managing and allocating resources on a consolidated basis enables the CEO to assess the overall level of resources available and how to best deploy these resources across functions, therapeutic target areas and research and development projects that are in line with the Company' s long- term company- wide strategic goals. Consistent with this decision- making process, the CEO uses consolidated financial information for purposes of evaluating performance, forecasting future period financial results, allocating resources and setting incentive targets. Operating expenses are used to monitor budget versus actual results. The monitoring of budgeted versus actual results are used in assessing performance of the segment. All the Company' s long- lived assets are held in the United States and all the Company' s revenues are primarily related to TLANDO. The following table is representative of the significant expense categories regularly provided to the CODM when managing the Company' s single reporting segment. A reconciliation to the consolidated net income (loss) for the years ended December 31** , 2024 ~~,~~ **and 2023 is included at** the **bottom** ~~Company entered into a License Agreement with Verity Pharmaceuticals, Inc. for the commercialization~~ of **the table below. Schedule of Significant Expense Categories 2024 2023 Year Ended December 31, 2024 2023 Total revenues $ 11, 198, 144 $ (2, 850, 818) Program expenses (1) LPCN 1154 (1) 3, 628, 033 2, 631, 643 LPCN 1148 (1) 78, 796 3, 200, 730** TLANDO ~~® in~~ **(1) 168, 814 752, 652** ~~the~~ **Other research** ~~U. S.~~ and ~~for the~~ development **programs** ~~and commercialization rights to TLANDO XR in Canada as described in Note 4~~ (~~c~~ **1**) **857, 107 622, 741 Non- program expenses (2) (2) 3, 675, 349 3, 371, 120 Personnel costs 3, 536, 529 3, 846, 816 Stock- based compensation 408, 551 654, 438 Total segment operating income (loss) (3) (1, 155, 035) (17, 930, 958) Other income (loss) (3) 1, 163, 387 1, 578, 787 Net income (loss) $ 8, 352 $ (16, 352, 171) (1) Includes external research and development expenses. (2) Includes general and administrative expenses, information technology, infrastructure, facilities, and intellectual property, and legal and professional fees. (3) Includes interest income and gain on warrant liability**. ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL ~~DISCLOSURE~~ **DISCLOSUREITEM** ~~ITEM~~ 9A. CONTROLS AND PROCEDURES Evaluation of Disclosure Controls and Procedures We maintain " disclosure controls and procedures " within the meaning of Rule 13a- 15 (e) of ~~the Securities Exchange Act of 1934, as amended, or~~ the Exchange Act. Our disclosure controls and procedures (" Disclosure Controls ") are designed to ensure that information required to be disclosed by us in the reports we file or submit under the Exchange Act, such as this Annual Report ~~on Form 10- K~~, is recorded, processed, summarized and reported within the time periods specified in the SEC' s rules and forms. Our Disclosure Controls include, without limitation, controls and procedures designed to ensure that such information is accumulated and communicated to our management, including our Chief Executive Officer and Principal Financial Officer, as appropriate to allow timely decisions regarding required disclosure. As of the end of the period covered by this Annual Report ~~on Form 10- K~~, we evaluated the effectiveness of the design and

operation of our Disclosure Controls, which was done under the supervision and with the participation of our management, including our Chief Executive Officer and our Principal Financial Officer. Based on the ~~controls~~ evaluation, our Chief Executive Officer and Principal Financial Officer have concluded that, as of the date of their evaluation, our Disclosure Controls were effective as of December 31, ~~2023~~ **2024** . Management' s Report on Internal Control over Financial Reporting Our management is responsible for establishing and maintaining adequate internal control over financial reporting. Our internal control system was designed to provide our management and ~~board~~ **Board** of ~~directors~~ **Directors** reasonable assurance regarding the reliability of financial reporting and preparation of financial statements for external purposes in accordance with GAAP. Internal control over financial reporting has inherent limitations. Internal control over financial reporting is a process that involves human diligence and compliance and is subject to lapses in judgment and breakdowns resulting from human failures. Internal control over financial reporting also can be circumvented by collusion or improper management override. Because of such limitations, there is a risk that material misstatements will not be prevented or detected on a timely basis by internal control over financial reporting. However, these inherent limitations are known features of the financial reporting process. Therefore, it is possible to design into the process safeguards to reduce, though not eliminate, this risk. Our management has assessed the effectiveness of internal control over financial reporting as of December 31, ~~2023~~ **2024** . In making this assessment, we used the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission in Internal Control- Integrated Framework (2013). Based on our assessment we believe that, as of December 31, ~~2023~~ **2024** , our internal control over financial reporting is effective based on those criteria. Change in Internal Control over Financial Reporting During the **fiscal** year ended December 31, ~~2023~~ **2024 ,** there have been no changes in our internal control over financial reporting (as defined in Rule 13a- 15 (f) under the Exchange Act) that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting. ITEM 9B. OTHER INFORMATION During the three months ended December 31, ~~2023~~ **2024** , none of our directors or officers adopted or terminated a " Rule 10- b5- 1 trading arrangement " or " non- Rule 10- b5- 1 trading arrangement " as each term is identified in Item 408 of Regulation S- K. ITEM 9C. DISCLOSURE REGARDING FOREIGN JURISDICTIONS THAT PREVENT INSPECTIONS **Not applicable.** PART **IIIITEM** ~~III ITEM~~ 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE **GOVERNANCECertain** ~~GOVERNANCE Certain~~ of the information required by this item will be contained in our definitive Proxy Statement with respect to our ~~2024~~ **2025** Annual Meeting of Stockholders, under the captions " Election of Directors, " and " Compliance with Section 16 (a) of the Exchange Act " and is incorporated into this item by reference. ITEM 11. EXECUTIVE ~~COMPENSATION~~ **COMPENSATIONThe** ~~The~~ information required by this item will be contained in our definitive Proxy Statement with respect to our ~~2024~~ **2025** Annual Meeting of Stockholders, under the captions " Executive Compensation **,** " ~~,~~" Compensation Committee Interlocks and Insider Participation **,** " ~~,~~and " Compensation Committee Report " and is incorporated into this item by reference. ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT, AND RELATED STOCKHOLDER ~~MATTERS~~ **MATTERSThe** ~~The~~ information required by this item will be contained in our definitive Proxy Statement with respect to our ~~2024~~ **2025** Annual Meeting of Stockholders, under the captions " Security Ownership of Certain Beneficial Owners and Management " and " Equity Compensation Plan Information " and is incorporated into this item by reference. ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR ~~INDEPENDENCE~~ **INDEPENDENCEThe** ~~The~~ information required by this item will be contained in our definitive Proxy Statement with respect to our ~~2024~~ **2025** Annual Meeting of Stockholders under the captions " Certain Relationships and Related Transactions " and " Independence of the Board " and is incorporated into this item by reference. ITEM 14. PRINCIPAL ACCOUNTANT FEES AND ~~SERVICES~~ **SERVICESThe** ~~The~~ information required by this item will be contained in our definitive Proxy Statement with respect to our ~~2024~~ **2025** Annual Meeting of Stockholders, under the caption " Principal Accountant Fees and Services " and is incorporated into this item by reference. PART ~~IV ITEM~~ **IVITEM** 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES (a) The following documents are filed as part of this Annual Report on Form 10- K. 1. Financial Statements. The financial statements listed on the accompanying Index to Consolidated Financial Statements are filed as part of this **Annual** ~~report~~ **Report** . 2. Financial statement schedules. There are no financial statements schedules included because they are either not applicable or the required information is shown in the consolidated financial statements or the notes thereto. 3. Exhibits. The following exhibits are filed or incorporated by reference as part of this **Annual Report** ~~Form 10- K~~ . INDEX TO **EXHIBITSExhibit** ~~EXHIBITS Exhibit~~ Incorporation By Reference Number Exhibit Description Form SEC File No. Exhibit Filing Date 2. 1 Agreement and Plan of Merger and Reorganization, dated July 24, 2013, by and among Marathon Bar Corp., Lipocine Operating Inc., and MBAR Acquisition Corp. 8- K 333- 178230 2. 1 7 / 25 / 2013 3. 1 Amended and Restated Certificate of Incorporation 8- K 333- 178230 3. 2 7 / 25 / 2013 3. 2 Amended and Restated Bylaws 8- K 333- 178230 3. 3 7 / 25 / 2013 3. 3 Certificate of Designation of Series A Junior Participating Preferred Stock. 8- K 001- 36357 3. 1 12 / 1 / 2015 3. 4 Certificate of Increase of Series A Junior Participating Preferred Stock 8- K 001- 36357 3. 1 11 / 1 / 2021 3. 5 Certificate of Amendment to the Amended and Restated Certificate of Incorporation of Lipocine Inc. 8- K 001- 36357 3. 4 6 / 28 / 2022 3. 6 Certificate of Designation of Series B Preferred Stock 8- K 001- 36357 3. 2 3 / 10 / 2023 3. 7 Amendment to the Amended and Restated Bylaws of Lipocine Inc. 8- K 001- 36357 3. 1 3 / 10 / 2023 3. 8 Certificate of Amendment to the Amended and Restated Certificated of Incorporation of Lipocine Inc. 8- K 001- 36357 3. 2 5 / 11 / 2023 **3. 9 Certificate of Amendment to Certificate of Designation of Series A Junior Participating Preferred Stock. 8- K 001- 36357 3. 1 10 / 22 / 2024** 4. 1 Form of Common Stock certificate 8- K 333- 178230 4. 1 7 / 25 / 2013 4. 2 Second Amended and Restated Stockholder Rights Agreement dated as of November 1, 2021 by and between the Company and American Stock Transfer & Trust Company, LLC 8- K 001- 36357 4. 1 11 / 1 / 2021 4. 3 Form of Pre- Funded Warrant 8- K 001- 36357 4. 1 11 / 14 / 2019 4. 4 Form of Common..... 6 7 / 25 / 2013Exhibit **2019Exhibit** Incorporation By Reference Number Exhibit Description Form SEC File No. Exhibit Filing Date **2019** 4.4 Form of Common Warrant 8- K 001- 36357 4.2 11 / 14 / 2019 4.5 Form of Common Warrant 8- K 001- 36357 4.1 2 / 26 / 2020 4.6 Description of Registered Securities 10- K 001- 36357 4.6 3 / 9

/ 2022 ~~4.7 Third Amended & Restated Rights Agreement,dated October 22,2024.8- K 001- 36357 4.1 10 / 22 / 2024~~ 10.1 * * Lipocine Inc.Amended and Restated 2011 Equity Incentive Plan 8- K 333- 178230 10.1 7 / 25 / 2013 10.2 * * Form of Stock Option Agreement and Option Grant Notice under the 2011 Equity Incentive Plan 8- K 333- 178230 10.2 7 / 25 / 2013 10.3 * * Form of Restricted Stock Award Agreement and Notice under the 2011 Equity Incentive Plan 8- K 333- 178230 10.3 7 / 25 / 2013 10.4 * * Form of Restricted Stock Unit Agreement and Notice under the 2011 Equity Incentive Plan 10- K 001- 36357 10.4 3 / 31 / 2014 10.6 Second Lease Extension and Modification Agreement,dated June 21,2011,by and between Lipocine Inc.and Paradigm Resources,L.C.8- K 333- 178230 10.5 7 / 25 / 2013 10.7 * * Form of **Indemnification Agreement by and between Lipocine Inc.and each of its directors and officers 8- K 333- 178230 10.6 7 / 25 / 2013Exhibit** 10. 8 Registration Rights Agreement, dated May 25, 2004, by and between Lipocine Operating Inc. and Schwarz Pharma Limited (now UCB Manufacturing Ireland Ltd.) 8- K 333- 178230 10. 8 7 / 25 / 2013 10. 9 Registration Rights Agreement, dated April 20, 2001, by and among Lipocine Operating Inc., Elan International Services, Ltd., and Elan Pharma International Limited 8- K 333- 178230 10. 9 7 / 25 / 2013 10. 10 Form of Securities Purchase Agreement, dated July 26, 2013 8- K 333- 178230 10. 10 7 / 31 / 2013 10. 11 Form of Registration Rights Agreement, dated July 26, 2013 8- K 333- 178230 10. 11 7 / 31 / 2013 10. 12 Manufacturing Agreement, dated August 27, 2013, by and between Lipocine Inc. and Encap Drug Delivery. 8- K 333- 178230 10. 12 9 / 5 / 2013 10. 13 * * Executive Employment Agreement, dated January 7, 2014, by and between Lipocine Inc. and Dr. Mahesh V. Patel 8- K 000- 55092 10. 1 1 / 7 / 2014 10. 15 Commercial Manufacturing Services and Supply Agreement, dated March 3, 2016, by and between Lipocine Inc. and M. W. Encap Ltd. 10- Q 001- 36357 10. 1 5 / 9 / 2016 10. 16 Controlled Equity OfferingSM Sales Agreement, dated March 6, 2017, by and between Lipocine Inc. and Cantor Fitzgerald & Co. 10- K 001- 36357 10. 22 3 / 6 / 2017 10. 17 * * Vice President Employment Agreement, dated November 5, 2018, by and between Lipocine Inc. and Nachiappan Chidambaram. 10- Q 001- 36357 10. 1 11 / 7 / 18 10. 18 Loan and Security Agreement dated January 5, 2018 8- K 001- 36357 10. 1 1 / 9 / 2018 10. 20 Securities Purchase Agreement, dated as of November 14, 2019, by and between Lipocine, Inc. and the purchasers identified on the signature pages thereto 8- K 001- 36357 10. 2 11 / 14 / 2019 10. 21 Securities Purchase Agreement, dated as of February 25, 2020, by and between Lipocine, Inc. and the purchasers identified on the signature pages thereto 8- K 001- 36357 10. 2 2 / 26 / 2020 10. 22 Fourth Amended and..... 1 5 / 9 / 2022Exhibit **2020Exhibit** Incorporation By Reference Number Exhibit Description Form SEC File No. Exhibit Filing Date 10. ~~2020 10.~~22 Fourth Amended and Restated Lipocine Inc.2014 Stock and Incentive Plan S- 8 333- 240197 99.1 07 / 30 / 2020 10.23 First Amendment to Loan and Security Agreement,dated February 16,2021,made by and among Lipocine Inc.,Lipocine Operating Inc.and Silicon Valley Bank 8- K 001- 36357 10.1 2 / 18 / 2021 10.24 * * * License Agreement dated October 14,2021,by and between Lipocine,Inc.and Antares Pharma,Inc.10- Q 001- 36357 10.1 11 / 10 / 2021 10.25 * * * Amendment No.1 to Commercial Manufacturing Services and Supply Agreement between Lipocine,Inc.and MW Encap Ltd.Dated October 13,2021 10- Q 001- 36357 10.2 11 / 10 / 2021 10.26 * * Principal Accounting Officer Employment Agreement,dated March 7,2022,by and between Lipocine Inc.and Krista Fogarty.8- K / A 001- 36357 10.1 3 / 7 / 2022 10.27 First Amendment to License Agreement,dated October 14,2021,made by and among Lipocine Inc.,and Antares Pharma,Inc.10- Q 001- 36357 10.1 5 / 9 / **2022 10.** 28 *, * * * License Agreement dated January 12, 2024 by and among Lipocine, Inc., Gordon Silver Limited, and Verity Pharmaceuticals **10- K 001- 36357 10. 28 3 / 7 / 2024 10. 29 Lipocine Inc. Fifth Amended and Restated 2014 Stock and Incentive Plan 8- K 001- 36357 10. 1 6 / 3 / 2024 19 * Lipocine Inc. Insider Trading Policy** 21. 1 * Subsidiaries 23. 1 * Consent of Tanner LLC 31. 1 * Certification of Principal Executive Officer pursuant to Section 302 of the Sarbanes- Oxley Act of 2002. 31. 2 * Certification of Principal Financial Officer pursuant to Section 302 of the Sarbanes- Oxley Act of 2002. 32. 1 * *** * *** Certification of Principal Executive Officer pursuant to Section 906 of the Sarbanes- Oxley Act of 2002, 18 U. S. C. 1350. 32. 2 * *** * *** Certification of Principal Financial Officer pursuant to Section 906 of the Sarbanes- Oxley Act of 2002, 18 U. S. C. 1350. ~~97 *~~ Lipocine Inc. Clawback Policy **10- K 001- 36357 03 / 07 / 24Exhibit Incorporation By Reference Number Exhibit Description Form SEC File No. Exhibit Filing Date** 101. INS * XBRL Instance Document – the instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document. 101. SCH * Inline XBRL Taxonomy Extension Schema Document 101. CAL * Inline XBRL Taxonomy Extension Calculation Linkbase Document 101. DEF * Inline XBRL Taxonomy Extension Definition Linkbase Document 101. LAB * Inline XBRL Taxonomy Extension Labels Linkbase Document 101. PRE * Inline XBRL Taxonomy Extension Presentation Linkbase Document 104 * Cover Page Interactive Data File (formatted as Inline XBRL and contained in Exhibit 101) * Filed herewith **.** * * Management contract or compensation plan or arrangement **.** Confidential treatment has been granted with respect to certain portions of this exhibit. Omitted portions have been submitted separately with the Securities and Exchange Commission. * * * Certain portions of this exhibit have been omitted pursuant to Item 601 (b) (10) of Regulation S- K. The Registrant hereby undertakes to furnish to the SEC, upon request, copies of any such instruments. *** * * * Furnished herewith.** ITEM 16. FORM 10- K SUMMARY ~~None~~ SIGNATURESPursuant to the requirements of Section 13 or 15 (d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized. Lipocine Inc. (Registrant) Dated: March ~~7~~ **13** , ~~2024~~ **2025** / s / Mahesh V. Patel Mahesh V. Patel, President and Chief Executive Officer (Principal Executive Officer and Principal Financial Officer) Dated: March ~~7~~ **13** , ~~2024~~ **2025** / s / Krista Fogarty Krista Fogarty, Corporate Controller (Principal Accounting Officer) Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the date indicated. Signature Title Date / s / Mahesh V. Patel President and Chief Executive Officer (Principal Executive March ~~7~~ **13** , ~~2024~~ **2025** Mahesh V. Patel Officer and Principal Financial Officer) / s / Krista Fogarty Corporate Controller (Principal Accounting Officer) March ~~7~~ **13** , ~~2024~~ **2025** Krista Fogarty / s / Jeffrey Fink Director March ~~7~~ **13** , ~~2024~~ **2025** Jeffrey Fink / s / Jill M. Jene Director March ~~7~~ **13** , ~~2024~~ **2025** Jill M. Jene / s / John Higuchi Director March ~~7~~ **13** , ~~2024~~ **2025** John Higuchi / s / R. Dana Ono Director March ~~7~~ **13** , ~~2024~~ **2025** R. Dana Ono / s / Spyros Papapetropoulos Independent Lead Director and Chairman of the Board March ~~7~~ **13** , ~~2024~~ **2025** Spyros Papapetropoulos Exhibit ~~10~~ **LIPOCINE INC** . **INSIDER TRADING POLICY NOVEMBER 17** ~~28~~

