Risk Factors Comparison 2025-03-28 to 2024-04-01 Form: 10-K

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Investing in shares of our common stock is very speculative and involves a high degree of risk. You should carefully consider the risks and uncertainties described below, the section of this Report entitled " Management' s Discussion and Analysis of Financial Condition and Results of Operations " and our financial statements and related notes included elsewhere in this Report before investing in shares of our common stock. The risks and uncertainties described below are not the only ones we face. Additional risks and uncertainties that we are unaware of, or that we currently believe are not material, may also become important factors that affect us. If any of the following risks occur, our business, operating results and prospects could be materially harmed. In that event, the price of our common stock could decline, and you could lose part or all of your investment. **Summary Risk Factors Our business is subject to numerous risks and uncertainties that you should consider before investing in our company. You should carefully consider all of the risks described more fully in the section titled " Risk Factors " in this Annual Report on page 19, before deciding to invest in our common stock. If any of these risks actually occurs, our business, financial condition and results of operations would likely be materially adversely affected. Important factors that could cause actual results or events to differ materially, but are not limited to, the following: Risks Related to Our Intellectual Property We depend on rights to Ketamir- 2 that are or will be licensed to us. We may not be able to adequately protect our product candidates or our proprietary technology in the marketplace. If third parties claim that our intellectual property, products, processes, or anything else used by us infringes upon their intellectual property, our operating profits could be adversely affected. We have been granted a license to the right to develop Ketamir- 2 in the United States in human and pet application, but we have not been granted a license to the rights to patents covering Ketamir- 2 in foreign jurisdictions.** Risks Related to Our Operations and Financial Condition We are an early development- stage company with no revenues **and our financial condition raises substantial doubt as to our ability to continue as a going concern. Because we have a limited operating history, you may not be able to accurately evaluate our operations. We will need to raise additional financing for the continuation of our operations. Our operating results may fluctuate, which could have a negative impact on our ability to grow our client base, establish sustainable revenues and succeed overall. We have yet to achieve a profit and will not achieve a profit in the near future, if at all. Certain of our executive officers are not employed by us on a full- time basis. Conflicts of interest may arise between us and MIRALOGX. Risks Relating to Our Business and Our Industry Our future success will largely depend on the success of Ketamir- 2 and MIRA- 55 and any future product candidates, which development will require significant capital resources and years of clinical development effort. We are dependent on our current and future product candidates, some of which may not receive regulatory approval or be successfully commercialized. We may not successfully integrate with SKNY following our potential upcoming acquisition Results of pre- clinical studies and earlier clinical trials are not necessarily predictive indicators of future results. We have limited marketing experience, and we do not anticipate at this time establishing a sales force or distribution and reimbursement capabilities, and we may not be able to successfully commercialize any of our product candidates if they are approved in the future. We will need to further increase the size and complexity of our organization in the future, and we may experience difficulties in managing our growth and executing our growth strategy. We expect to face intense competition, often from companies with greater resources and experience than we have. We have significant and increasing liquidity needs and may require additional funding. Risks Related to Development and Regulatory Approval of Our Product Candidates Clinical trials for our product candidates are expensive, time- consuming, uncertain, and susceptible to change, delay or termination. The results of clinical trials are open to differing interpretations. Any failure by us to comply with existing regulations could harm our reputation and operating results. The regulatory approval processes with the FDA are lengthy and inherently unpredictable. There is a high rate of failure for drug candidates proceeding through clinical trials. Risks Related to Our Reliance Upon Third Parties We rely on, and expect to continue to rely on, third parties to conduct clinical trials for our product candidates. Our existing collaboration arrangements and any that we may enter into in the future may not be successful, which could adversely affect our ability to develop and commercialize our product candidates. Risks Relating to the Ownership of Our Common Stock Because of the speculative nature of an investment in our company, you may lose your entire investment. Certain of our founding stockholders, plus our existing officers and directors, control a substantial interest in us and thus may influence certain actions requiring stockholder vote We are an early development- stage company with no revenues** . As such, our losses from operations and negative cash flows as of December 31, ~~2023~~ **2024** raise substantial doubt about our ability to continue as a going concern absent obtaining adequate new debt or equity financings. As a very early development- stage enterprise that is focused on the development of a pre- clinical pharmaceutical product, we have generated no revenue and have an accumulated deficit of $ **29. 1 million through December 31, 2024, and $** 21. 3 million through December 31, 2023 ~~, and $ 9. 3 million through December 31, 2022~~ . We have concluded that substantial doubt exists about our ability to continue as a going concern for the 12 months following the issuance of the financial statements included in this Annual Report on Form 10- K. As of the issuance date of these financial statements, we believe that we have sufficient resources available to support our development activities and business operations and timely satisfy our obligations as they come due into the ~~fourth~~ **third** quarter of ~~2024~~ **2025** . We do not have sufficient cash and cash equivalents as of the date of filing this Annual Report on Form 10- K to support our operations for at least the 12 months following the issuance of the financial statements. To alleviate the conditions that raise substantial doubt about our ability to continue as a going concern, we plan to

secure additional capital, potentially through a combination of public or private equity offerings and strategic transactions, including potential alliances and drug product collaborations, however, none of these alternatives are committed at this time. There can be no assurance that we will be successful in obtaining sufficient funding on terms acceptable to us to fund continuing operations, if at all, identify and enter into any strategic transactions that will provide the capital that we will require or achieve the other strategies to alleviate the conditions that raise substantial doubt about our ability to continue as a going concern. If none of these alternatives are available, or if available, are not available on satisfactory terms, we will not have sufficient cash resources and liquidity to fund our business operations for at least the 12 months following the date the financial statements are issued. The failure to obtain sufficient capital on acceptable terms when needed may require us to delay, limit, or eliminate the development of business opportunities and our ability to achieve our business objectives and our competitiveness, and our business, financial condition, and results of operations will be materially adversely affected. In addition, the perception that we may not be able to continue as a going concern may cause others to choose not to deal with us due to concerns about our ability to meet our contractual obligations. **Additionally, we filed a shelf registration statement with the SEC to facilitate the issuance of our common stock and entered into an At The Market Offering Agreement with Rodman & Renshaw LLC, under which we may offer and sell shares of our Common Stock. The maximum amount eligible to be sold under the ATM Agreement is $ 75 million. However, although we have received net proceeds of $ 3. 6 million during 2024 from the ATM, there are no assurances that we will be successful in raising any additional capital from the ATM.** The report of our independent registered accounting firm on our audited financial statements for the fiscal year ended December 31, ~~2023~~ **2024** contains an explanatory paragraph relating to our ability to continue as a going concern. The auditor' s opinion on our audited financial statements for the year ended December 31, ~~2023~~ **2024** includes an explanatory paragraph stating that we have **no revenue and** incurred recurring losses from **operations and cash used in** operations that raise substantial doubt about our ability to continue as a going concern. While we believe that we will be able to obtain the capital we need to continue our operations, there can be no assurances that we will be successful in these efforts or will be able to resolve our liquidity issues or eliminate our operating losses. If we are unable to obtain sufficient funding, we would need to significantly reduce our operating plans and curtail some or all of our development efforts. Accordingly, our business, prospects, financial condition, and results of operations will be materially and adversely affected, and we may be unable to continue as a going concern. If we seek additional financing to fund our business activities in the future and there remains substantial doubt about our ability to continue as a going concern, investors or other financing sources may be unwilling to provide additional funding on commercially reasonable terms or at all. **We** ~~Because we have a limited operating history, you~~ may not be ~~able to accurately evaluate~~ **successful in the integration of** our **potential acquisition of SKNY. As discussed earlier in this Annual Report of Form 10- K, we have entered into a binding letter of intent to acquire SKNY. Integrating SKNY' s business, processes, and** operations **presents new risks to the business that must be managed carefully. If not, it could have a material impact on operations and cause results to differ significantly from expectations. Acquisitions involve a number of risks and difficulties, including: (i) expansion into new markets and business ventures; (ii) the requirement to understand local business practices; (iii) the diversion of management' s attention to the assimilation of acquired operations and personnel; (iv) being bound by client or vendor contracts with unfavorable terms; and (v) potential adverse effects on a company' s operating results for various reasons, including, but not limited to, the following items: (a) the inability to achieve financial targets; (b) the inability to achieve certain operating goals and synergies; (c) costs incurred to exit current or acquired contracts or activities; (d) costs incurred to service any acquisition debt; and (e) the amortization or impairment of intangible assets. Due to the multiple risks and difficulties associated with any acquisition, there can be no assurance that we will be successful in achieving our expected strategic, operating, and financial goals for any such acquisition** . We have had limited operations to date. Therefore, we have a limited operating history upon which to evaluate the merits of investing in our company. Potential investors should be aware of the difficulties normally encountered by new companies and the high rate of failure of such enterprises. The likelihood of success must be considered in light of the problems, expenses, difficulties, complications, and delays encountered in connection with the operations that we plan to undertake. These potential problems include, but are not limited to, unanticipated problems relating to the ability to generate sufficient cash flow to operate our business, and additional costs and expenses that may exceed current estimates. We expect to continue to incur significant losses into the foreseeable future. We recognize that if the effectiveness of our business plan is not forthcoming, we will not be able to continue business operations. There is no history upon which to base any assumption as to the likelihood that we will prove successful, and it is doubtful that we will generate any operating revenues or ever achieve profitable operations. If we are unsuccessful in addressing these risks, our business will most likely fail. We have significant and increasing liquidity needs and will require additional funding. Our operations have consumed substantial amounts of cash since inception. For the year ended December 31, ~~2023~~ **2024** , we reported a net operating cash outflow of $ ~~4.