~~LICENSE AGREEMENT This License Agreement (this " Agreement ") is made and entered into on January 12~~ , ~~2024~~ **2023 BACKGROUND The Board** ~~(the " Signing Date ") and is effective as~~ of **Directors of** ~~February 1, 2024 (the " Effective Date ") by and between~~ Lipocine Inc. ~~, a Delaware corporation~~ (" Lipocine " **or the** ~~),~~ **,** ~~and Gordon Silver Limited, an Irish corporation (" GSL "). Lipocine and GSL may be referred to herein individually as a " Party ", and collectively as the " Parties ". Recitals Whereas, Lipocine owns or controls certain patent rights, know- how, Regulatory Approvals (hereinafter defined) and Regulatory Documents (hereinafter defined) relating to its proprietary drug products referred to as TLANDO and TLANDO XR; WHEREAS, GSL and Verity Pharmaceuticals, Inc., a corporation incorporated in Delaware, United States of America (hereinafter " Verity ") are both Affiliates of Verity Pharmaceuticals, Inc. (Canada) a corporation organized and existing under the laws of British Columbia (hereinafter " Holding~~ Company ") **has adopted this Insider Trading Policy** (~~GSL~~ **the " Policy ") for our directors** , ~~Verity~~ **officers, employees, consultants and their respective affiliates (including entities or trusts that own Company securities and are controlled by such persons) (" Covered Persons "), including those who serve in such capacities with any of the subsidiaries of Lipocine, with respect to the trading of the Company' s securities, as well as the securities of publicly traded companies with whom we have a relationship. Federal and state securities laws prohibit the purchase or sale of a company' s securities by persons who are aware of material information about that company that is not generally known or available to the public. These laws also prohibit persons who are aware of such material nonpublic information from disclosing this information to others who may trade. Companies and their controlling persons are also subject to liability if they fail to take reasonable steps to prevent insider trading by company personnel. It is important that you understand the breadth of activities that constitute illegal insider trading and the consequences, which can be severe. The U. S. Securities and Exchange Commission, together with U. S. Attorneys, investigate and pursue insider trading vigorously. Cases have been successfully prosecuted against trading by employees at all levels through foreign accounts, trading by family members and friends, and trading involving only a small number of shares. The Company has adopted this Policy both to satisfy the Company' s obligation to prevent insider trading and to help Company personnel avoid the severe consequences associated with violations of the insider trading laws. This Policy is also intended to prevent even the appearance of improper conduct on the part of anyone employed by or associated with the Company (not just the officers or directors of the Company). It is your obligation to understand and comply with this Policy. Should you have any questions regarding this Policy, please contact the Compliance Officer: Krista Fogarty, Corporate Controller, at (801) 994- 7383 or her successor. 1. PENALTIES FOR NONCOMPLIANCE Penalties for trading on or communicating material nonpublic information can be severe, both for individuals involved in such unlawful conduct and their employers and supervisors, and may include jail terms, criminal fines, civil penalties and civil enforcement injunctions. Given the severity of the potential penalties, compliance with this Policy Statement is absolutely mandatory. Legal Penalties. A person who violates insider trading laws by engaging in transactions in a company' s securities when he or she has material nonpublic information can be sentenced to a substantial jail term (up to 20 years) and required to pay a criminal penalty of several times the amount of profits gained or losses avoided. In addition, a person who tips others may also be liable for transactions by the tippees to whom he or she has disclosed material nonpublic information. Tippers can be subject to the same penalties and sanctions as the tippees, and the SEC has imposed large penalties even when the tipper did not profit from the transaction. The SEC can also seek substantial civil penalties from any person who, at the time of ~~and~~ an ~~Holding~~ insider trading violation, " directly or indirectly controlled the person who committed such violation, " which would apply to the Company and / or management and supervisory personnel. Even for violations that result in a small or no profit, the SEC can seek substantial penalties from a company and / or its management and supervisory personnel as control persons. Company- Imposed Sanctions. Compliance with the policies of the Company is a condition of continued employment or service with the Company of each employee, officer and director. An employee' s failure to comply with the Company' s insider trading policy will subject the employee to Company- imposed sanctions, which may include dismissal for cause, whether or not the employee' s failure to comply results in a violation of law. The Company reserves the right to determine, in its own discretion and on the basis of the information available to it, whether this Policy has been violated. The Company may also determine that specific conduct violates this Policy whether or not the conduct also violates the law. It is not necessary for the Company to wait for the filing or conclusion of a civil or criminal action against the alleged violator before taking disciplinary action. 2. SCOPE OF POLICY Persons Covered. As a director, officer, employee or consultant of Lipocine or its subsidiaries this Policy applies to you and any of your affiliates, including any entities or trusts that you control that own shares of the Company' s stock. The same restrictions that apply to you apply to your family members who reside with you, anyone else who lives in your household, and any family members who do not live in your household but whose transactions in Lipocine securities are directed by you or are subject to your influence or control (such as parents or children who consult with you before they trade in Lipocine securities). You are responsible for making sure that the purchase or sale of any security covered by this Policy by any such person complies with this Policy. Companies Covered. The prohibition on insider trading in this Policy is not limited to trading in Lipocine securities. It includes trading in the securities of other firms, such as customers or suppliers of Lipocine and those with which Lipocine may be negotiating material transactions, such as a corporate collaboration, license, acquisition, investment or sale. Information that is not material to the Company may nevertheless be material to one of those other firms. The prohibition on insider trading in this Policy also applies to trading in the securities of all other companies from which you have obtained material nonpublic information in the scope of your employment. Transactions Covered. Trading includes purchases and sales of stock, derivative securities on hedging transactions such as put and call options and short and long sales, convertible debentures or preferred stock, and debt securities (debentures, bonds and notes). Compliance Officer and Compliance Committee: The Company has designated Krista Fogarty, Corporate Controller,**

as its Compliance Officer (the " Compliance Officer "). The Insider Trading Compliance Committee (the " Compliance Committee ") will consist of the Compliance Officer and Mahesh Patel, Chief Executive Officer. The Compliance Committee will review and either approve or prohibit all proposed trades by Covered Persons. 3. STATEMENT OF POLICY No Trading on Inside Information. You may not trade in the securities of Lipocine, directly or through family members or other persons or entities, if you are aware of material nonpublic information relating to the Company. Similarly, you may not trade in the securities of any other company if you are aware of material nonpublic information about that company which you obtained in the course of your employment with Lipocine. This Policy also applies to your family members who reside with you, anyone else who lives in your household, and any family members who do not live in your household but whose transactions in Company securities are directed by you or are subject to your influence or control (such as parents or children who consult with you before they trade in Company securities). You are responsible for the transactions of these other persons, and therefore should make them aware of the need to confer with you before they trade in the Company' s securities. No Tipping. You may not pass material nonpublic information on to others or recommend to anyone the purchase or sale of any securities when you are aware of such information. This practice, known as " tipping, " also violates the securities laws and can result in the same civil and criminal penalties that apply to insider trading, even though you did not trade and did not gain any benefit from another' s trading. No Exception for Hardship. The existence of a personal financial emergency does not excuse you from compliance with this Policy. Transactions that may be necessary or justifiable for independent reasons (such as the need to raise money for an emergency expenditure) are not excepted from the policy. If the employee, officer or director has material, nonpublic information, the prohibition still applies. The securities laws do not recognize such mitigating circumstances, and, in any event, even the appearance of an improper transaction must be avoided to preserve the Company' s reputation for adhering to high standards of conduct. Pre- Clearance Procedures. To help prevent inadvertent violations of the federal securities laws and to avoid even the appearance of trading on the basis of inside information, Lipocine ' s board of directors has adopted certain Pre- Clearance Procedures. All directors, Executive Officers, officers, employees and consultants, may not engage in any transaction involving Lipocine' s securities (including an option exercise, or a gift, loan, pledge or hedge, contribution to a trust or any other transfer) without first obtaining pre- clearance of the transaction from the Compliance Committee. A request for pre- clearance should be submitted to the Compliance Officer at least two business days in advance of the proposed transaction whenever possible. However, the Compliance Officer is under no obligation to approve a trade submitted for pre- clearance, and may determine not to permit the trade. The Compliance Officer may not trade in Lipocine securities unless the Compliance Committee has approved the trade (s) in accordance with the procedures set forth in this Policy. Stock Trading Periods (" Windows "), Blackouts and Related Procedures. All directors, officers, employees and consultants of the Company are **subject** ~~hereinafter collectively referred~~ to **certain Windows- Related Procedures including certain Blackout periods when trading in Lipocine shares is prohibited. In general, directors, officers, employees and consultants of Lipocine are not restricted under this Policy from buying or selling the Company' s stock when the trading Window is open** as **long as they are not in possession of material nonpublic information and they first obtain pre- clearance for a proposed transaction from the Compliance Committee, as explained in this Policy. However, directors, officers, employees and consultants may not buy or sell the Company' s stock when the Window is closed and a Blackout on trading is in place. The Insider Trading Policy Compliance Officer will notify directors, officers, employees and consultants, by e- mail or otherwise, that trading of Lipocine securities or any other company is prohibited (i. e. that the Window is closed and a Blackout on trading is imposed). Windows will generally be closed during the following time periods and may also be closed during times that the Company' s Compliance Committee, in consultation with Company management, deem appropriate (the** " ~~Verity Group~~ **Special Blackout Period** "). ~~WHEREAS~~ **The following closed trading Window applies to all directors** , ~~GSL~~ **officers, which** is ~~engaged in~~ **defined to include the Chief Executive Officer** , ~~among~~ **Chief Financial Officer, any Vice President or above of Lipocine, and all financial and accounting personnel of Lipocine and its subsidiaries: ● Quarterly Closed Window Periods. The Company' s announcement of its quarterly financial results almost always has the potential to have a material effect on the market for the Company' s securities. Therefore, to avoid even the appearance of trading on the basis of material nonpublic information, you may not trade in the Company' s securities during the period beginning the first day after quarter or year end, and ending after the second full business day following the public dissemination of the Company' s annual or quarterly financial results (either through a press release or by filing of the respective Form 8- K, Form 10- Q or 10- K for that quarter or year end). The following trading Windows may apply to all directors, officers, employees and consultants: ● Closed Window Periods or Blackouts for Interim Earnings Releases and Event- Specific Releases. The Company may on occasion issue interim earnings guidance or** other ~~things~~ **potentially material information such as execution of an important contract** , ~~managing the Intellectual Property owned~~ **important regulatory developments, clinical trial results, or important product development milestones,** by ~~or licensed to~~ **means of a press release, SEC filing on Form 8- K,** ~~the~~ **other** ~~Verity Group; WHEREAS, Verity~~ **SEC filing or other means designed to achieve widespread dissemination of the information. You should anticipate that the window will also be closed while the Company** is ~~engaged~~ in the **process** ~~registration, promotion and commercialization~~ of **assembling** ~~pharmaceutical products in~~ the **information** ~~Territory; Whereas, GSL desires~~ to ~~obtain~~ **be released until the second full business day following the release of that information by the Company. ● Closed Window Periods for Results of Clinical Trials. The Company will conduct clinical trials** from **time** ~~Lipocine, and Lipocine is willing~~ to ~~grant to GSL,~~ **time. To avoid** the **appearance of trading** ~~exclusive license to develop, manufacture, and commercialize TLANDO and TLANDO XR in the Territory,~~ on the **basis of material nonpublic information** ~~terms and conditions set forth herein. Now~~ , ~~Therefore, based on~~ **you may not trade in** the ~~premises and~~ **Company' s securities (1) during** the ~~mutual covenants~~ **period beginning with the last patient visit of each**

clinical trial and ~~obligations set forth below, and intending~~ -- **ending after** ~~to be bound hereby,~~ the **second full business day** ~~Parties agree as follows: article Definitions For purposes of this Agreement, the~~ following ~~capitalized terms shall have~~ the ~~meanings as set forth below~~ **release of the results of such clinical trial by the Company, (2) at any time** when **you become aware that** ~~used in this Agreement: 1. 1 " Abbott Agreement " means the Amendment and Termination Agreement by and between Lipocine and Abbott Products, Inc., dated March 29, 2012, and the side- letter between Lipocine and Abbott Laboratories, dated July 3, 2012. 1. 2 " Affiliate " means, with respect to~~ a **clinical trial** ~~Person, another Person that, directly or indirectly, through one or more intermediaries, controls, is controlled by or is under common control with such Person. For purposes of this definition, " control " means (with correlative meanings for the terms " controlled by " and " under common control with ") the possession, direct or indirect, of the power to cause the direction of the management and policies of the applicable entity, whether through ownership of more than fifty percent (50 %) of the voting securities of such entity, by contract or otherwise. A Person~~ will be **successful or unsuccessful, or** ~~an~~ **any** ~~Affiliate~~ **regulatory action related to the clinical trial by the Company, or (3) at any time when you are aware of material, non- public information relating to the efficacy or safety data of the clinical trials. ● Closed Window Periods** for **Regulatory and Commercial Events** ~~purposes of this Agreement only so long as it satisfies the definition set forth above in this Section~~ . ~~For~~ **You may not trade in** the ~~avoidance of doubt, Affiliates of GSL include Holding~~ Company **' s securities when you are** ~~and Verity. 1. 3 " " shall have the meaning ascribed to it~~ in **possession of material** ~~Section 4. 4. 1. 4 " Antares " means Antares Pharma~~ , **non- public information relating** ~~Inc. and its Affiliates. 1. 5 " Antares TSA " means the Transition Services Agreement between Lipocine and Antares~~ to ~~be entered into~~ **any regulatory filings, communications, actions, approvals or denials, or any manufacturing, clinical or commercial events or developments, product sourcing, or product launch dates until the second full business day following the release of that information** by ~~Lipocine and Antares prior to~~ the **Company** ~~Effective Date~~ . **● No insiders may disclose to** ~~1. 6 " Applicable Laws " means all laws, statutes and governmental rules and regulations, guidelines, notification of~~ any **third party that the Special Blackout Period is designated. Procedures Relating to Trades by Covered Persons and** Regulatory **filings** ~~Authority applicable to any of the activities conducted under this Agreement~~ . **Regardless** ~~1. 7 " Assigned Assets " shall have the meaning ascribed to it in Section 2. 5. 1. 8 " Assigned Agreements " means those agreements listed in Exhibit B. 1. 9 " Assigned Domain Names " means those domain names listed in Exhibit E. 1. 10 " Authorized Generic Product " means with respect to a Licensed Product in a country, any oral pharmaceutical product Commercialized by GSL, its Affiliates or Sublicensees in such country that (a) contains the same active pharmaceutical ingredient as such Licensed Product, (b) is marketed in such country pursuant to or by cross reference to the Regulatory Approval for such Licensed Product or with the permission or authorization~~ of ~~GSL in such country, and (c) for TLANDO, is not marketed under TLANDO (or any replacement trademark thereof) and for TLANDO XR is not marketed under TLANDO XR or a trademark used by GSL at such time in its marketing of TLANDO XR. 1. 11 " Available Inventory " shall have the meaning ascribed to it in the Antares TSA. 1. 12 " Breaching Party " shall have the meaning ascribed to it in Section 11. 2 (b). 1. 13 " Business Day " means any day other than a Saturday, Sunday, or a day on which banking institutions are authorized or obligated by law to be closed in New York, New York. 1. 14 " Canada " means Canada and all its provinces and territories. 1. 15 " Calendar Quarter " means each successive period of three calendar months commencing on January 1, April 1, July 1, and October 1, except that the first Calendar Quarter of the Term commences on the Effective Date and ends on the day immediately before the first to occur of January 1, April 1, July 1, or October 1 after the Effective Date, and the last Calendar Quarter ends on the last day of the Term. 1. 16 " Calendar Year " means the period beginning January 1 and ending December 31, except that the first Calendar Year of the Term commences on the Effective Date and ends following December 31 of the same year as of the Effective Date. 1. 17 " Claim " means any claim, allegation, suit, complaint, action or legal proceeding. 1. 18 " " means., its Affiliates or any successors or assigns thereof. 1. 19 " " shall have the meaning set forth in Section 7. 8. 1. 20 " Settlement Agreement " shall have the meaning set forth in Section 7. 8. 1. 21 " Commercialize " or " Commercialization " means any and all activities directed to the preparation for sale of, offering for sale of or sale of a Licensed Product, including such activities related to promotion, marketing, distribution and / or detailing of Licensed Product, but excluding activities directed to Development and Manufacturing. 1. 22 " Commercialization Plan ". 1. 23 " Commercially Reasonable Efforts " means, with respect to specific tasks or activities conducted under this Agreement, the level of efforts and resources commonly used in the pharmaceutical industry to conduct such tasks or activities with respect to products at a similar stage (to the Licensed Product) in its product life and of similar market potential, based on information and conditions then~~ - **the proposed timing** ~~- prevailing. 1. 24 " Commercial Launch " means, with respect to the Licensed Product in a country in the Territory, the availability of the Licensed Product for~~ - **or type of trade** ~~commercial sale to the public~~ , **no Covered Person may trade in Company securities until** ~~as evidenced by publicly available sales information (e. g., from Third Party data monitoring services such as IMS and Symphony). 1. 25 " Confidential Information " means, as to a particular Party, all confidential or proprietary Information received or otherwise obtained by the other Party from such Party or its Affiliates pursuant to this Agreement, but excluding any specific Information that such other Party can demonstrate~~ : (a) ~~is now, or hereafter becomes, available to the public other~~ -- **the** ~~than~~ **person trading** ~~as~~ **has notified** ~~a result of a breach of this Agreement of~~ the **Compliance Officer** ~~receiving Party, or its Affiliates, or any entity that obtained such Information from the disclosing Party~~ in ~~accordance with this Agreement~~ **writing of the amount and nature of the proposed trade (s)** ; (b) the **person trading has certified** ~~receiving Party or its Affiliates already possesses prior~~ to ~~receipt thereof from~~ **the Compliance Officer in writing at the time of such proposed trade (s) that (i)** ~~the~~ - **he** ~~disclosing Party~~ **or she is not in possession of material nonpublic information concerning the Company and (ii) the proposed trade (s) do not violate the trading restrictions of Section 16 of the Exchange Act or Rule 144 of the Securities Act** ; (c) ~~is obtained without restriction~~ **the person trading has notified and received approval** from **the Compliance Committee for the filing of** a **Form 144 with** ~~Third Party, to~~ the **SEC** ~~knowledge of the receiving Party was not restricted from disclosing the same to the receiving Party or its Affiliates without restriction~~ ; ~~or~~ **and** (d) **the Compliance**

Committee has approved the trade (s), and the Compliance Officer has certified such approval in writing. Approved 10b5- 1 Plan Exception. The trading restrictions in this Policy do not apply to transactions under a pre- exiting written plan, contract, instruction, or arrangement under Rule 10b5- 1 under the Securities Exchange Act of 1934 (an " Approved 10b5- 1 Plan ") that meets the requirement described in Rule 10b5- 1 and the following requirements: ● it has been **reviewed** ~~independently developed by the receiving Party or its Affiliates without the aid, application or use of any Confidential Information of the disclosing Party. 1. 26 " Control " means, with respect to any material, item of Information, or intellectual property right, that the applicable Party, Antares or their respective Affiliates own or has a license, or sublicense (as applicable) (excluding a license granted pursuant to this Agreement) to such material, Information or right and has the ability to grant to the other Party access to use, ownership, a license and / or a sublicense as provided for in this Agreement under such material, item or right without violating the terms of any agreement or other arrangement with any Third Party as of the time such Party, Antares or their respective Affiliates would first be required hereunder to grant the other Party such access, ownership, license, or sublicense (as applicable). 1. 27 " Develop " or " Development " means, with respect to a Licensed Product, all activities that are necessary or useful to obtain, support, or maintain Regulatory Approval (other than to obtain any pricing or reimbursement approvals) of such Licensed Product, including any such activities relating to research, preparing and conducting clinical studies and regulatory activities (e. g., preparing, filing, and obtaining regulatory applications and conducting required Phase IV Trials, if any). " Develop " or " Development " excludes the Commercialization of a Licensed Product. 1. 28 " Development Plan " means a TLANDO Development Plan and / or TLANDO XR Development Plan. 1. 29 " Dollar " or " $ " means a United States dollar. 1. 30 " " means. 1. 31 " Supply Agreement " means the Commercial Manufacturing Services and Supply Agreement between Lipocine and, as amended as of October 13, 2021, including the applicable quality agreement. 1. 32 " Event " shall have the meaning ascribed to it in Section 3. 6. 1. 33 " FDA " means the United States Food and Drug Administration, or any successor thereto. 1. 34 " Field Infringement " shall have the meaning ascribed to it in Section 7. 3 (a). 1. 35 " Field of Use " means (a) testosterone replacement therapy in males for conditions associated with deficiency or absence of endogenous testosterone, as indicated in the TLANDO NDA and TLANDO XR IND, (b) treatment of Klinefelter syndrome, and (c) all pediatric indications relating to testosterone replacement therapy in males for conditions associated with a deficiency or absence of endogenous testosterone. 1. 36 " Generic Product " means, with respect to a Licensed Product in a country, any product sold by a Third Party in such country that is not a Sublicensee of GSL or its Affiliates: (A) for which the Regulatory Approval relies on or refers to such Licensed Product as a reference product and (B) either (i) has an~~ **and** ~~AB- rating in the Orange Book, or (ii) is~~ approved by the **Compliance Officer at least [five business days] in advance of being entered into (or, if revised or amended, such revisions or amendments have been reviewed and approved by the Compliance Officer at least [five business days] in advance of being entered into); ● it provides that no trades may occur thereunder until expiration of the** applicable **cooling** ~~Regulatory Authority in Canada as interchangeable with or therapeutically equivalent to such Licensed Product. 1. 37 " 1. 38 " GSL Indemnitees " shall have the meaning ascribed to such term in Section 9. 1. 1. 39 " GSL Inventory " shall have the meaning ascribed to such term in Section 11. 3 (b). 1. 40 " GSL Product Information " means all data, results, know-~~ ~~how and other Information generated, created, made or discovered or identified by or on behalf of~~ **off period specified** ~~GSL (or its Affiliate or Sublicensees) pursuant to work conducted under this Agreement, including~~ in **Rule 10b5** ~~any clinical trials or other studies on a Licensed Product conducted under this Agreement. 1. 41 " GSL Product Patent " means any patent or patent application that (a) is Controlled by Verity, its Affiliate or Sublicensee, and (b) claims or covers the research, development, use, manufacture or sale of Licensed Product, including all patent rights covering or claiming inventions made, generated, identified or discovered by or on behalf of GSL (or its Affiliate or Sublicensee) pursuant to work conducted under this Agreement. 1. 42 " GSL Product Technology " means the GSL Product Information and the GSL Patents (or any part of aspect thereof). 1. 43 " GSL-~~ ~~Supplied Product " shall have the meaning ascribed to such term in Section 4. 3. 1. 44 " Health Canada " means Canada' s regulatory agency responsible for approval of new drugs, or any successor thereto. 1. 45 " Improvement " means any Invention that is (a) a modification, improvement or enhancement to the Licensed Product or Licensed Technology (and including all line extensions of a Licensed Product (e. g. for different dosage strengths of Licensed Product)), and (b) necessary or reasonably useful for the Development, Manufacturing, or Commercialization of Licensed Product, including all intellectual property rights therein and thereto. 1. 46 " IND " means an Investigational New Drug application, as defined in 21 C. F. R. 312 or any successor regulation, and any counterpart in Canada. 1. 47 " Indemnified Party " shall have the meaning ascribed to it in Section 9. 3. 1. 48 " Indemnifying Party " shall have the meaning ascribed to it in Section 9. 3. 1. 49 " Information " means any and all data, results, Improvements, processes, methods, protocols, formulas, inventions, know- how, trade secrets and any other information, patentable or otherwise, which may include (but is not limited to) scientific, research and development, manufacturing know- how, pre- clinical, clinical, regulatory, manufacturing, safety, marketing, financial and commercial information or data. 1. 50 " Invention " means any process, formulation, method, composition of matter, article of manufacture, discovery, improvement, know- how or finding that is conceived or reduced to practice (whether patentable or not) as a result of a Party, its Affiliates or, in the case of Verity, its Sublicensees exercising its rights or carrying out its obligations under this Agreement, including all rights, title and interest in and to the intellectual property rights therein. 1. 51 " Joint Inventions " means any and all Inventions discovered or created jointly by or on behalf of Lipocine or its Affiliates, on the one hand, and GSL, its Sublicensees, or their respective Affiliates, on the other hand, whether or not patented or patentable. 1. 52 " JSC " shall have the meaning ascribed to it in Section 3.~~ 1 (c) **(ii) (B), and no trades occur until after that time** . **The appropriate cooling- off period will vary based on the status of the Covered Person. For directors and officers, the cooling- off period ends on the later of (x) ninety days after adoption or certain modifications of the 10b5-** 1 **plan; or (y)** ~~. 53 " Launch Date " means, with respect to~~ **two business days following disclosure of the Company' s financial results in** a ~~Licensed Product~~ **Form 10- Q or Form 10- K for the quarter** in **which the 10b5- 1 plan was adopted. In no case will the cooling- off period for directors and officers exceed 120 days. For all**

other Covered Persons, if a ~~country~~ **cooling- off period is required under Rule 10b5- 1** , the ~~date on which~~ **cooling- off period ends 30 days after adoption or modification of the 10b5- 1 plan; ● it is entered into in good faith by the Covered Person, and not as part of a plan or scheme to evade the prohibitions of Rule 10b5- 1, at a time when the Covered Person was not in possession of material nonpublic information about the Company; and, if the Covered Person is a director or officer, the 10b5- 1 plan must include representations by the Covered Person certifying to that effect; ● it gives a third party the discretionary authority to execute** such ~~Licensed Product~~ **purchases and sales, outside the control of the Covered Person, so long as such third party does not possess any material nonpublic information about the Company; or explicitly specifies the security or securities to be purchased or sold, the number of shares, the prices and / or dates of transactions, or other formula (s) describing such transactions; and ● it** is ~~first sold~~ **the only outstanding Approved 10b5- 1 Plan entered into** by **the Covered Person** ~~GSL, its Affiliates or Sublicensee to a Third Party (including a distributor)~~ **subject to the exceptions set out** in **Rule 10b5-** ~~such country, after Regulatory Approval for such Licensed Product in such country has been granted.~~ 1 ~~. 54 " Licensed Know- How " means the Information, including Regulatory Documents, that (a) is Controlled by Lipocine or its Affiliate, and (b) relates to Licensed Product and is needed for the Development and Commercialization of Licensed Product in the Field of Use in the Territory. 1. 55 " Licensed Patents " means: (a) the patents and patent applications set forth in Exhibit A; (b) any and all patent applications that are continuations or divisionals of the patent applications described in (a) above;~~ (c) **(ii) (D)). No Approved 10b5- 1 Plan may be adopted during a blackout period. If you are considering entering into, modifying or terminating an Approved 10b5- 1 Plan or have** any **questions regarding Approved 10b5- 1 Plans, please contact the Compliance Officer. You should consult your own legal and tax advisors before entering into, or modifying or terminating,** ~~and~~ **an** ~~all issued~~ **Approved 10b5- 1 Plan. A trading plan, contract, instruction or arrangement will not qualify as** ~~and~~ **an** ~~unexpired patents resulting from~~ **Approved 10b5- 1 Plan without the prior review and approval of the Compliance Officer as described above. Exceptions to Trading Prohibitions: The prohibition on trading in Company securities during Blackout Periods, during Special Blackout Periods, or while otherwise in possession of material nonpublic information does not generally apply to the following. However, in order to ensure that you comply with this policy and the insider trading laws, you must still consult with the Compliance Officer prior to engaging in such transactions. a. purchases made under an employee stock purchase plan operated by the Company; provided, however, that the securities so acquired may not be sold during a Blackout Period or** any **Special Blackout Period; andb. acquisitions or dispositions** of **Company common stock under** the ~~applications described in~~ **Company' s 401 (k) plan, which are made pursuant to standing instructions not entered into or modified during** a **Blackout Period or Special Blackout Period or while otherwise in possession of material nonpublic information. 4. DEFINITION OF MATERIAL NONPUBLIC INFORMATION Note that inside information has two important elements- (1**) ~~or~~ **materiality and (** ~~b~~ **2**) ~~above~~ **public availability. Materiality. Insider trading restrictions come into play only if the information you possess is " material. " Materiality, however, involves a relatively low threshold. Material information is any information that a reasonable investor would consider important in making a decision to buy, hold or sell securities. Any information that could be expected to affect the Company' s stock price, whether it is positive or negative, should be considered material. Some examples of information that ordinarily would be regarded as material are set forth below but this list is not exhaustive – other information may be deemed material based upon the circumstances: ● Financial information, including, but not limited to, revenue results, operating income or loss, or net income or loss** ; **● Earnings that are inconsistent with the consensus expectations of the investment community or other earnings guidance, projections or budgets; ● News about a significant contract or cancellation of an existing significant contract; ● News about significant new services or lines of business; ● The gain or loss of a significant supplier; ● A pending or proposed merger, acquisition, joint venture or tender offer; ● A pending or proposed acquisition or disposition of a significant asset (** ~~d~~ **s**) **or facility; ● A change in the Company' s dividend policy or the declaration of a stock split, ● The implementation, change in or results of a Company stock buy- back; ● A public or private offering of additional securities, borrowings, credit facilities or other financing transactions; ● A change in the Board of Directors, senior management or** any ~~and all issued and unexpired reissues~~ **other major personnel changes; ● Significant legal exposure due to actual** , ~~reexaminations~~ **pending or threatened litigation; or ● Impending bankruptcy or the existence of financial or liquidity problems. Both positive and negative information can be material. Because trading that receives scrutiny will be evaluated after the fact with the benefit of hindsight** , ~~renewals~~ **questions concerning the materiality of particular information should be resolved in favor of materiality** , **and trading should be avoided. If you are unsure whether information is material, you should consult the ComplianceOfficer before making any decision to disclose such information or to trade in or recommend securities to which that information relates or assume that the information is material. Public Availability. Insider trading prohibitions come into play only when you possess information that is material and " nonpublic. " The fact information has been disclosed to a few members of the public does not make it public** ~~or~~ **for insider trading purposes. Nonpublic information may include: ● Information available to a select group of analysts or brokers or institutional investors; ● Undisclosed facts that are the subject of rumors, even if the rumors are widely circulated; and ● Information that has been entrusted to the Company on a confidential basis until a public announcement of the information has been made and enough time has elapsed for the market to respond to a public announcement of the information. If you are aware of material nonpublic information, you may not trade until the information has been disclosed broadly to the marketplace (such as by press release or an SEC filing) and the investing public has had time to absorb the information fully. To avoid the appearance of impropriety, as a general rule, information should not be considered fully absorbed by the marketplace until after the second business day after the information is released. If, for example, the Company were to make an announcement on a Monday, you should not trade in the Company' s securities until Thursday. If an announcement was made on a Friday, Wednesday generally**

would be the first eligible trading day after the announcement. 5. ADDITIONAL GUIDANCE Lipocine considers it improper and inappropriate for those employed by or associated with the Company to engage in short- term ~~extensions~~ , speculative transactions, including derivatives or hedges, in or related to the Company' s securities or in other transactions in the Company' s securities that may lead to inadvertent violations of the insider trading laws. Accordingly, your trading in the Company' s securities is subject to the following additional guidance. Short Sales. Short sales of the Company' s securities evidence ~~any~~ an ~~of~~ expectation on the ~~patents described~~ part of the seller that the securities will decline in value ~~(a)~~ , ~~(b)~~ and therefore signal to the market that the seller has no confidence in the Company or its short- term prospects. In addition, short sales may reduce the seller' s incentive to improve the Company' s performance. ~~or~~ For these reasons, short sales of the Company' s securities are prohibited by this Policy. In addition, Section 16 (c) ~~above;~~ of the Securities Exchange Act of 1934, as amended (~~c~~ the " Exchange Act ") prohibits officers and directors from engaging in short sales. Publicly Traded Options. A transaction in options is, in effect, a bet on the short- term movement of the Company' s stock, and therefore creates the appearance that the director, officer or employee is trading based on inside information. Transactions in options also may focus the director' s, officer' s or employee' s attention on short- term performance at the expense of the Company' s long- term objectives. Accordingly, transactions in puts, calls or other derivative securities involving the Company, on an exchange or in any other organized market, are prohibited by this Policy. (Option positions arising from certain types of hedging transactions are governed by the section below captioned " Hedging Transactions "). Hedging Transactions. Certain forms of hedging or monetization transactions, such as zero- cost collars and forward sale contracts, allow a director, officer or employee to lock in much of the value of his or her stock holdings, often in exchange for all ~~foreign counterparts~~ or part of the potential for upside appreciation in the stock. These transactions allow the director, officer or employee to continue to own the covered securities, but without the full risks and rewards of ownership. When that occurs, the director, officer or employee may no longer have the same objectives as the Company' s other stockholders. Therefore, the Company discourages you from engaging in such transactions. Any person wishing to enter into such ~~any~~ an ~~of~~ arrangement must first pre- clear the ~~patents described in (~~ proposed transaction with the Board of Directors. Any request for pre- clearance of a ~~), (b), (c)~~ hedging or similar arrangement must be submitted to the Chief Financial Officer ~~or~~ for approval at least one week prior ~~(d) above in the Territory; and (f) any patent or patent applications Controlled now or in the future during the Term by Lipocine that constitute Improvements~~ to the ~~inventions described in~~ proposed execution of documents evidencing the ~~patents~~ proposed transaction and must ~~patent applications~~ set forth a justification for the proposed transaction. Exercising Employee Stock Options. You may exercise your vested options to purchase shares of common stock of the Company for cash. However, any sale of those shares is subject to the prohibition on trading in ~~Exhibit~~ the securities under this Policy. This prohibition applies to cashless exercises and sales made to cover any tax liability arising from the exercise of the options. Thus, if you choose to exercise stock options when the Window is closed or you are in possession of material non- public information, then you must hold all of the shares of stock purchased upon such exercise until the Window is open or the inside information is no longer material or is publicly available. Standing Orders. Standing orders should be used only for a very brief period of time. A standing order placed with a broker to sell or purchase stock at a specified price leaves you with no control over the timing of the transaction . A standing order transaction executed by the broker when you are aware of material nonpublic information may result in unlawful insider trading. However, as previously explained in this Policy, trades by individuals in the Company' s securities that are executed pursuant to an Approved 10b5- 1 Plan are not subject to the prohibition on trading on the basis of material nonpublic information contained in this Policy or to the restrictions set forth above relating to pre- clearance procedures and Windows . ~~56 " Licensed Product " means TLANDO ®~~ Margin Accounts and Pledges. Securities held in a margin account may be sold by the broker without the customer' s consent if the customer fails to meet a margin call. Similarly, securities pledged (or hypothecated) as collateral for a loan may be sold in foreclosure if the borrower defaults on the loan. Because a margin sale or foreclosure sale may occur at a time when the pledgor is aware of material nonpublic information or otherwise is not permitted to trade in Company securities, directors, officers and other employees are prohibited from holding Company securities in a margin account or pledging Company securities as collateral for a loan. An exception to this prohibition exists where a person wishes to pledge Company securities as collateral for a loan (not including margin debt) and clearly demonstrates the financial capacity to repay the loan without resort to the pledged securities. Any director or officer of the Company wishing to enter into such ~~and~~ an arrangement must first pre ~~TLANDO ® XR. 1. 57 " Licensed Technology " means the Licensed Patents and Licensed Know-~~ clear ~~How. 1. 58 " Licensed Trademarks " mean~~ the ~~United States trademarks listed in Exhibit A~~ proposed transaction with the Board of Directors . ~~1~~ Any request for pre- clearance of a margin account, pledge, or similar arrangement must be submitted to the Compliance Officer for approval at least one week prior to the proposed execution of documents evidencing the proposed transaction and must set forth a justification for the proposed transaction . ~~59 "~~ 6. POST- TERMINATION TRANSACTIONS This Policy continues to apply to your transactions in Lipocine ~~Indemnitees " shall~~ securities even after you have terminated your employment ~~the meaning ascribed to such term in Section 9. 2. 1. 60 " Losses " means costs and expenses (including, without limitation, reasonable legal expenses and attorneys' fees), judgments, liabilities, fines, damages, assessments and /~~ or other ~~losses incurred~~ services to Lipocine or its affiliates as follows: if you are aware of material nonpublic information when your employment or service relationship terminates, you may not trade in Lipocine securities until that information has become public or is no longer material. In all other respects, the procedures set forth in this Policy will cease to apply to your transactions in Lipocine securities upon the expiration of any closed Window period that is applicable to your transactions at the time of your termination of employment or services. 7. UNAUTHORIZED DISCLOSURE Maintaining the confidentiality of Lipocine ' s information is essential for competitive, security and other business

reasons, as well as to comply with securities laws and the confidentiality obligations you have promised to the Company upon commencing your employment or other affiliation with the Company. You should treat all information you learn about Lipocine or its business plans in connection with **your employment** ~~investigating, defending or asserting any Claim for which indemnification is available hereunder. 1. 61 " NDC " means national drug code number (s)~~ as **confidential** ~~listed by the FDA. 1. 62 " Net Sales " means the gross amounts invoiced and actually recorded by GSL, its Affiliates or Sublicensees, for sales of Licensed Product in the Territory to Third Parties (that are not Sublicensees) in an~~ **and proprietary** ~~arm' s length transaction, in each case, less the following deductions~~ to ~~the extent actually allowed and taken in accordance with US GAAP: (e) normal and customary trade, quantity, prompt pay and cash discounts actually allowed and properly taken directly with respect to sales of Licensed Product; (f) returns, charge- back payments, rebates, fees, and discounts (or equivalents thereof) payable to trade customers, wholesalers, managed health care organizations, pharmacy benefit managers (or equivalents thereof), group purchasing organizations, specialty pharmacy providers, federal, state / provincial, local, or other~~ -- **the Company** ~~governments, or their agencies or purchasers or reimbursers, including Medicaid, Medicare or other government special medical assistance programs and payer fees and discounts offered to patients via patient assistance program (s) (e~~. **Inadvertent disclosure of confidential** ~~g., co- payment program); (g) tariffs, duties, excise, sales, value- added and other taxes (but not taxes based on income); and (h) amounts credited for~~ - **or inside** ~~bad debt or uncollectible amounts on previously sold products, provided that any amount of bad debt or uncollectible amounts subsequently repaid or collected will be deemed Net Sales in the Calendar Quarter in which such repayment or collection is made. For purposes of determining Net Sales, a Licensed Product shall be deemed to be sold when recorded as a sale in accordance with US GAAP, consistently applied. In the case such as barter or counter- trade of a Licensed Product, other than exclusively for money, Net Sales shall be calculated as above on the value of the consideration received or, if higher, on the fair market price of the Licensed Product. Notwithstanding the foregoing, Net Sales shall not include (and a " sale " shall not be deemed to have occurred in the event of) (i) transfers or dispositions of such Licensed Product for clinical purposes, compassionate use or as samples, in each case, without charge, or (ii) GSL' s or any Affiliates' transfer of any Licensed Product to one another or to a Sublicensee, unless such transferee is an end user of the Licensed Product. 1. 63 " Non- Breaching Party " shall have the meaning ascribed to it in Section 11. 2 (b). 1. 64 " Other Licensees " shall have the meaning ascribed to it in Section 3. 5. 1. 65 " Patents " means all: (a) patents and patent applications, including any provisional patent applications, (b) any patent application claiming priority from such patent applications or provisional patent applications, including divisions, continuations, continuations- in- part, additions, (c) any patent that has issued or in the future issues from any of the foregoing patent applications, including any utility or design patent or certificate of invention, and (d) re- issues, renewals, extensions, substitutions, re- examinations or restorations, registrations and revalidations, and supplementary protection certificates and equivalents to any of the foregoing. 1. 66 " Person " means an individual, a corporation, a partnership, an association, a trust, or other entity or organization, including a government or political subdivision or an agency thereof. 1. 67 " Phase IV Trial " means a clinical trial of a pharmaceutical product initiated (i. e. first patient dosing) in the Territory in an approved indication after receipt of Regulatory Approval for such product in such indication in the Territory, to delineate additional~~ information **may expose** ~~about such product' s risks, benefits and optimal use. 1. 68 " Product Marks " shall have the meaning ascribed to it in Section 6. 2 and shall include the Licensed Trademarks. 1. 69 " Prosecution " shall have the meaning ascribed to it in Section 7. 2. 1. 70 " Regulatory Approval " means any approvals (including NDAs, NDSs, supplements, amendments, pre- and post- approvals and price approvals), licenses, registrations or authorizations of any national, regional, state or local regulatory agency, department, bureau, commission, council or other governmental entity, necessary for the manufacture, marketing, distribution, use or sale of Licensed Product in the Territory. 1. 71 " Regulatory Authority " means any regulatory agency, department, bureau, commission, council or other governmental entity involved in granting approvals for the development, manufacturing, marketing, reimbursement and / or pricing of Licensed Product in the Territory. 1. 72 " Regulatory Documents " means all regulatory documents and filings, correspondence with Regulatory Authorities, annual reports and amendments thereto related to Licensed Product in the Territory. 1. 73 " Royalty Report " shall have the meaning ascribed to it in Section 5. 4. 1. 74 means 1. 75 " 1. 76 " Sublicensee (s) " means any Third Party to which GSL or its Affiliate grants rights licensed to GSL pursuant to this Agreement. 1. 77 " Term " means the term of this Agreement as set forth in Section 11. 1. 1. 78 " Territory " means the United States and Canada. 1. 79 " Third Party " means any Person other than~~ Lipocine ~~or GSL or an~~ **and you** ~~Affiliate of either of them. 1. 80 " TLANDO " means the testosterone undecanoate product described in the TLANDO NDA including all forms, compounds, formulations, presentations, specifications, manner of delivery, dosage strengths, line extensions, modifications, developments and Improvements of such product. 1. 81 " TLANDO Development Plan " shall have the meaning ascribed~~ to **significant risk** ~~it in Section 3. 2 (d). 1. 82 " TLANDO NDA " means new drug application 208088 for TLANDO in the United States. 1. 83 " TLANDO NDS " means a new drug submission for the Licensed Product in Canada. 1. 84 " TLANDO XR " means the testosterone tridecanoate product described in the TLANDO XR IND (which, as~~ of ~~the Effective Date, is LPCN 1111 Once Daily Oral TRT and has the proposed brand name TLANDO ® XR), including all forms, compounds, formulations, presentations, specifications, manner of delivery, dosage strengths, line extensions, modifications, developments and Improvements of such product. 1. 85 " TLANDO XR Development Plan " shall have the meaning ascribed to it in Section 3. 2 (b). 1. 86 " TLANDO XR IND " investigational~~ -- **investigation** ~~new drug application 119099 for the TLANDO XR in the United States. 1. 87 " Trademark " means any trade name, service mark, logo or trademark (whether or not registered), together with all goodwill associated therewith, and any renewals, extensions or modifications thereto. 1. 88 " United States " means the United States of America and all of its dependent territories (including without limitation American Samoa, Puerto Rico, Guam, the Northern Mariana Islands, and the United States Virgin Islands).. 1. 89 " US GAAP " means United States generally accepted accounting principles. 1. 90 " Valid Claim " means (a) an~~ **and** ~~unexpired claim of an issued patent within the Licensed Patents that has not been found to be invalid or unenforceable by a court or other authority in the country of the patent, from which decision no appeal is taken or can be~~

taken, or (b) a pending claim in a patent application within the Licensed Patents that has not been abandoned or finally determined to be unpatentable by the applicable patent authority in a ruling or decision from which no appeal is taken or can be taken. article Licenses and Related Rights 2. 1 License Grant; Sublicensing. (a) Subject to the terms and conditions of this Agreement, Lipocine hereby grants to GSL an exclusive (even as to Lipocine and its Affiliate) license, under the Licensed Patents, Licensed Trademarks and the Licensed Know- How solely to Develop, manufacture, have manufactured, and Commercialize Licensed Product within the Field of Use in the Territory during the Term. (b) GSL may sublicense the rights granted to it pursuant to Section 2. 1 (a) to a Sublicensee without the consent of Lipocine. Without limiting the foregoing, GSL shall advise Lipocine of each sublicense agreement and any amendments thereto within of execution, and all sublicenses shall be consistent with the terms and conditions of this Agreement. (c) All licenses and other rights granted to GSL under this Agreement are subject to the rights and obligations of Lipocine under the Agreement. GSL shall comply with all applicable terms and conditions of the Agreement, and shall perform and take such actions as may be required to allow Lipocine to comply with its obligations thereunder, including but not limited to, obligations relating to sublicensing, patent matters, confidentiality, reporting, audit rights, indemnification and diligence; provided, however, that Lipocine shall pay directly to Abbott in accordance with the terms of the Abbott Agreement all royalties due and payable to pursuant to the Agreement based on Net Sales of TLANDO by GSL, its Affiliates and Sublicensees. 2. 2 Limitations on License Rights. GSL hereby covenants and agrees that it and its Affiliates and Sublicensees shall not during the Term: (a) use or practice the Licensed Technology or Licensed Trademarks for any use or purpose other than as expressly permitted by the license granted in Section 2. 1, (b) directly or indirectly, develop, use, promote, market, offer for sale or sell any testosterone replacement therapy product comprising testosterone undecanoate, other than Licensed Product in the Field of Use, and shall not assist any Third Party in doing so, (c) without limiting (b), directly or indirectly, develop, use, promote, market, offer for sale or sell any testosterone therapy where such therapy is manufactured, commercialized and / or prescribed for the purpose of treating liver disease, NASH, cirrhosis, sarcopenia, cachexia, any end stage disease such as chronic kidney disease, end stage renal disease, congestive heart failure, idiopathic pulmonary fibrosis, cancer, muscle disorder, or other indication that is not a deficiency or absence of endogenous testosterone condition, even if any of the foregoing also happens to treat a deficiency or absence of endogenous testosterone condition, and (d) market, promote or sell any Licensed Product outside the Territory or anywhere outside the Field of Use. Further, GSL shall take all reasonable measures to prevent export of Licensed Product from the Territory to any country outside the Territory. All such activities and rights are expressly and exclusively reserved to Lipocine. For the avoidance of doubt, GSL shall not have any right under this Agreement to use or exploit the Licensed Technology for any purpose outside the Field of Use in the Territory or for any purpose outside of the Territory, inside or outside the Field of Use. 2. 3 Limitations on Lipocine Rights. Lipocine hereby covenants and agrees that it and its Affiliates and Other Licensees shall not during the Term: (a) use or practice the Licensed Technology for any use or purpose in the Territory in the Field of Use, (b) use or practice the Licensed Trademarks for any use or purpose in the Territory, and (c) directly or indirectly, develop, use, promote, market, offer for sale or sell any testosterone replacement therapy product comprising testosterone undecanoate in the Territory in the Field of Use, and shall not assist any Third Party in doing so. Further, Lipocine shall take all reasonable measures to prevent export of Licensed Product in the Territory for use in the Field of Use from other countries or jurisdictions. 2. 4 Retained Rights. Notwithstanding the licenses granted to GSL pursuant to Section 2. 1, Lipocine retains all rights under the Licensed Technology: (a) to manufacture testosterone undecanoate and Licensed Product anywhere for Commercialization outside the Territory or Commercialization anywhere outside the Field of Use; (b) as needed to fulfill its obligations under this Agreement; and (c) to conduct research and development activities with respect to testosterone undecanoate and Licensed Product anywhere for use and sale outside the Territory and anywhere outside the Field of Use. 2. 5 Assignments. Lipocine shall assign or cause Antares to assign to GSL all right title and interest in and to the Assigned Domain Names, Assigned Agreements, the TLANDO NDA, and the TLANDO XR IND (the " Assigned Assets ") on or before the Effective Date. GSL hereby accepts the assignment of the rights and obligations with respect to the Assigned Assets and shall comply with all such obligations arising out of the Assigned Assets as of the date assigned to GSL. For the avoidance of doubt, GSL shall have the obligation -- **litigation** to maintain the TLANDO NDA in accordance with Applicable Laws as of the Effective Date . **The timing and nature of** 2. 6 Licensed Trademarks Additional Terms. (a) GSL shall comply with Lipocine' s reasonable instructions as **disclosure of material information** to **outsiders is subject to legal rules,** the **breach of** form and manner in which **could result** the Licensed Trademarks may be used pursuant to this Agreement. GSL shall not alter or modify the Licensed Trademarks in **substantial liability** any manner, without the prior written consent of Lipocine, such consent not to **you** be unreasonably withheld , conditioned or delayed. GSL shall display the **Company** Licensed Trademarks only in connection with the Licensed Product and **its management** shall include all notices and legends with respect to the Licensed Trademarks as are required by applicable federal, state, provincial or local trademark laws or as reasonably requested by Lipocine . **Accordingly** GSL shall , at all times, use Commercially Reaonable Efforts to preserve the value, validity and goodwill associated with the Licensed Trademarks. (b) GSL acknowledges and agrees that it is familiar **important that responses to inquiries about Lipocine by the press, investment analysts or others in the financial community be made on Lipocine' s behalf only through authorized individuals. Please consult Lipocine' s Regulation FD and Corporate Communication Policy for more details regarding its policy on speaking to the media, financial analysts and investors. 8. PERSONAL RESPONSIBILITY You should remember that the ultimate responsibility for adhering to this Policy and avoiding improper trading rests** with **you** the nature and quality of the Licensed Products with which GSL intends to use the Licensed Trademarks . **If you violate this Policy,** Lipocine may request **take disciplinary action against you** , **including dismissing you for cause. 9. SECTION 16 RESTRICTIONS ON DIRECTORS AND EXECUTIVE OFFICERS Directors and Executive Officers of the Company and certain other persons identified by the Company** from time to time , representative examples **must also comply with the reporting obligations and limitations on short- swing transactions set forth in Section 16** of **the Exchange Act, and the**

Lipocine Section 16 Compliance Program administered by the Compliance Officer. The practical effect of these provisions is that Executive Officers, directors and such other persons who purchase and sell the Company' s securities within a six- month period must disgorge all ~~advertising and promotional~~ **profits to the Company whether or not they had knowledge of any** material **nonpublic information. Under these provisions, and so long as certain other criteria are met, neither the receipt of an option under the Company' s option plans, nor the exercise of that option is deemed a purchase under Section 16; however, the sale of any such shares is a sale under Section 16. 10. COMPANY ASSISTANCE Your compliance with this Policy is of the utmost importance both for you and for the Company. If you have any questions about this Policy or its application to any proposed transaction, you may obtain additional guidance from the Compliance Officer at 675 Arapeen Drive, Suite 202, Salt Lake City, Utah 84108 or (801) 994- 7383. Do not try to resolve uncertainties** on ~~which~~ **your own, as** the ~~Licensed Trademarks~~ **rules relating to insider trading** are ~~used~~ **often complex, not always intuitive and carry severe consequences. 11. CERTIFICATION All employees must certify their understanding of, and intent to comply with, this Policy. A copy of the certification that employees must sign is enclosed with this Policy. This Policy is dated as of the date set forth on the first page of the Policy. LIPOCINE, INC. INSIDER TRADING POLICY CERTIFICATION I hereby certify that: 1. I have read and understand the Lipocine Inc. Insider Trading Policy dated [●], 2023** (~~collectively~~ the " ~~Materials~~ **Policy** "). **I understand that the Compliance Officer** ~~GSL agrees to furnish examples of such Materials upon reasonable request~~ and ~~at no cost to~~ **the outside legal counsel of** Lipocine **Inc** . ~~To~~ **(** the ~~extent~~ **" Company ") are available to answer any questions I have regarding the Policy Statement. 2. I agree** that **I will** ~~the use of the Licensed Trademarks as used in the Materials does not~~ comply with the **Policy for as long as I am subject** ~~terms of this Agreement, Lipocine shall have the right~~ to **such policy. 3. I understand that** ~~request modifications to the manner in which the Licensed Trademarks are used in connection with the Materials and GSL shall promptly consider and comply with~~ all ~~reasonable~~ **of my trades must be preapproved by the Compliance Officer identified in the Policy or** such ~~requests~~ **other person as the Company may designate from time to time** . **4** . **I agree** ~~(c) GSL hereby acknowledges~~ that the **Company may** ~~Licensed Trademarks and all goodwill associated therewith are and shall remain the sole property of Lipocine and no rights are conferred upon GSL except as specifically set forth herein. Any and all goodwill arising from GSL' s use of the Licensed Trademarks shall inure solely to the benefit of Lipocine. (d) Except as otherwise contemplated herein, GSL shall not,~~ at any time ~~, adopt or use, without Lipocine' s prior written consent, any mark confusingly similar to the Licensed Trademarks. GSL shall not contest or deny Lipocine' s exclusive ownership of the Licensed Trademarks, the validity or enforceability of the Licensed Trademarks, or oppose or seek to cancel any application or registration for the Licensed Trademarks by Lipocine, or aid others in doing so, either during the term of this Agreement or at any time thereafter. (e) Upon reasonable request by Lipocine, or its successors~~ and ~~assigns, GSL agrees to reasonably cooperate with Lipocine, or its successors and assigns, and execute and deliver without further compensation any and all documents, and / or evidence of use reasonably necessary to secure or maintain protection for the Licensed Trademarks. article Transfer Of Information; Development and Regulatory Matters 3. 1 Product Information Transfer. (a) Licensed Know- How. On the Effective Date, Lipocine will provide to GSL copies of the Licensed Know- How that is relevant to GSL to Commercialize TLANDO in the United States and to Develop, seek Regulatory Approval of, and Commercialize Licensed Product in the Territory to the extent then in Lipocine' s or its Affiliates' possession and Control. The clinical data portion of the Licensed Know- How will be provided to GSL in computer- readable, SAS transport format, where practicable and available, and otherwise in printed format. All other portions of the Licensed Know- How will be provided to GSL in written form, electronically if reasonably practicable and otherwise in hard copy documents. If, during the Term, Licensed Know- How in Lipocine' s possession and Control are identified that is Controlled by Lipocine or its Affiliates and was, as of the Licensed Start Date, related to the Development or Commercialization of Licensed Product in the Territory in the Field of Use as contemplated in this Agreement, and was not previously provided to GSL pursuant to this Section 3. 1 (a), then Lipocine will provide such Licensed Know- How to GSL promptly after such identification. (b) Reserved Rights. Notwithstanding the disclosures in subsection (a) above, it is understood that Lipocine (and its Affiliates and Other Licensees) shall have and retains the full rights to use, review, access, reference and incorporate all Licensed Know- How (including all data and information in Regulatory Documents disclosed to GSL) to satisfy its obligations hereunder and to exercise all of its retained rights. (c) JSC; Development Information Exchange. Promptly after the Effective Date, the Parties will form a Joint Steering Committee (the " JSC "), consisting of two representatives selected by each Party. Each party may replace one or more of its representatives,~~ in its sole discretion **issue** ~~, effective upon written notice to the other Party of such change. The JSC shall meet for consultation and discussion purposes only and does not have any authority beyond the matters expressly set forth in this Agreement, and may not in any way amend or modify the terms or provisions of this Agreement, and may not enter into any agreement. Upon request of either Party (no more than), the Parties will have~~ a **prohibition** ~~meeting of the JSC (which may be a video or telephonic conference, at either Party' s request) to discuss progress regarding the Development and / or Commercialization of Licensed Product in the Territory, and to exchange Information regarding the Development and / or Commercialization status and progress outside Territory and in the Territory and to discuss and exchange Information~~ on **trading in Company securities,** ~~any other matters relating to Licensed Product Development~~ and ~~Commercialization~~ that ~~either Party reasonably requests. The Party who calls the meeting shall prepare and circulate a draft agenda for review. Such meetings may be held with respect to specific Development and Commercialization subject matters (e. g., non- clinical, clinical, CMC, manufacturing). In addition, a Party may request that the other~~ -- **the Company** ~~Party include in any JSC meeting its contract manufacturer, CRO and other relevant Person working on Licensed Product Development and / or Commercialization, to participate in the meeting to the extent important to such requesting Party' s Development and / or Commercialization activities, and the other Party will use reasonable efforts to accommodate such request.. The JSC shall keep reasonable minutes of all matters discussed and decisions made at the JSC meetings. The Party who hosts or requests the JSC meeting shall prepare the minutes of the meeting and circulate such minutes to the other Party or approval within of the JSC meeting. 3. 2 Pharmaceutical~~

Development in Territory. (a) As of the Effective Date, GSL shall have **full power** sole control over and decision- making authority with respect to **cancel any outstanding orders** the Development of the Licensed Product in the Field in the Territory , including **good until cancelled orders** the conduct of any clinical trials (including Phase 4 Trials) necessary to obtain and maintain Regulatory Approval of the Licensed Product in the Field in the Territory. All Data obtained from Clinical Trials conducted by GSL shall be GSL Product Information. (b). (c). (d) (e). 3. 3 Communications with Regulatory Authorities. From and after the Effective Date , **that I may place** except as otherwise set forth in this Agreement or the Antares TSA , **but I understand that I** GSL shall be responsible for all contacts with Regulatory Authorities with respect to Licensed Product in the Territory within the Field of Use. GSL shall have the responsibility, subject to the terms of this Agreement, to prepare and submit (a) all regulatory filings with Regulatory Authorities in the Territory as needed to conduct its Development, manufacture and Commercialization of Licensed Product in the Territory in the Field of Use, and (b) all applications to obtain Regulatory Approvals in the Territory. All such regulatory submissions shall be in compliance with all Applicable Laws. GSL shall keep Lipocine informed of all material developments regarding all such regulatory activities, shall provide to Lipocine copies of all regulatory submissions (including applications for Regulatory Approval) in the Territory and of all responses from Regulatory Authorities, shall provide Lipocine reasonable advance notice of any meetings or scheduled discussions with Regulatory Authorities in the Territory regarding Licensed Product, and shall update Lipocine as reasonably requested as to all progress and results of all such regulatory filings and meetings. Lipocine shall have the right to comment on all draft regulatory submissions, and GSL shall reasonably consider all such comments. GSL shall disclose and when requested, provide to Lipocine all regulatory and related Development Information, including Regulatory Authority communications, protocol submissions, annual reports, and licensing applications in a reasonable timeframe. 3. 4 Regulatory Filings. GSL shall prepare, file and maintain with the appropriate Regulatory Authorities in the Territory, at its sole expense and in its own name, all documents (including all INDs) that are necessary to conduct any needed clinical studies of the Licensed Product for Regulatory Approval in the Territory in the Field of Use, and any other applications for Regulatory Approval that are needed to market and sell Licensed Products in the Field of Use in the Territory. Promptly after the submission of each such regulatory filing, GSL shall notify Lipocine that such regulatory filing has been made, and upon Lipocine' s request, GSL shall provide Lipocine with a copy of each such filing in English. 3. 5 Information Exchange with Other Licensees. It is understood that Lipocine may enter into one or more license agreements with Third Parties (collectively " Other Licensees ") regarding license rights to TLANDO and / or TLANDO XR for development, use and / or sale outside the Territory or anywhere outside the Field of Use. In order to facilitate coordination of Development of Licensed Product on a worldwide basis, GSL agrees to use Commercially Reasonable Efforts to comply with reasonable requests by Lipocine to be consistent with the Development plans of Other Licensees on a worldwide basis. To that end, GSL and Lipocine will use reasonable efforts to discuss such coordination with GSL' s Development efforts on TLANDO. To the extent necessary for such coordination, Lipocine will use reasonable efforts to set up an information exchange network among Lipocine, its Other Licensees, contract manufacturers and GSL so that each of such parties will be able to exchange the necessary information needed by each such party. By way of example, with regard to the adverse event information, GSL will set up, maintain and manage a worldwide quality and adverse event reporting system network so that, for example, Lipocine, its Other Licensees and GSL can submit adverse event information to the applicable Regulatory Authority promptly in accordance with the regulatory requirements in their respective territory. To the extent pre- approved by Lipocine in writing, Lipocine and its Other Licensees will compensate GSL the direct costs (administrative, personnel, and IT systems) accrued by GSL to capture, maintain and report adverse event, quality or other information to the applicable Regulatory Authority outside the Territory. Aggregate direct costs will be compensated to GSL on a quarterly basis, one quarter in arrears to the accrual of these costs. 3. 6 Event Reporting. Each Party shall be responsible for reporting all Events (as defined below) associated with the Development or Commercialization of Licensed Product in its respective territory (as to GSL, the Territory and, as to Lipocine, outside the Territory) to the appropriate Regulatory Authorities in its respective territory, in accordance with all Applicable Laws, and shall provide the other Party copies of all such reports promptly after filing with the Regulatory Authorities. Additionally, in the event either Party receives information regarding Events related to the use of Licensed Product, such Party shall promptly provide the other Party with such information in accordance with the separate Safety Agreement to be entered into by the Parties promptly. For purposes of this Section 3. 6, " Event " shall mean any Licensed Product complaint, adverse event or adverse drug reaction, including malfunctions, product failure, improper or inadequate design, manufacturer labeling, quality control or user error reported during the use of the Licensed Product by or on behalf of a Party, its Affiliates, Sublicensees and customers (including end users purchasing Licensed Product or using Licensed Product purchased from any of the foregoing). Each Party shall notify the other Party immediately of any Information received regarding any threatened or pending action by any public authority that may affect or related to the safety, efficacy, or other labeling claims of any Licensed Product. Without limiting the foregoing, the Parties shall negotiate in good faith and enter into a pharmacovigilance agreement consistent with this Section 3. 6. 3. 7 Rights of Reference. Each Party shall provide the other Party in writing letters of reference, granting that other Party (and its Affiliates, Sublicensees and Other Licensees) the right of reference for all purposes relating to Development or Commercialization of Licensed Product in their respective territories (for GSL, the Territory in the Field of Use, and for Lipocine, outside the Territory or anywhere outside the Field of Use) with respect to all filings with Regulatory Authorities made by or on behalf of the providing Party, its Affiliate, Other Licensees or Sublicensees relating to Licensed Product, and to all Regulatory Approvals, including, in the case of Lipocine as the referencing Party, to the TLANDO NDA and TLANDO XR IND. Such letters of reference shall expressly permit the receiving Party, to transfer such rights to its Affiliates and Other Licensees or Sublicenses, as the case may be, and allow such entities the right of reference to all such filings and Regulatory Approvals in the respective territories and fields of use and such rights of reference shall expressly be binding on any assignee or transferee of the providing Party' s rights to such filings and Regulatory Approvals under this Agreement. If a Regulatory Authority requires access to certain portions of any such filings, registrations and approvals related to Licensed

Product for legal or regulatory purposes in connection with the receiving Party or its Affiliate' s or Other Licensee' s or Sublicensees' Development and / or Commercialization efforts, including without limitation, for filing patent- related submissions, then the providing Party shall cooperate with such Regulatory Authority and make such portions available to the Regulatory Authority and, if legally required for the receiving Party to submit or pursue an application for Regulatory Approval, to the receiving Party (or its Affiliate or Other Licensee or Sublicensee) solely for such purpose. 3. 8 Recall Matters. GSL shall observe and conform at all times with all legal requirements in order to maintain an effective system for the recall from the market in the United States and Canada of any Licensed Product used or sold in the United States and Canada. GSL will be responsible for conducting, in accordance with all Applicable Laws, all withdrawals or recalls of Licensed Product used or sold in the United States and Canada in the Field of Use, and will provide Lipocine with reasonable notice under the circumstances of such intended withdrawal or recall in an appropriate time, to the extent practicable, for Lipocine and GSL to discuss such intended action. 3. 9 Returns. GSL shall be responsible for any and all returns that shall arise in connection with sales / distribution of the Licensed Product by GSL, its Affiliates and Sublicensees; provided that Antares shall be entitled to direct any such activities related to Licensed Product bearing Antares' NDC that was sold by GSL, its Affiliates and Sublicensees as permitted by the Antares TSA. 3. 10 Commercialization Diligence. GSL shall use Commercially Reasonable Efforts to Commercialize the Licensed Products in the Territory within the Field of Use to maximize sales. Without limiting the foregoing and subject to Lipocine complying with its obligations under this Agreement, GSL shall (i) begin to Commercialize (including the sale of) TLANDO in the United States on February 1, 2024, and (ii) conduct any post marketing requirements of and commitments to the Regulatory Authorities. Commencing from the Effective Date with respect to TLANDO in the United States, and at least prior to the projected Commercial Launch of a Licensed Product in the Territory, GSL shall deliver to Lipocine a Commercialization Plan for the Licensed Product for review and comment, and provide Lipocine copies of any material revisions or amendments thereto made by GSL prior to Commercial Launch of the Licensed Product by GSL, its Affiliates or Sublicensees. GSL shall Commercialize the Licensed Product in accordance with the Commercialization Plan. After Commercial Launch of a Licensed Product, on a GSL shall submit an updated Commercialization Plan to Lipocine for its review and comment. Each Commercialization Plan shall include and GSL shall provide Lipocine with GSL shall assume sole responsibility for **compliance** all reporting obligations to governmental authorities and rebate counterparties in connection with Licensed Product sold after February 1, 2024. 3. 11 Reports. after the **Policy. I further agree** end of each Calendar Quarter during the Term, GSL shall provide to Lipocine a written report concerning its (and its Affiliates' and Sublicensees', if applicable) efforts **represent that I will never trade in Company securities while I am in possession of material nonpublic information** regarding Development and Commercialization of the **Company. 5. This certification constitutes consent** Licensed Product in the Territory as carried out during and as planned for the **Company** next and the results of such efforts, which shall be consistent with the applicable Development Plan and Commercialization Plan,. article Supply of Licensed Product 4. 1 Manufacture of Licensed Product on behalf of GSL. GSL shall, at its sole discretion, cost and expense, manufacture or have manufactured Licensed Product for Regulatory Approval and Commercialization of the Licensed Product in the Territory within the Field of Use. Upon the assignment of Supply Agreement to **issue** GSL, GSL shall procure its supply of Licensed Product from in accordance with the terms of Supply Agreement or any **necessary stop- transfer orders to** other -- **the Company** Third Party contracted by GSL for which GSL obtains Regulatory Approval. 4. 2 Purchased Inventory. Without limiting Section 4. 1, GSL shall have the right to purchase from Antares Available Inventory in accordance with the terms and conditions set forth in the Antares TSA. GSL acknowledges and agrees that GSL ' s sale of Licensed Product bearing Antares Trademarks and NDC Numbers are subject to the terms and conditions of the Antares TSA. GSL acknowledges and agrees that any Available Inventory will be supplied to GSL " as- is ". LIPOCINE MAKES NO REPRESENTATIONS, GUARANTEES OR WARRANTIES OF ANY KIND, IMPLIED OR EXPRESSED, WITH RESPECT TO THE AVAILABLE INVENTORY, INCLUDING, WITHOUT LIMITATION, ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, ALL OF WHICH ARE SPECIFICALLY DISCLAIMED. 4. 3 GSL Supply of Licensed Product to Lipocine. Lipocine may request from time to time that GSL or its Affiliate sell Licensed Product to Lipocine for use outside the Territory or anywhere outside the Field of Use (" GSL- Supplied Product ") at a price equal to GSL' s Third Party cost of goods sold, plus an administration fee not to exceed. GSL MAKES NO REPRESENTATIONS, GUARANTEES OR WARRANTIES OF ANY KIND, IMPLIED OR EXPRESSED, WITH RESPECT TO GSL- SUPPLIED PRODUCT IT SELLS TO LIPOCINE, INCLUDING, WITHOUT LIMITATION, ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, ALL OF WHICH ARE SPECIFICALLY DISCLAIMED. Notwithstanding the foregoing, GSL shall use Commercially Reasonable Efforts to assist Lipocine in enforcing any warranties made by or obligations of, the manufacturer of the GSL- Supplied Product. Lipocine reserves the right to purchase Licensed Product for use outside the Territory or anywhere outside the Field of Use directly from or any other Third Party. 4. 4 article Consideration; Payments; Reports 5. 1 License Fee. GSL shall pay to Lipocine by wire transfer **agent to enforce compliance with the Policy. Signature** a nonrefundable, noncreditable licensing fee of Eleven Million Dollars ($ 11, 000, 000) payable as follows : _____ **Print Name** (a) Two Million Five Hundred Thousand Dollars ($ 2, 500, 000) on the Signing Date; (b) Five Million Dollars ($ 5, 000, 000) on the Effective Date; (c) Two Million Five Hundred Thousand Dollars ($ 2, 500, 000) no later than January 1, 2025; and (d) One Million Dollars ($ 1, 000, 000) no later than January 1, 2026. 5. 2 Milestone Payments. GSL shall pay to Lipocine a one- time milestone payment in the amounts set forth below for the achievement of the applicable Development events and sales milestones with respect to Licensed Product in the United States and Canada by GSL, its Affiliates and / or Sublicensees : _____ Milestone Event one- time Milestone Payment Amount Approval of an TLANDO NDS in Canada by Health Canada Approval of an NDA for TLANDO XR by the FDA Upon the Upon Upon annual Net Sales of Licensed Product exceeding for the first time in a Calendar Year Upon annual Net Sales of Licensed Product exceeding for the first time in a Calendar Year Upon annual Net Sales of Licensed

Product exceeding for the first time in a Calendar Year Upon annual Net Sales of Licensed Product exceeding for the first time in a Calendar Year Upon annual Net Sales of Licensed Product exceeding for the first time in a Calendar Year Upon annual Net Sales of Licensed Product exceeding for the first time in a Calendar Year Upon annual Net Sales of Licensed Product exceeding for the first time in a Calendar Year Upon annual Net Sales of Licensed Product exceeding for the first time in a Calendar Year Upon annual Net Sales of Licensed Product exceeding for the first time in a Calendar Year For clarity, (i) activities by GSL' s Affiliates or Sublicensees that, individually or collectively with GSL, achieve any of the above milestone events shall be deemed to meet the milestone, and (ii) if more than one sales milestone is met during a Calendar Year, the milestone payment for each milestone shall be payable. By way of example, The payments set forth in Section 5. 2 corresponding to each commercial sales milestone event shall only be payable one (1) time with respect to any and all Licensed Product developed under this Agreement. For clarity, if a milestone is achieved by the aggregate Net Sales of TLANDO and such milestone payment is made, then no repeat milestone payment is due for such milestone if such milestone is later achieved for a second time based on the Net Sales of TLANDO XR. For further clarity, the Net Sales of TLANDO XR shall be aggregated with the Net Sales of TLANDO to determine when any unpaid milestone has been achieved. Each such milestone payment hereunder shall be paid to Lipocine within after meeting the applicable milestone event with respect to such milestone payment. All such milestone payments shall be nonrefundable and noncreditable against any other fees or payments due Lipocine under this Agreement. 5. 3 Royalties. (a) GSL shall pay royalties to Lipocine on sales of Licensed Product in the United States and Canada by GSL, its Affiliates and Sublicensees, such royalties as a percentage of Net Sales of Licensed Product, at the following royalty rates, which depend on the aggregate amount of Net Sales of all Licensed Product sold in the United States and Canada in the applicable Calendar Year: Annual Net Sales Royalty Rate On all annual Net Sales 12 % On all annual Net Sales above but below 14 % On all annual Net Sales above 16 % (b) The royalty rates set forth in subsection (a) above shall each be increased by two percent (2 %) (i. e. to 14 %, 16 % and 18 %) for Net Sales made after (c) The foregoing royalties shall be paid with respect to sales of the Licensed Product in the Territory by GSL, its Affiliates and Sublicensees, until the expiration of the Term. (d) (c) 5. 4 Payments; Reports. Payment of all sums due to Lipocine under this Article 5 shall be made to Lipocine by wire transfer, or electronic funds transfer (EFT), to the Lipocine' s following bank account (or to such other account as specified by Lipocine in writing): Royalty reports of the sale of Licensed Product for each Calendar Quarter will be calculated and delivered to Lipocine under this Agreement within of the end of each such Calendar Quarter (each, a " Royalty Report "); provided, however, that GSL shall provide to Lipocine a written estimate of Net Sales in a Calendar Quarter no later than after the end of such Calendar Quarter in order for Lipocine to comply with its SEC reporting obligations.. Royalties to be paid pursuant to a Royalty Report shall be due and payable by GSL within after receipt of invoice from Lipocine and shall be paid in US Dollars. GSL shall, and shall cause its Affiliates and Sublicensees to, keep complete and accurate records pertaining to the sale or other disposition of Licensed Product in sufficient detail to permit Lipocine to confirm the accuracy of all payments due hereunder. 5. 5 Late Payments. Any amounts owed and not paid by GSL when due under this Agreement shall be subject to interest from and including the date payment is due through and including the date upon which GSL has made a wire transfer of immediately available funds as set forth in Section 5. 4, at a per annum interest rate equal to the Prime Rate, as most recently published by the Wall Street Journal, plus. 5. 6 Tax Cooperation. The Parties agree to cooperate with one another and use reasonable efforts to avoid or reduce tax withholding or similar obligations in respect of all license fees, royalties, milestone payments, and other payments made by GSL to Lipocine under this Agreement. 5. 7 Audit. GSL and its Affiliates shall keep complete and accurate records of the underlying revenue and expense data relating to the calculations of Net Sales and payments required under this Agreement for from the end of the Calendar Quarter in which the Net Sales were accrued. Lipocine shall have the right, at its own expense and no more than once per year, to have an independent, certified public accountant, selected by Lipocine and reasonably acceptable to GSL, review all such records upon reasonable notice and during regular business hours and under obligations of strict confidence, for the sole purpose of verifying the basis and accuracy of payments required and made under this Agreement within the prior period, and identifying any inaccuracies. The Audit shall be completed within a time period which GSL shall act in good faith providing reasonable efforts to support the timeline. No Calendar Quarter may be audited more than one time. Notwithstanding the foregoing, Before beginning its audit, the independent public accountant shall enter into a confidentiality agreement acceptable to GSL pursuant to which such independent public accountant shall keep confidential all information reviewed during such audit. The independent public accountant shall disclose to each Party (a) the accuracy of Net Sales reported and the basis for royalty and other payments made to Lipocine under this Agreement and (b) the difference, if any, such reported and paid amounts vary from amounts determined as a result of the audit GSL shall be entitled to receive a copy of each audit report promptly from the appointed Auditor. Should the inspection show a payment inaccuracy to Lipocine' s detriment, then GSL shall pay the amount of the discrepancy within days after being notified thereof and upon receipt of an invoice. Lipocine shall pay the costs of the inspection unless the discrepancy to Lipocine' s detriment is the greater of for the period audited, in which case GSL shall pay to Lipocine the actual costs charged by such accountant for such inspection. In case of an overpayment by GSL, Lipocine shall issue a credit to GSL for the reported overpayment. articleCommercialization of Licensed Products 6. 1 Territory Commercialization Activities. GSL (itself or through an Affiliate) shall be responsible for all sales, marketing, and promotional activities for the Licensed Product (s) in the Territory in the Field of Use in accordance with this Agreement and the Commercialization Plan and shall bear all related costs and expenses. 6. 2 Trademarks. GSL shall use the Licensed Trademarks when Commercializing of the Licensed Product in the Territory in the Field of Use. In addition, GSL shall have the right to select use and / or register one or more Trademark (s) for use in connection with the Commercialization of Licensed Product in the Territory in the Field of Use (the " Product Marks "), provided that no such Product Mark shall be confusingly similar to the Licensed Trademarks or any other Trademarks owned by Lipocine or its Affiliate. GSL shall own any such Product Mark that is created by GSL for the Licensed Product in the Territory for the Field of Use, and will directly seek to register, use, control and maintain the Product

Mark (s) (other than the Licensed Trademarks) in the Territory, at its expense. article Intellectual Property 7. 1 Ownership of Information and IP. (a) Lipocine shall remain the owner of and have control over all Licensed Know- How and all Licensed Patents, and including all Improvements, modifications or additions thereto made, created, developed or discovered by or on behalf of Lipocine or its Affiliate pursuant to or relating to this Agreement, which rights are subject only to the license rights granted in Section 2. 1. For clarity, Lipocine shall not own or have control over any Improvements, modifications or additions to the Licensed Know- How and Licensed Patents made, created, developed or discovered by GSL in the course of carrying out its obligations under this Agreement, except as otherwise expressly set forth in Section 11. 3 (b). (b) GSL shall own and control the GSL Technology, except as otherwise expressly set forth in Section 11. 3 (b). (c) The Parties shall jointly own all Joint Inventions (including Joint Improvements). Subject to the rights granted by a Party to the other Party hereunder, (i) neither Party will have any obligation to obtain any approval or consent of, nor pay a share of the proceeds to or account to, the other Party to practice, enforce, license, assign or otherwise exploit any Joint Inventions (including Joint Improvements), and each Party hereby waives any right it may have under the laws of any jurisdiction to require such approval, consent or accounting; and (ii) each Party hereby grants to the other Party a nonexclusive, royalty- free, worldwide license, with the right to grant sublicenses through multiple tiers (except as otherwise expressly provided in this Agreement) under their undivided interest in the Joint Inventions (including Joint Improvements), to exploit the Joint Inventions subject to the terms and conditions of this Agreement. 7. 2 Prosecution and Maintenance. Lipocine will have the sole responsibility and discretion, using its Commercially Reasonable Efforts, for the filing, prosecution, and maintenance of the Licensed Patents and Patents associated with Joint Inventions before the patent authorities in the Territory (the " Prosecution "), including conducting or defending any interferences or similar proceedings and in obtaining and maintaining any patent extensions, supplementary protection certificates and the like with respect to the Licensed Patents. All costs and expenses in relation to any Prosecution in the Territory shall be borne by Lipocine. Lipocine will consult with GSL reasonably regarding such Prosecution efforts and shall consider and take into account any reasonable GSL comments with regards to such efforts. To that end, Lipocine will keep GSL reasonably informed of the progress with regard to Prosecution activities in the Territory, to the extent such progress reasonably relates to the claims in the Licensed Patents that relate to the Licensed Product and are licensed to GSL under this Agreement. 7. 3 Infringement by Third Parties. (a) If either Party becomes aware of any infringement, misappropriation, or violation, actual or suspected, of the Licensed Technology or Licensed Trademarks by a Third Party in the Territory in the Field of Use, including with respect to any ANDA litigation claims under the Drug Price Competition and Patent Tenn Restoration Act of 1984 (Public Law 98- 417, known as the Hatch- Waxman Act), as amended (a " Field Infringement "), it shall promptly give notice to the other Party in writing specifying the particulars of the suspected infringement. (b) (c) 7. 4 Defense. Each Party shall promptly notify the other Party upon receiving written notice of any potential infringement, or any Third Party claim or action against Lipocine or GSL or any of their Affiliates, Sublicensees or Other Licensees for possible infringement, of a Third Party patent right resulting from the Development or Commercialization of Licensed Product in the Territory in the Field of Use. Subject to the indemnification and defense obligations of the Parties under Article 9, each Party shall be responsible for defending, and shall control the defense of, any such action brought against such Party. The Parties shall confer with each other and cooperate in the defense of any such action whether or not both Lipocine and GSL are named parties. Neither Party shall enter into any settlement of any action under this Section 7. 4 that materially negatively affects the other Party or its rights or interests under this Agreement without such other Party' s written consent, which consent shall not be unreasonably withheld or delayed. 7. 5 Third Party Declaratory Judgment or Patent Challenges. If a Third Party asserts, in a declaratory judgment action, administrative proceeding (e. g. inter parties review), or similar action, that a Licensed Patent is invalid or unenforceable, then the Party first becoming aware of such action or claim shall promptly give written notice to the other Party. Lipocine shall have the first right, but not obligation, to defend against such action or claim. If Lipocine elects to not defend against such action or claim, GSL shall have the right, but not an obligation, to defend against such action or claim. Any costs and expenses with respect to such defense with respect to such Licensed Patent shall be borne by the defending Party. 7. 6 Cooperation. Each Party agrees to reasonably cooperate with the other Party in the filing, prosecution, maintenance, defense and enforcement of Licensed Patents, as set forth in this Article 7, including joining an action or proceeding if reasonably requested, signing any necessary legal papers, and providing the other Party with data or other information reasonably requested in support thereof. Each Party shall keep the other Party reasonably informed of the substantive developments with respect to any enforcement or defensive actions under this Article 7 regarding Licensed Patents. In the event that one Party but not the other initiates, maintains, prosecutes, defends and / or controls litigation pursuant to section 7. 2 (b), the opposite Party shall reasonably cooperate with the first Party in the litigation. 7. 7 Marking. All Licensed Products shall be marked with the patent numbers of issued patents within Licensed Patents that cover such Licensed Products, to the extent permitted by law in the Territory. 7. 8 Settlement. GSL acknowledges that Lipocine and have entered into a Confidential Settlement Agreement, dated July 13, 2021, attached hereto as Exhibit C (the " Settlement Agreement "). Lipocine acknowledges and agrees that GSL' s written consent shall be required for any amendment to the Settlement Agreement. GSL acknowledges and agrees that the Settlement Agreement sets forth certain terms and conditions related to the Patents, including as set forth in Sections 2. 3, 2. 4, 2. 6, and 6. 6 of the Settlement Agreement. Without limiting the foregoing, GSL shall not have any right under this Agreement to, and shall not assist any Person to or request Lipocine to, enforce any Patent including the Licensed Patents against, its affiliates, directors, officers, employees, agents, representatives, heirs, assigns, predecessors, successors, licensees (of the Patents relating to oral testosterone undecanoate products), marketing partners, manufacturers, importers, suppliers, distributors, and customers (collectively the " Parties ") with respect to an oral testosterone undecanoate product in the Field of Use. GSL agrees not to, and shall not assist any Person to or request Lipocine to, challenge the validity or enforceability of any Patents claiming oral testosterone undecanoate products in the Field of Use, and GSL further agrees not to, and shall not assist any Person to or request Lipocine to assist it to, commercialize a generic version of Jatenzo ® or a generic version of any oral testosterone undecanoate product in the Field of Use that references a NDA

Controlled by, per the terms of Section 2. 6 of the Settlement Agreement. GSL further agrees that the Governing Law and Venue of the Settlement Agreement shall be governed by the laws of the State of Delaware, and GSL agrees not to make any public statements or take actions to disparage the name of, per the terms of Section 6. 6 of the Settlement Agreement. article Representations, Warranties And Covenants 8. 1 Representations and Warranties of Lipocine. Lipocine hereby represents and warrants to GSL as follows: (a) Corporate Existence and Power. Lipocine is a corporation duly organized, validly existing and in good standing under the laws of the State of Delaware, U. S. A, and has full corporate power and authority and the legal right to own and operate its property and assets and to carry on its business as it is now being conducted. (b) Authority and Binding Agreement. Lipocine has the requisite corporate power and authority and the legal right to enter into this Agreement and perform its obligations hereunder. Lipocine has taken all necessary corporate action on its part required to authorize the execution and delivery of the Agreement and the performance of its obligations hereunder. The Agreement has been duly executed and delivered by Lipocine and constitutes a legal, valid and binding obligation of Lipocine that is enforceable against it in accordance with its terms subject to applicable bankruptcy, insolvency, fraudulent conveyance, reorganization, moratorium and similar Laws affecting creditors' rights generally and subject, as to enforceability, to general principles of equity. (c) No Violation. The execution, delivery and performance of its obligations under this Agreement by Lipocine does not (i) contravene any provision of its constating or organizational documents; (ii) violate or result in a breach of any material agreement or other binding instrument, including, without limitation, the Antares TSA an the Settlement Agreement, to which it is a party or by which it may be bound, constitute a default (or an event that with notice or lapse of time or both would become a default), result in the termination of, or accelerate the performance required by, or result in a right of termination, purchase, sale, cancellation, modification or acceleration under any of such agreement or other binding instrument, nor (iii) violate or conflict with any Applicable Laws. Further, Lipocine has no knowledge or belief that the exercise of GSL' s rights under the license granted under section 2 will infringe any Third Party intellectual property rights but rather, believes that the exercise of GSL' s rights under the license granted under Section 2 will not infringe any Third Party intellectual property rights. (d) Patent Rights. Lipocine Controls the Licensed Patents listed on Exhibit A, has the right to grant the license under the Licensed Technology granted in Section 2. 1 and has not assigned, transferred, conveyed or licensed its right, title and interest in the Licensed Technology in the Territory in the Field of Use in a manner inconsistent with such license or the other material terms of this Agreement. Lipocine has no knowledge or belief that the Licensed Patents in the Territory are invalid or unenforceable. Lipocine has no knowledge or belief that any Third Party is challenging (or intends to challenge) the validity or enforceability of the Licensed Patents in the Territory. (e) Litigation. There is no action, suit, claim, investigation or other legal proceeding pending or, to Lipocine' s knowledge or belief, threatened against Lipocine, its Affiliates or Other Licensees, which could challenge or seek to prevent, enjoin or otherwise delay Lipocine from fulfilling its obligations hereunder or that alleges that Lipocine' s activities with respect to the Licensed Products have infringed any of the intellectual property rights of any Third Party. (f) as of the Effective Date, the Assigned Agreements represent all of Lipocine' s material agreements with Third Parties as of the Effective Date that are specifically and substantially directed to the Licensed Products; (g) as of the Effective Date, to Lipocine' s knowledge, it has made available to GSL a copy of (i) all relevant material data and information with respect to the Licensed Products, (ii) any material correspondence to and from any Regulatory Authority concerning the Licensed Products (including, but not limited to, with respect to the termination, suspension or material modification of any Clinical Trials of the Licensed Products) and (iii) all adverse event files and complaint files related to the Licensed Products that were reported to the FDA, with respect to the foregoing subclauses (i)- (iii), that are in the possession of Lipocine as of the Effective Date. (h) to its knowledge, as of the Effective Date, all filings with and submissions to the FDA made by Lipocine related to the Licensed Products, whether oral, written or electronically delivered, were true, accurate and complete in all material respects as of the date made, and, to the extent required to be updated, as so updated remain true, accurate and complete in all material respects as of the date hereof and do not materially misstate any of the statements or information included therein, or omit to state a material fact necessary to make the statements therein not misleading; (i) to Lipocine' s knowledge, the Licensed Patents listed on Exhibit A represent all Patents Controlled by Lipocine as of the Effective Date that are necessary or reasonably useful for GSL' s Development, Manufacture or Commercialization of the Licensed Products as contemplated by this Agreement; (j) as of the Effective Date, it is the sole and exclusive owner of the entire right, title, and interest in the Licensed Patents listed on Exhibit A, and to its knowledge and belief, the Licensed Patents are free of any encumbrance, lien, or claim of ownership by any Third Party; (k) to its knowledge, all Development and Manufacture of the Licensed Products prior to the Effective Date has been performed in all material respects with Applicable Law (including GMP, as applicable); (l) to its knowledge, all Clinical Trials conducted on the Licensed Products prior to the Effective Date have complied in all material respects with all Applicable Law (and all Data was collected and maintained in accordance in all material respects with all applicable Data Security and Privacy Laws); (m) as of the Effective Date: **EXHIBIT** (i) Lipocine has not received any written communication, or, to its knowledge and belief, been named in any proceeding, alleging or implying that Lipocine' s, or its Affiliates and / or Other Licensees' use of the Licensed Technology is infringing or misappropriating any intellectual property of a Third Party or Person; (ii) no action has been instituted or, to Lipocine' s knowledge and belief, threatened relating to any Licensed Technology; and (iii) to Lipocine' s knowledge and belief no Licensed Technology is subject to any proceeding or outstanding order or stipulation restricting in any way the use, transfer, or licensing by GSL, or which may adversely affect the validity, use, or enforceability of such Licensed Technology; (n) to its knowledge, as of the Effective Date, there is no unauthorized use, infringement or misappropriation of any of the Licensed Technology by any Person, including any employee, former employee, independent contractor or consultant of Lipocine, except as would not, individually or in the aggregate, result in a material adverse effect on Lipocine nor GSL' s rights under this Agreement; (o) the execution, delivery and performance by Lipocine of this Agreement and its compliance with the terms and provisions hereof does not, to its knowledge, violate or result, in any material respect, in a breach of or default under any binding obligation or agreement of Lipocine existing as of the

Effective Date; (p) as of the Effective Date, the TLANDO XR IND is the IND covering TLANDO XR; (q) other than the Agreement, there are no other Third Party agreements pursuant to which Lipocine owes royalties with respect to the Licensed Technology or Licensed Products in the Territory in the Field of Use. (r) Disclaimer. Except as expressly set forth in this Section 8. 1, All INTELLECTUAL PROPERTY RIGHTS, ASSETS, materials and information provided TO GSL under THIS AGREEMENT are being provided " as is " and without any representations or warranties. Except as expressly set forth above in this Section 8. 1, Lipocine makes no representations or warranties, EXPRESS OR IMPLIED, of any kind, INCLUDING as to MERCHANTABILITY, FITNESS FOR A PARTICULAR USE OR NON- INFRINGEMENT. Specifically, EXCEPT AS EXPRESSLY SET FORTH ABOVE IN THIS SECTION 8. 1 Lipocine does not warrant the validity or enforceability of the Licensed PatentS, or that the Licensed Patents or Licensed Know- How may be exploited without infringing other patents or other intellectual property rights of Third Parties. 8. 2 Representations and Warranties of GSL. GSL hereby represents and warrants to Lipocine as at the Effective Date as follows: (a) Corporate Existence and Power. GSL is a corporation duly organized, validly existing and in good standing under the laws of Ireland, and has full corporate power and authority and the legal right to own and operate its property and assets and to carry on its business as it is now being conducted. (b) Authority and Binding Agreement. GSL has the requisite corporate power and authority and the legal right to enter into this Agreement and perform its obligations hereunder. GSL has taken all necessary corporate action on its part required to authorize the execution and delivery of the Agreement and the performance of its obligations hereunder. The Agreement has been duly executed and delivered by GSL and constitutes a legal, valid and binding obligation of GSL that is enforceable against it in accordance with its terms subject to applicable bankruptcy, insolvency, fraudulent conveyance, reorganization, moratorium and similar Laws affecting creditors' rights generally and subject, as to enforceability, to general principles of equity. (c) No Conflict. The execution, delivery and performance of this Agreement by GSL does not conflict with, and would not result in a breach of, any material agreement, instrument or understanding, oral or written, to which it is a party or by which it may be bound, nor violate any material law or regulation of any court, governmental body or administrative or other agency having jurisdiction over it. (d) Permits. GSL will maintain all licenses, authorizations, and permissions necessary under Applicable Law for meeting and performing its obligations under this Agreement. (e) Accounting Standards. GSL will maintain a commercially reasonable system of internal accounting controls in compliance with Applicable Laws and US GAAP. 8. 3 Additional Covenants (a) Anti-Bribery and Anti- Corruption Compliance. (i) Neither Party has directly or indirectly, offered, promised, paid, authorized or given, nor will in the future, offer, promise, pay, authorize or give, money or anything of value, directly or indirectly, to any Government Official (as defined below) or Other Covered Party (as defined below) for the purpose of: (i) influencing any act or decision of the Government Official or Other Covered Party; (ii) inducing the Government Official or Other Covered Party to do or omit to do an act in violation of a lawful duty; (iii) securing any improper advantage; or (iv) inducing the Government Official or Other Covered Party to influence the act or decision of a government or government instrumentality, in order to obtain or retain business, or direct business to, any person or entity, in any way related to this Agreement. For purposes of this Agreement: (A) " Government Official " means any official, officer, employee or representative of: (x) any federal, state, provincial, county or municipal government or any department or agency thereof; (y) any public international organization or any department or agency thereof; or (c) any company or other entity owned or controlled by any government; and (B) " Other Covered Party " means any political party or party official, or any candidate for political office. (ii) Neither Party is aware of any Government Official or Other Covered Party having any financial interest in the subject matter of this Agreement or in any way personally benefiting, directly or indirectly, from this Agreement. (iii) No political contributions or charitable donations shall be given, offered, promised or paid at the request of any Government Official or Other Covered Party that is in any way related to this Agreement or any related activity, without the other Party' s prior written approval. (b) No Misappropriation or Infringement. GSL covenants to Lipocine that GSL shall not knowingly misappropriate or infringe any trade secret, patent or other intellectual property of Third Party in its activities to Develop, manufacture or Commercialize Licensed Products. (c) No Debarment. GSL covenants to Lipocine that, in the course of conducting its activities under this Agreement, GSL shall not knowingly use any employee or consultant who is or has been debarred by any Regulatory Authority or is or has been the subject of debarment proceedings by any Regulatory Authority. (d) Compliance with Applicable Law. GSL and Lipocine covenants to comply with all Applicable Laws in performing or conducting its activities under this Agreement, including all applicable anti- corruption laws, including the Foreign Corrupt Practices Act of 1977, as amended (" FCPA ") and all laws enacted to implement the OECD Convention on Combating Bribery of Foreign Officials in International Business Transactions. Neither Party shall offer, promise or pay any political contributions or charitable donations at the request of any Government Official or Other Covered Party that is in any way related to this Agreement or any related activity, without the other Party' s prior written approval. article Indemnification 9. 1 Indemnification by Lipocine. Lipocine hereby agrees to defend, hold harmless and indemnify GSL and its Affiliates and Sublicensees, and each of their respective officers, directors and employees (collectively, the " GSL Indemnitees "), from and against any and all Losses suffered by GSL Indemnitees arising directly out of any Claim brought by a Third Party against a GSL Indemnitee to the extent based upon or results from: (i) any breach of Lipocine' s representations and warranties set forth in Section 8. 1 of this Agreement; (ii) Lipocine' s failure to perform any covenant or agreement of Lipocine set forth in this Agreement; (iii) the exercise or practice by Lipocine or its Affiliates or Other Licensees of any retained rights under Section 2. 4, including without limitation, the Development, manufacture or Commercialization of Licensed Product (including GSL- Supplied Product) by or for Lipocine or its Affiliates outside the Territory; (iv) the negligence or willful misconduct of Lipocine, its Affiliates, Other Licensees or their respective officers, directors, employees, shareholders, agents or contractors; (v) the Commercialization of Licensed Product (including GSL-Supplied Product) by or on behalf of Lipocine, its Affiliates or its Other Licensees outside the Field of Use in the Territory or outside the Territory in or outside the Field of Use; (vi) the Development, manufacture or Commercialization of Licensed Product by or on behalf of Lipocine or its Affiliates or Other Licensees prior to the Effective Date; (vii) Third Party (including

contract manufacturing organization (CMO)) payments that accrued prior to the Effective Date; or (viii) material breach of Lipocine' s contractual agreements with Third Parties regarding the Licensed Technology, including the Abbott Agreement, or (x) the Development, manufacture or Commercialization of the Licensed Products by Lipocine, its Affiliates or any of their respective licensees following the effective date of termination of this Agreement, including, but not limited to, all product liability claims, claims that the Licensed Product infringe, misappropriate or violate a Third Party' s intellectual property rights, and Third Party claims related to the misappropriation of the Licensed Technology. Lipocine shall have no obligation to indemnify the GSL Indemnitees to the extent that the Losses arise out of or result from matters for which GSL has an indemnification obligation pursuant to Section 9. 2. 9. 2 Indemnification by GSL. GSL hereby agrees to defend, hold harmless and indemnify Lipocine and its Affiliates, and each of their respective officers, directors and employees (collectively, the " Lipocine Indemnitees "), from and against any and all Losses arising out of any Claim brought by a Third Party against a Lipocine Indemnitee to the extent based upon or results from: (i) any breach of GSL' s representations and warranties set forth in Section 8. 2 of this Agreement; (ii) GSL' s or its Affiliate' s failure to perform any covenant or agreement of GSL set forth in this Agreement; (iii) the exercise or practice by GSL or its Affiliate or Sublicensee of the licenses granted to GSL under Section 2. 1 or use of or arising from the Assigned Assets; or (iv) the Development, manufacture or Commercialization of Licensed Product by or for GSL, its Affiliate or Sublicensees in the Territory on or after the Effective Date; except in the case of (iii) and (iv), to the extent any such Losses result from matters for which Lipocine has an indemnification obligation pursuant to Section 9. 1. 9. 3 Indemnification Procedures. To be eligible to be indemnified for a Claim, a Person seeking indemnification (the " Indemnified Party ") shall (i) provide the Party required to indemnify such Person (the " Indemnifying Party ") with prompt written notice of the Claim giving rise to the indemnification obligation under this Article 9, provided that, the failure to provide such prompt notice shall not relieve the Indemnifying Party of any of its obligations under this Article 9 except to the extent the Indemnifying Party is actually prejudiced thereby; (ii) provide the Indemnifying Party with the exclusive ability to defend (with the reasonable cooperation of the Indemnified Party) against the Claim; and (iii) not settle, admit or materially prejudice the Claim, without the Indemnifying Party' s prior written consent. The Indemnified Party shall reasonably cooperate with the Indemnifying Party, at the Indemnifying Party' s expense, in the defense of any Claim. Notwithstanding the foregoing, if the Indemnifying Party assumes the defence, the Indemnified Party shall have the right to participate in and have its own counsel participate in any action or proceeding for which the Indemnified Party seeks to be indemnified by the Indemnifying Party. Such participation shall be at the Indemnified Party' s expense, unless (i) the Indemnifying Party and the Indemnified Party shall have mutually agreed to the retention of such counsel or (ii) the named parties to any such proceeding (including any impleaded parties) include both the Indemnifying Party and the Indemnified Party and, in the reasonable opinion of counsel to the Indemnifying Party, representation of both parties by the same counsel would be inappropriate due to actual or potential conflicting interests between them, in which case the reasonable fees and expenses of one counsel of the Indemnified Party will be paid by the Indemnifying Party and the Indemnifying Party' s counsel will control the defense. The Indemnifying Party' s obligations under Section 9. 1 or 9. 2, as the case may be, shall not apply to the extent of the Indemnified Party' s failure to take reasonable action to mitigate any Losses. The Indemnifying Party shall not settle or compromise (except a settlement or compromise involving solely the payment of money for which the Indemnifying Party is solely responsible and that does not require an admission of liability, responsibility or wrong- doing on the part of the Indemnified Party or a settlement that does not include, as an unconditional term, the giving by the claimant or the plaintiff to the Indemnified Party a release from all liability in respect of the Claim or resulting litigation), or consent to the entry of any judgment (other than a judgment of dismissal on the merits without costs) with respect to, any Claim, without the prior written consent of the Indemnified Party, which will not be unreasonably withheld or delayed. 9. 4 Insurance. Each Party shall, at its own expense, procure and maintain during the Term and for a period of thereafter, appropriate liability insurance policy / policies, including product liability insurance consistent with normal business practices of prudent companies similarly situated in the United States. Such insurance shall not be construed to create a limit of either Party' s liability with respect to its indemnification obligations under this Article 9. Each Party shall provide the other Party with written evidence of such insurance upon request. Each Party shall provide the other Party with prompt written notice of cancellation, non- renewal or material change in such insurance or self- insurance which could materially adversely affect the rights of the other Party hereunder and shall use Commercially Reasonable Efforts to provide such notice at least prior to any such cancellation, non- renewal or material change. 9. 5 Limitation. With respect to the indemnity obligation in Section 9. 1 and 9. 2 above, it is understood and agreed that the indemnification does not cover or include lost profits or other future economic harm or special, incidental, indirect or punitive damages. article Confidentiality 10. 1 Treatment of Confidential Information. The Parties agree that during the Term, and for a period of after this Agreement expires or terminates, a Party receiving Confidential Information of the other Party shall (i) maintain in confidence such Confidential Information; (ii) not disclose such Confidential Information to any Third Party without prior written consent of the disclosing Party, except as otherwise permitted in this Article 10; and (iii) not use such Confidential Information for any purpose other than the performance of its obligations or exercise of its rights under this Agreement. 10. 2 Authorized Disclosure. (a) If a Party is required to disclose specific Confidential Information of the other Party to comply with an applicable law, regulation, legal process, or order of a government authority or court of competent jurisdiction, the Party may disclose such Confidential Information only to the entity or person required to receive such disclosure; provided, however, that the Party required to disclose such Confidential Information shall (a) to the extent permitted by such law, regulation, process, order or rules, first have given prompt (but in no event less) advance notice to such other Party to enable it to seek any available exemptions from or limitations on such disclosure requirement and shall reasonably cooperate in such efforts by the other Party at the other Party' s expense, (b) furnish only the portion of the Confidential Information which is legally required to be disclosed; (c) use all reasonable efforts to secure confidential protection of such Confidential Information, and (d) continue to perform its obligations of confidentiality and non- use set out in this Article 11. (b) Each Party may disclose Confidential Information of the other Party

to Regulatory Authorities to the extent such disclosure is reasonably necessary in regulatory filings required for the development and / or commercialization of Licensed Products. In addition, each Party may disclose Confidential Information of the other Party to the extent such disclosure is reasonably necessary in the following instances: filing or prosecuting patents as permitted by this Agreement; disclosure to Affiliates, Other Licensees or Sublicensees or potential Other Licensees or Sublicensees; disclosure to contractors, employees and consultants, who need to know such information for the development, manufacture and commercialization of Licensed Products; disclosure to bankers, lawyers, accountants, agents or other Third Parties in connection with due diligence or similar investigations or in furtherance of the Party' s obligations under this Agreement; and to potential Third Party investors or lenders (and their respective advisors) in confidential financing documents; provided that any such Third Party is bound by obligations of confidentiality and non- use at least as restrictive as those set forth herein. In the case of each disclosure, the Party making such disclosure shall use reasonable efforts to obtain confidential treatment of any such disclosure, and shall not disclose Confidential Information of the other Party other than is reasonably necessary. 10. 3 Publicity; Terms of Agreement. The Parties shall treat the existence and material terms of this Agreement as confidential and shall not disclose such information to Third Parties without the prior written consent of the other Party or except as provided in Section 10. 2 (treating such information as Confidential Information of both Parties for purposes of Section 10. 2). The Parties agree that upon execution of this Agreement or shortly thereafter, either Party may issue a press release, which shall be subject to prior review and approval by the other Party, not to be unreasonably withheld or delayed. Except for such press release or as otherwise required by Applicable Law or applicable stock exchange requirements, neither Lipocine nor GSL shall issue or cause the publication of any other press release or public announcement with respect to the transactions contemplated by this Agreement without the express prior approval of the other Party, which approval shall not be unreasonably withheld, conditioned or delayed; provided that, each of Lipocine and GSL may make any public statement in response to questions by the press, analysts, investors or those attending industry conferences or financial analyst calls, or issue press releases, so long as any such public statement or press release is not inconsistent with prior public disclosures or public statements approved by the other Party pursuant to this Section 10. 3 and which do not reveal non- public information about the other Party. If, in the reasonable opinion of a Party' s legal counsel, a public announcement of the transactions contemplated by the Agreement is required by applicable laws or applicable stock exchange requirements, then, to the extent permissible by law, such Party will provide the other with notice reasonable under the circumstances (but in no event less than prior to disclosure) of such intended announcement and will consult with the other Party with respect to the nature and scope of the required announcement (which shall be limited to the information reasonably required to be disclosed). In addition to the foregoing, with respect to complying with the disclosure requirements of the Securities and Exchange Commission or other stock exchange or regulatory agencies, in connection with any required filing of this Agreement with such agency, the Parties shall consult with one another concerning which terms of this Agreement shall be requested to be redacted in any public disclosure of the Agreement by the agency, Licensed Products and Field of Use, the exhibits, and any dollar amounts set forth herein. 10. 4 Injunctive Relief. Given the nature of the Confidential Information and the competitive damage that may result to a Party upon unauthorized disclosure, use or transfer of its Confidential Information to any Third Party, the Parties agree that monetary damages may not be a sufficient remedy for any breach of this Article 10. In addition to all other remedies, a Party shall be entitled to seek specific performance and injunctive and other equitable relief as a remedy for any breach or threatened breach of this Article 10. 10. 5 Return of Confidential Information. Upon the effective date of the expiration or earlier termination of this Agreement for any reason, each Party shall return to the other Party and cease using all Confidential Information of the other; provided, however, each Party may retain one (1) copy of such Confidential Information (i) to the extent required to comply with Applicable Law or Regulatory Authority, professional standards or written or established internal document retention policies. (ii) for the sole purpose of performing any continuing obligations hereunder or (iii) for archival purpose (including automated archival processes) or that is embedded in minutes of the board of directors of a Party or its Affiliates. article Term And Termination 11. 1 Term. Unless sooner terminated pursuant to Section 11. 2, this Agreement is effective as of the Effective Date in perpetuity (such period, the " Term "). 11. 2 Termination. (a) Termination for Bankruptcy / Insolvency. A Party may, but is under no obligation to, terminate this Agreement on written notice in the event any of the following occurs with respect to the other Party: (a) such Party files a petition in bankruptcy or makes a general assignment for the benefit of creditors or otherwise acknowledges in writing insolvency, or is adjudged bankrupt, and such Party, (i) fails to assume this Agreement in any such bankruptcy proceeding within after filing or (ii) assumes and assigns this Agreement to a Third Party; (b) such Party goes into or is placed in a process of complete liquidation; (c) a trustee or receiver is appointed for any substantial portion of such Party' s business and such trustee or receiver is not discharged within after appointment; (d) any case or proceeding shall have been commenced or other action taken against such Party in bankruptcy or seeking liquidation, reorganization, dissolution, a winding- up arrangement, composition or readjustment of its debts or any other relief under any bankruptcy, insolvency, reorganization or similar act or law of any jurisdiction now or hereafter in effect is not dismissed or converted into a voluntary proceeding governed by clause (a) above within after filing; or (e) there shall have been issued a warrant of attachment, execution, distraint or similar process against any substantial part of the property of such Party and such event shall have continued for a period of and none of the following has occurred: (i) it is dismissed, (ii) it is bonded in a manner reasonably satisfactory to the other Party, or (iii) it is discharged. (b) Termination for Default. Upon any material breach of this Agreement by a Party (the " Breaching Party "), the other Party (the " Non- Breaching Party ") may notify the Breaching Party in writing of such breach and require that the Breaching Party cure such breach within of such notice, for any payment breach, or within of the Non- Breaching Party' s notice for any other material breach. In the event the Breaching Party shall not have cured the breach by the end of the applicable cure period, the Non- Breaching Party may terminate this Agreement immediately upon written notice to the Breaching Party. (c) Termination for Convenience. GSL may terminate this Agreement for convenience upon written notice to Lipocine. (d) Other Termination. If GSL, its Affiliate, its Sublicensee files any lawsuit or reexamination or protest proceeding or the equivalent

against Lipocine or its Affiliates seeking a declaratory judgment or determination that any claim (s) of the Licensed Patents is invalid, unenforceable, of narrower scope or otherwise not patentable, then Lipocine shall have the right to terminate this Agreement at any time upon written notice to GSL. 11. 3 Effects of Termination. (a) Upon any early termination of this Agreement, including pursuant to Section 11. 2: (i) all licenses and rights granted under this Agreement to GSL and its Affiliates shall terminate and revert exclusively to Lipocine; (ii) any sublicenses granted to a Sublicensee shall automatically terminate; and (iii) except as expressly permitted in this Section 11. 3, GSL (and its Affiliates and Sublicensees) shall immediately cease all Development and Commercialization of Licensed Products and return to Lipocine all physical manifestations of the Licensed Technology and Lipocine Confidential Information (including manufacturing Information). (b) Upon any early termination of this Agreement, and Lipocine' s request in writing no later than after the effective date of such termination, GSL shall, and shall cause its Affiliates and Sublicensees to, promptly assign and transfer to Lipocine (including making such notices and filings as may be required with Regulatory Authorities and other governmental authorities of the Territory to effect such transfer), the following with respect only to the Licensed Products: (i) ownership of all Regulatory Documents and Regulatory Approvals, including the TLANDO Regulatory Approvals and the TLANDO XR Regulatory Approvals, applicable to Licensed Product that are Controlled by GSL, its Affiliate or Sublicensee (including the Regulatory Documents) at such time; (ii) all pre- clinical (including toxicology) and clinical study protocols, data and reports applicable to Licensed Products that are Controlled by GSL, its Affiliate or Sublicensee at such time; (iii) all clinical trial results, and the results of all ongoing clinical trials; (iv) such other information, data, and documents applicable to Licensed Products that are Controlled by GSL, its Affiliate or Sublicensee that are reasonably requested by Lipocine to permit Lipocine and its Affiliates to Develop, manufacture and Commercialize Licensed Products after the termination date; (v) any contracts with Third Parties related to Development, manufacture and Commercialization of Licensed Products, including the Supply Agreement; (vi) any inventory of Licensed Product (" GSL Inventory "); (vii) any pending or registered Product Mark Controlled by GSL; (viii) all domain names that are exclusively related to the Licensed Product, and (ix) without limiting the foregoing, all GSL Product Technology. If this Agreement is terminated early by Lipocine pursuant to Section 11. 2 or by GSL pursuant to Section 11. 2 (c), GSL shall make the assignments and transfers to Lipocine under this Section 11. 3 (b) at no cost to Lipocine. If this Agreement is terminated early by GSL pursuant to Section 11. 2 (a) or (b), such assignments and transfers under this Section 11. 3 (b) shall be subject to Lipocine' s payment of a reasonable royalty based on Net Sales of Licensed Product to GSL to be negotiated by the Parties in good faith; provided, however, that in the event the Parties are unable to agree upon such reasonable royalty within of the applicable date of the notice of termination, the Parties shall submit the dispute to a mutually acceptable valuation expert to determine such royalty as soon as practicable and the expert' s determination shall be binding on the Parties. The Parties shall share the cost of the expert. (c) In the event Lipocine requests the assignment and transfer of GSL Inventory, GSL shall grant, and does hereby grant, to Lipocine, its Other Licensees and designees a nonexclusive, royalty- free right and license under the Product Marks and the other Trademarks, tradenames, logos, trade dress and NDCs and / or DIN used by GSL, its Affiliates and Sublicensees to Commercialize the Licensed Products in the Territory, to sell the GSL Inventory. If Lipocine does not request the assignment and transfer of GSL Inventory in writing within of the effective date of any termination of this Agreement, GSL shall have the right to sell the GSL Inventory for a period of following such termination of this Agreement so long as GSL is able to do so in compliance with Applicable Laws and has fully paid, and continues to fully pay when due, any and all royalties and milestone payments owed to Lipocine with respect to the sale of the GSL Inventory. GSL shall not, and shall cause its Affiliates and Sublicensees not to, destroy GSL Inventory without providing Lipocine prior written notice. (d) 11. 4 Survival. The following provisions shall survive any expiration or termination of this Agreement: Articles 1 (to the extent needed for the other Articles and Sections that survive), 9, 10, and 12, and Sections 3. 8, 5. 5, 5. 7, 5. 8, 11. 3 and 11. 4. Termination of this Agreement shall not relieve the Parties of any liability which accrued (including any payment obligation that has accrued or become due and payable) (it being understood that, by way of example, GSL' s obligation to pay milestone payments " accrues " when the event has occurred) hereunder prior to the effective date of such termination nor preclude either Party from pursuing all rights and remedies it may have hereunder or at law or in equity with respect to any breach of this Agreement nor prejudice either Party' s right to obtain performance of any obligation. The remedies provided in this Article 11 are not exclusive of any other remedies a Party may have in law or equity. article Miscellaneous 12. 1 Entire Agreement; Amendment. This Agreement, including the exhibits, constitutes the entire agreement between the Parties (or their Affiliates) related to the subject matter hereof. All prior and contemporaneous negotiations, representations, warranties, agreements, statements, promises and understandings related to the subject matter hereof are superseded by and merged into and extinguished and completely expressed by this Agreement, including the exhibits. No Party shall be bound by or charged with any written or oral agreements, representations, warranties, statements, promises or understandings not specifically set forth in this Agreement, including the exhibits. No subsequent alteration, amendment, change or addition to this Agreement shall be binding upon the Parties unless reduced to writing and signed by an authorized officer of each Party. 12. 2 Notices. Any notice required or permitted to be given under this Agreement shall be in writing and shall be deemed to have been sufficiently given for all purposes (i) when delivered, if personally delivered, (ii) on the next Business Day if sent by recognized overnight courier, or (iii) five Business Days after mailing, if mailed by first class certified or registered airmail, postage prepaid, return receipt requested, in each case using the mailing addresses of the Parties as set forth below (or such other mailing address of which a Party is notified pursuant to this Section 12. 2): 12. 3 Governing Law; Dispute Resolution. This Agreement shall be governed and construed in accordance with the laws of the State of, as applied to agreements executed and performed entirely within the State of, without regard to any applicable principles of conflicts of law. In the event any dispute or other issues arises among the Parties, each of the Parties shall exert its commercially reasonable efforts (including, by the face- to- face meeting of the respective top management) to resolve such dispute or issue. In the eventuality that such dispute or issue cannot be amicably resolved within of written notice from a Party, such dispute or issue may be submitted by a Party to the for binding arbitration in accordance with the commercial arbitration

rules of the as then in effect. Such arbitrations shall be conducted in the English language, and, unless otherwise agreed by the Parties to the dispute, shall be held in. Any arbitration award rendered in any such arbitration proceeding may be entered in and enforced by any court of competent jurisdiction. Such arbitration shall be the sole and exclusive dispute resolution mechanism (other than discussion by the Parties), except that a Party may seek interim or permanent injunctive relief in a court of competent jurisdiction. 12. 4 Limitation of Liability. EXCEPT FOR FRAUD OR COMPARABLE INTENTIONAL MISCONDUCT, NEITHER PARTY SHALL BE ENTITLED TO RECOVER FROM THE OTHER PARTY ANY INDIRECT, SPECIAL, INCIDENTAL, CONSEQUENTIAL OR PUNITIVE DAMAGES IN CONNECTION WITH THIS AGREEMENT OR ANY LICENSE GRANTED HEREUNDER. For the avoidance of doubt, the limitations set forth in this Section 12. 4 shall not apply with respect to either Party' s indemnification obligations under Sections 9. 1 or 9. 2 for Third Party Claims that are direct damages incurred by the Third Party bringing the Third Party Claim. 12. 5 Interpretation. Lipocine and GSL have each participated in negotiations and due diligence and consulted their respective counsel regarding this Agreement. In the event an ambiguity or question of intent or interpretation arises, this Agreement shall be construed as if drafted jointly by the Parties and no presumption or burden of proof shall arise favoring or disfavoring any Party by virtue of the authorship of any provisions of this Agreement. 12. 6 Assignment. Neither Party may assign or transfer this Agreement or any rights or obligations hereunder, by operation of law or otherwise, without the prior written consent of the other Party such consent not to be unreasonably withheld, conditioned or delayed; except that a Party may make such an assignment or transfer, by operation of law or otherwise, without the other Party' s consent to its Affiliate (s) or to an entity that acquires all or substantially all of such Party' s rights to the Licensed Products, whether in a merger, consolidation, reorganization, acquisition, sale or otherwise. For the avoidance of doubt, nothing in this Agreement shall be construed as limiting Lipocine' s right to enter into a royalty monetization agreement with a Third Party. This Agreement shall be binding on the successors and permitted assigns of the assigning Party, and the name of a Party appearing herein shall be deemed to include the name (s) of such Party' s successors and permitted assigns to the extent necessary to carry out the intent of this Agreement. Any assignment or attempted assignment by either Party in violation of the terms of this Section 12. 6 shall be null and void. 12. 7 Performance by Affiliates. Lipocine and GSL each acknowledge that obligations under this Agreement may be performed by Affiliates of Lipocine and GSL. Each of Lipocine and GSL guarantee performance of this Agreement by its Affiliates, notwithstanding any assignment to Affiliates in accordance with Section 12. 6 of this Agreement. 12. 8 Severability. In the event that any one or more of the provisions contained herein, or the application thereof in any circumstances, is held invalid, illegal or unenforceable in any respect for any reason, the Parties shall negotiate in good faith with a view to the substitution therefor of a suitable and equitable provision in order to carry out, so far as may be valid and enforceable, the intent and purpose of such invalid provision; provided, however, that the validity, legality and enforceability of any such provision in every other respect and of the remaining provisions contained herein shall not be in any way impaired thereby, it being intended that all of the rights and privileges of the Parties hereto shall be enforceable to the fullest extent permitted by law. 12. 9 Headings. The heading for each article and section in this Agreement has been inserted for convenience of reference only and is not intended to limit or expand on the meaning of the language contained in the particular article or section. 12. 10 Further Actions Each Party agrees to execute, acknowledge and deliver such further instruments, and to do all such other acts, as may be necessary or appropriate in order to carry out the purposes and intent of the Agreement. 12. 11 Independent Contractors. The relationship between GSL and Lipocine created by this Agreement is solely that of independent contractors. This Agreement does not create any agency, distributorship, employee-employer, partnership, joint venture or similar business relationship between the Parties. Neither Party is a legal representative of the other Party, and neither Party can assume or create any obligation, representation, warranty or guarantee, express or implied, on behalf of the other Party for any purpose whatsoever. Each Party shall use its own discretion and shall have complete and authoritative control over its employees and the details of performing its obligations under this Agreement. 12. 12 Use of Name. No right, express or implied, is granted to GSL by this Agreement to use in any manner any Trademark of Lipocine or its Affiliates other than the Licensed Trademark. GSL shall not use or allow its representatives to use, any name or Trademark of Lipocine or its Affiliates other than the Licensed Trademark, or the name of any of their employees, or any derivatives thereof, for purposes of any promotion, publicity or advertising without Lipocine' s prior written consent, which may be withheld at Lipocine' s sole discretion. 12. 13 No Waiver. A Party' s consent to or waiver, express or implied, of the other Party' s breach of its obligations hereunder shall not be deemed to be or construed as a consent to or waiver of any other breach of the same or any other obligations of the other Party. A Party' s failure to complain of any act, or failure to act, by the other Party, to declare the other Party in default, to insist upon the strict performance of any obligation or condition of this Agreement or to exercise any right or remedy consequent upon a breach thereof, no matter how long such failure continues, shall not constitute a waiver by such Party of its rights hereunder, of any such breach, or of any other obligation or condition. A Party' s consent in any one instance shall not limit or waive the necessity to obtain such Party' s consent in any future instance and in any event no consent or waiver shall be effective for any purpose hereunder unless such consent or waiver is in writing and signed by the Party granting such consent or waiver. 12. 14 Fees and Expenses. Regardless of whether or not the transactions contemplated by this Agreement are consummated, each Party shall bear its own fees and expenses incurred in connection with the negotiation and execution of this Agreement. 12. 15 No Set- Off. Neither Party shall have any right to set- off any amount owed to by such Party to the other Party or an Affiliate thereof under this Agreement. 12. 16 No Other Rights. The Parties acknowledge and agree that, except as expressly set forth in this Agreement, neither Party grants any rights or licenses to the other Party under this Agreement nor shall either Party have any rights or obligations under this Agreement. 12. 17 Parties in Interest. This Agreement shall be binding upon and inure solely to the benefit of each Party hereto and its respective successors and permitted assigns, and nothing in this Agreement, express or implied, is intended to or shall confer upon any other person any right, benefit or remedy of any nature whatsoever under or by reason of this Agreement (with the exception of GSL Indemnitees and Lipocine Indemnitees under Sections 9. 1 and 9. 2, respectively). 12. 18 Rules of Construction. The use in this

~~Agreement of the term " including " (or any cognates thereof, such as " include " or " includes ") means " including (or the applicable cognate thereof), without limitation. " The words " herein, " " hereof, " " hereunder, " and other words of similar import refer to this Agreement as a whole, including the exhibits, and not to any particular section, subsection, paragraph, subparagraph or clause contained in this Agreement. All definitions set forth in this Agreement will be deemed applicable whether the words defined are used in this Agreement in the singular or the plural. All references to sections and exhibits mean those sections of this Agreement and the exhibits attached to this Agreement, except where otherwise stated. The words " will " and " shall " are herein used interchangeably and the word " will " shall be construed to have the same meaning and effect as the word " shall ". 12. 19 Counterparts. This Agreement may be executed in two (2) or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. 12. 20 Precedence. In the event of any conflict between this Agreement and any of the exhibits attached hereto, this Agreement shall control. 12.~~ 21 ~~Verity Affiliates' Guarantee~~ . **1SUBSIDIARIES** ~~Each of Holding Company and Verity, jointly and severally, hereby guarantees to Lipocine the performance by GSL of all of GSL' s duties and obligations under this Agreement, including payment obligations, the grant of rights and licenses, defense and indemnity obligations and payment of all damages, liability, costs, expenses and other amounts that may be payable by GSL or its Affiliates, or recoverable by Lipocine or its Affiliates from GSL by virtue of this Agreement. For clarity, Holding Company and Verity, jointly and severally, agrees to pay any amounts owed to Lipocine or its Affiliates by GSL under this Agreement in the event GSL fails to pay such amounts when due under this Agreement and to pay any amounts of liability or damages owed to Lipocine or its Affiliates by GSL for GSL' s breach of the Agreement if GSL fails to pay such amounts when due under this Agreement upon written request. [Signature Page follows] In Witness Whereof, the Parties have executed this Agreement by their duly authorized representatives as of the Effective Date. Lipocine Inc. By: Name: Title: Gordon Silver Limited an Irish corporation By: Title: Chair of the Board Solely for purposes of Section 12. 21 hereof: Verity Pharmaceuticals, Inc. Verity Pharmaceuticals, Inc. A Delaware corporation a British Columbia corporation By: By: Title: Authorized Person Title: Authorized PersonExhibit A Licensed Patents and Licensed Trademarks 1. Licensed Patents 2. Licensed Trademarks (US Only) Exhibit B Assigned Agreements Exhibit C Settlement Agreement Exhibit E Assigned Domain Names Tlando. net Tlando. info Tlando. org Tlando. us Tlando. com Tlando. biz Tlando4You. com Tlandosamples. com EXHIBIT 21. 1~~ Lipocine Operating Inc. EXHIBIT 23. 1 CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM The Board of Directors Lipocine Inc.: We consent to the incorporation by reference in the registration statements (Nos. 333- 250072, 333- 190897, 333- 240197, 333- 226664, 333- 214492, 333- 197421, 333- 191695 and 333- 275716) on Forms S- 3 and S- 8 of Lipocine Inc. of our report dated March ~~7~~ **12** , ~~2024~~ **2025** with respect to the consolidated balance sheets of Lipocine Inc. as of December 31, **2024 and** 2023 ~~and 2022~~ , and the related consolidated statements of operations and comprehensive loss, changes in stockholders' equity, and cash flows for the years then ended, and the related notes (collectively, the " consolidated financial statements "), which report appears in the December 31, ~~2023~~ **2024** annual report on Form 10- K of Lipocine Inc. / s / Tanner LLC **Salt Lake City, Utah March 13, 2025** EXHIBIT 31. ~~1~~ ~~CERTIFICATIONSI~~ **1CERTIFICATIONS I** , Mahesh V. Patel, certify that: 1. I have reviewed this annual report on Form 10- K of Lipocine Inc.; 2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report; 3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report; 4. The registrant' s other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a- 15 (e) and 15d- 15 (e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a- 15 (f) and 15d- 15 (f)) for the registrant and have: a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared; b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles; c) Evaluated the effectiveness of the registrant' s disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; ~~and~~ **andd** ~~d~~) Disclosed in this report any change in the registrant' s internal control over financial reporting that occurred during the registrant' s most recent fiscal quarter (the registrant' s fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant' s internal control over financial reporting; ~~and~~ **and5** ~~5~~ . The registrant' s other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant' s auditors and the audit committee of the registrant' s board of directors (or persons performing the equivalent functions): a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant' s ability to record, process, summarize and report financial information; ~~and~~ **andb** ~~b~~) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant' s internal control over financial reporting. Dated: March ~~7~~ **13** , ~~2024~~ **2025** / s / Mahesh V. Patel Mahesh V. Patel, President and Chief Executive Officer (Principal Executive Officer) EXHIBIT 31. 2Dated: March ~~7~~ **13** , ~~2024~~ **2025** / s / Mahesh V. Patel Mahesh V. Patel (Principal Financial Officer) EXHIBIT 32. 1 **CERTIFICATION** In connection with the Annual Report on Form 10- K of Lipocine Inc. (the " Corporation ") for the year ended December 31, ~~2023~~ **2024** as filed with the Securities and Exchange Commission on the date hereof (the " Report "), the undersigned, Mahesh V. Patel, President and Chief Executive Officer of the Corporation, hereby certifies, pursuant to Rule 13a- 14 (b) or Rule 15d- 14 (b) and 18 U. S. C. Section 1350, as adopted pursuant to Section 906 of

the Sarbanes- Oxley Act of 2002, that to his knowledge: (1) The Report fully complies with the requirements of Section 13 (a) or 15 (d) of the Securities Exchange Act of 1934, as amended, and (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Corporation. Dated: March ~~7~~ **13** , ~~2024~~ **2025** / s / Mahesh V. Patel Mahesh V. Patel, President and Chief Executive Officer (Principal Executive Officer) EXHIBIT 32. **2In** ~~2~~ ~~CERTIFICATIONIn~~ connection with the Annual Report on Form 10- K of Lipocine Inc. (the " Corporation ") for the year ended December 31, ~~2023~~ **2024** as filed with the Securities and Exchange Commission on the date hereof (the " Report "), the undersigned, Mahesh V. Patel, Principal Financial Officer of the Corporation, hereby certifies, pursuant to Rule 13a- 14 (b) or Rule 15d- 14 (b) and 18 U. S. C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes- Oxley Act of 2002, that to his knowledge: **(** ~~Exhibit 97 LIPOCINE INC. INCENTIVE COMPENSATION RECOVERY POLICY~~ 1 **)** ~~. Introduction.~~ The ~~Board~~ **Report fully complies with the requirements** of **Section 13** ~~Directors of Lipocine Inc.~~ (**a** ~~the " Company "~~) ~~believes that it is in the best interests of the Company and its stockholders to create and maintain a culture that emphasizes integrity and accountability and that reinforces the Company' s compensation philosophy. The Board has therefore adopted this policy, which provides for~~ - **or 15** ~~the recovery of erroneously awarded incentive compensation in the event that the Company is required to prepare an accounting restatement due to material noncompliance of the Company with any financial reporting requirements under the federal securities laws~~ (**d** ~~the " Policy "~~) ~~. This Policy is designed to comply with Section 10D~~ of the Securities Exchange Act of 1934, as amended **, and** (**2** ~~the " Exchange Act "~~) ~~, related rules or standards of~~ The **information contained in** ~~Nasdaq Stock Market or any other~~ -- **the** ~~securities exchange on which~~ **Report fairly presents, in all material respects,** the ~~Company'~~ **financial condition and results of operations of the Corporation. Dated: March 13, 2025 / s / Mahesh V** ~~shares are listed in the future~~ . ~~2~~ **Patel Mahesh V** . **Patel** ~~Administration. This Policy shall be administered by the Board or, if so designated by the Board, the Compensation Committee~~ (**Principal Financial Officer** ~~the " Committee "~~) ~~, in which case, all references herein to the Board shall be deemed references to the Committee. Any determinations made by the Board shall be final and binding on all affected individuals. 3. Covered Executives. Unless and until the Board determines otherwise, for purposes of this Policy, the term " Covered Executive " means a current or former employee who is or was identified by the Company as the Company' s president, principal financial officer, principal accounting officer (or if there is no such accounting officer, the controller), any vice- president of the Company in charge of a principal business unit, division, or function (such as sales, administration, or finance), any other officer who performs a policy- making function, or any other person (including any executive officer of the Company' s subsidiaries or affiliates) who performs similar policy- making functions for the Company. " Policy- making function " excludes policy- making functions that are not significant. " Covered Executives " will include, at minimum, the executive officers identified by the Company pursuant to Item 401 (b) of Regulation S- K of the Exchange Act. This Policy covers Incentive Compensation received by a person after beginning service as a Covered Executive and who served as a Covered Executive at any time during the performance period for that Incentive Compensation. 4. Recovery: Accounting Restatement. In the event of an " Accounting Restatement, " the Company will recover reasonably promptly any excess Incentive Compensation received by any Covered Executive during the three completed fiscal years immediately preceding the date on which the Company is required to prepare an Accounting Restatement, including transition periods resulting from a change in the Company' s fiscal year as provided in Rule 10D- 1 of the Exchange Act. Incentive Compensation is deemed " received " in the Company' s fiscal period during which the Financial Reporting Measure specified in the Incentive Compensation award is attained, even if the payment or grant of the Incentive Compensation occurs after the end of that period. (a) Definition of Accounting Restatement. For the purposes of this Policy, an " Accounting Restatement " means the Company is required to prepare an accounting restatement of its financial statements filed with the Securities and Exchange Commission (the " SEC ") due to the Company' s material noncompliance with any financial reporting requirements under the federal securities laws (including any required accounting restatement to correct an error in previously issued financial statements that is material to the previously issued financial statements, or that would result in a material misstatement if the error were corrected in the current period or left uncorrected in the current period). The determination of the time when the Company is " required " to prepare an Accounting Restatement shall be made in accordance with applicable SEC and national securities exchange rules and regulations. An Accounting Restatement does not include situations in which financial statement changes did not result from material non- compliance with financial reporting requirements, such as, but not limited to retrospective: (i) application of a change in accounting principles; (ii) revision to reportable segment information due to a change in the structure of the Company' s internal organization; (iii) reclassification due to a discontinued operation; (iv) application of a change in reporting entity, such as from a reorganization of entities under common control; (v) adjustment to provision amounts in connection with a prior business combination; and (vi) revision for stock splits, stock dividends, reverse stock splits or other changes in capital structure. (b) Definition of Incentive Compensation. For purposes of this Policy, " Incentive Compensation " means any compensation that is granted, earned, or vested based wholly or in part upon the attainment of a Financial Reporting Measure, including, for example, bonuses or awards under the Company' s short and long- term incentive plans, grants and awards under the Company' s equity incentive plans, and contributions of such bonuses or awards to the Company' s deferred compensation plans or other employee benefit plans. Incentive Compensation does not include awards which are granted, earned and vested without regard to attainment of Financial Reporting Measures, such as time- vesting awards, discretionary awards and awards based wholly on subjective standards, strategic measures or operational measures. (c) Financial Reporting Measures. " Financial Reporting Measures " are those that are determined and presented in accordance with the accounting principles used in preparing the Company' s financial statements (including non- GAAP financial measures) and any measures derived wholly or in part from such financial measures. For the avoidance of doubt, Financial Reporting Measures include stock price and total shareholder return. A measure need not be presented within the financial statements or included in a filing with the SEC to constitute a Financial Reporting Measure for purposes of this Policy. (d) Excess Incentive Compensation: Amount Subject to Recovery. The amount (s) to be recovered from the Covered Executive will be the amount (s) by which the Covered Executive'~~

s Incentive Compensation for the relevant period (s) exceeded the amount (s) that the Covered Executive otherwise would have received had such Incentive Compensation been determined based on the restated amounts contained in the Accounting Restatement. All amounts shall be computed without regard to taxes paid. For Incentive Compensation based on Financial Reporting Measures such as stock price or total shareholder return, where the amount of excess compensation is not subject to mathematical recalculation directly from the information in an Accounting Restatement, the Board will calculate the amount to be reimbursed based on a reasonable estimate of the effect of the Accounting Restatement on such Financial Reporting Measure upon which the Incentive Compensation was received. The Company will maintain documentation of that reasonable estimate and will provide such documentation to the applicable national securities exchange. (c) Method of Recovery. The Board will determine, in its sole discretion, the method (s) for recovering reasonably promptly excess Incentive Compensation hereunder. Such methods may include, without limitation: (i) requiring reimbursement of compensation previously paid; (ii) forfeiting any compensation contribution made under the Company' s deferred compensation plans, as well as any matching amounts and earnings thereon; (iii) offsetting the recovered amount from any compensation that the Covered Executive may earn or be awarded in the future (including, for the avoidance of doubt, recovering amounts earned or awarded in the future to such individual equal to compensation paid or deferred into tax – qualified plans or plans subject to the Employee Retirement Income Security Act of 1974 (collectively, " Exempt Plans "); provided that, no such recovery will be made from amounts held in any Exempt Plan of the Company); (iv) taking any other remedial and recovery action permitted by law, as determined by the Board; or (v) some combination of the foregoing. 5. No Indemnification or Advance. Subject to applicable law, the Company shall not indemnify, including by paying or reimbursing for premiums for any insurance policy covering any potential losses, any Covered Executives against the loss of any erroneously awarded Incentive Compensation, nor shall the Company advance any costs or expenses to any Covered Executives in connection with any action to recover excess Incentive Compensation. 6. Interpretation. The Board is authorized to interpret and construe this Policy and to make all determinations necessary, appropriate or advisable for the administration of this Policy. It is intended that this Policy be interpreted in a manner that is consistent with the requirements of Section 10D of the Exchange Act and any applicable rules or standards adopted by the SEC or any national securities exchange on which the Company' s securities are listed. 7. Effective Date. The effective date of this Policy is October 2, 2023 (the " Effective Date "). 1 This Policy applies to Incentive Compensation received by Covered Executives on or after the Effective Date even if such Incentive Compensation was approved, awarded, granted or paid to the Covered Executive prior to the Effective Date. In addition, this Policy is intended to be and will be incorporated as an essential term and condition of any Incentive Compensation agreement, plan or program that the Company establishes or maintains on or after the Effective Date. 8. Amendment and Termination. The Board may amend this Policy from time to time in its discretion, and shall amend this Policy as it deems necessary to reflect changes in regulations adopted by the SEC under Section 10D of the Exchange Act and to comply with any rules or standards adopted by The Nasdaq Stock Market or any other securities exchange on which the Company' s shares are listed in the future. Each listed issuer must comply with its recovery policy for all incentive- based compensation received by executive officers on or after the effective date of the applicable listing standards. 9. Other Recovery Rights. The Board intends that this Policy will be applied to the fullest extent of the law. Upon receipt of this Policy, each Covered Executive is required to complete the Receipt and Acknowledgement attached as Schedule A to this Policy. The Board may require that any employment agreement or similar agreement relating to Incentive Compensation received on or after the Effective Date shall, as a condition to the grant of any benefit thereunder, require a Covered Executive to agree to abide by the terms of this Policy. Any right of recovery under this Policy is in addition to, and not in lieu of, any (i) other remedies or rights of compensation recovery that may be available to the Company pursuant to the terms of any similar policy in any employment agreement, or similar agreement relating to Incentive Compensation, unless any such agreement expressly prohibits such right of recovery, and (ii) any other legal remedies available to the Company. The provisions of this Policy are in addition to (and not in lieu of) any rights to repayment the Company may have under Section 304 of the Sarbanes-Oxley Act of 2002 and other applicable laws. 10. Impracticability. The Company shall recover any excess Incentive Compensation in accordance with this Policy, except to the extent that certain conditions are met and the Board has determined that such recovery would be impracticable, all in accordance with Rule 10D- 1 of the Exchange Act and the rules or standards of The Nasdaq Stock Market or any other securities exchange on which the Company' s shares are listed in the future. 11. Successors. This Policy shall be binding upon and enforceable against all Covered Executives and their beneficiaries, heirs, executors, administrators or other legal representatives. Schedule A INCENTIVE- BASED COMPENSATION CLAWBACK POLICY RECEIPT AND ACKNOWLEDGEMENT I, _____, hereby acknowledge that I have received and read a copy of the Incentive Compensation Recovery Policy. As a condition of my receipt of any Incentive Compensation as defined in the Policy, I hereby agree to the terms of the Policy. I further agree that if recovery of excess Incentive Compensation is required pursuant to the Policy, the Company shall, to the fullest extent permitted by governing laws, require such recovery from me up to the amount by which the Incentive Compensation received by me, and amounts paid or payable pursuant or with respect thereto, constituted excess Incentive Compensation. If any such reimbursement, reduction, cancelation, forfeiture, repurchase, recoupment, offset against future grants or awards and / or other method of recovery does not fully satisfy the amount due, I agree to immediately pay the remaining unpaid balance to the Company. Signature Date