~~ 5 **. 6** million and a net cash inflow from ~~investing~~ **financing** activities of $ ~~8~~ **3** . 8 million. For the year ended December 31, ~~2022~~ **2023** , we reported a net operating cash outflow of $ **4.** 5 ~~. 6~~ million and a net cash inflow from ~~investing~~ **financing** activities of $ ~~3~~ **8** . ~~1~~ **8** million. Research and development, and general and administrative expenses, and cash used for operations will continue to be significant and may increase substantially in the future in connection with new research and development initiatives and continued product commercialization efforts. We may need to raise additional capital to fund our operations, continue to conduct clinical trials to support potential regulatory approval of marketing applications and to fund commercialization of our products. The amount and timing of our future funding requirements will depend on many factors, including, but not limited to: ● the timing of FDA approval, if any; ● the DEA continuing to classify Ketamir- 2 ~~and MIRA1a~~ as a substance not subject to CSA; ● the DEA **continuing to classify** ~~granting the classification of~~ MIRA- 55 as a substance not subject to CSA; ● the timing and amount of revenue from sales of our products, or revenue from grants or other sources; ● the rate of progress and cost of our clinical trials and other product development programs; ● costs of establishing or outsourcing sales, marketing, and distribution capabilities; ● costs and timing

of completion of expanded in- house manufacturing facilities as well as any outsourced commercial manufacturing supply arrangements for our product candidates; ● costs of filing, prosecuting, defending, and enforcing any patent claims and other intellectual property rights associated with our product candidates; ● costs of operating as a U. S. public company; ● the effect of competing technological and market developments; ● personnel, facilities, and equipment requirements; and ● the terms and timing of any additional collaborative, licensing, co- promotion, or other arrangements that we may establish. While we expect to fund our future capital requirements from a number of sources including existing cash balances, future cash flows from operations and the proceeds from further public offerings, we cannot assure you that any of these funding sources will be available to us on favorable terms, or at all. Further, even if we can raise funds from all of the above sources, the amounts raised may not be sufficient to meet our future capital requirements. Operating results may vary significantly in future periods. Our operating and financial results are likely to fluctuate significantly in the future. Our operating and financial results are unpredictable and may fluctuate, for among other reasons, due to: ● our achievement of product development objectives and milestones; ● clinical trial enrollment and expenses; ● research and development expenses; and ● the timing and nature of contract manufacturing and contract research payments. In addition, a high portion of our costs are determined on an annual basis, due in part to our significant research and development costs. Thus, increases in our costs could disproportionately affect financial results in a quarter. Other factors, including non- cash expenses associated with financing activity, could also lead to fluctuations in our results of operations. Because of these factors, our operating and financial results in one or more future quarters may fail to meet the expectations of securities analysts or investors, which could cause our share price to decline. We have yet to generate revenues or achieve a profit and may not generate revenue or achieve a profit for many years, if at all. We have not yet produced any revenues or profit and may not for many years, if at all. Our ability to generate revenue is dependent on the receipt of regulatory approval of our product candidates, which will take years to achieve and may not be obtained. We therefore cannot assure you we will be able to ever generate sufficient revenue to pay for our expenses or achieve profitability. Our ability to continue as a going concern in the future is dependent upon raising capital from financing transactions and keeping operating expenses below our revenue levels in order to achieve positive cash flows, none of which can be assured ~~. Conflicts of interest may arise between us and MIRALOGX~~ . MIRALOGX licenses us the patent pending rights to KETAMIR- 2. MIRALOGX is a separate intellectual property development company owned by the Bay Shore Trust. The Bay Shore Trust is also our largest stockholder. The interests of MIRALOGX are 100 % owned by the Bay Shore Trust. Our relationship with MIRALOGX and the Bay Shore Trust may create, or may create the appearance of, conflicts of interest when we are faced with decisions that could have different implications for MIRALOGX than the decisions have for us. Furthermore, in light of the license agreement that we have with MIRALOGX, if a dispute were to arise between MIRALOGX and us relating to our past or future relationship with MIRALOGX or with respect to intellectual property matters, these potential conflicts of interest may make it more difficult for us to favorably resolve such disputes. Certain of our executive officers will not be employed by us on a full- time basis. Erez Aminov, our ~~Chairman and~~ Chief Executive Officer **and Chairman of our board of directors** , ~~will~~ **is** not ~~be~~ employed by our company on **a** full- time basis. As **intended to be** provided in his ~~respective~~ employment agreement with our company, **he works on a part-** ~~Mr. Aminov is expected to devote approximately fifty percent (50 %) of his business~~ time **and as- needed basis** ~~to the affairs of our company~~ . Because **he does** ~~this officer will~~ not work full time for our company, instances may occur where he may not be immediately available to provide solutions to problems or address concerns that arise in the course of us conducting our business and thus adversely affect our business. In addition, he can become subject to conflicts of interest because he devotes part of his working time to other business endeavors and ~~has~~ **may have** responsibilities to other entities. Although ~~such officer~~ **Mr. Aminov** is aware of his ~~duty~~ **duties** and accountability to our company and to applicable laws and policies relating to corporate opportunity and conflicts of interest, such conflicts of interest may include deciding how much time to devote to our affairs, as well as what business opportunities should be presented to us. ~~Risks Relating~~ **Michelle Yanez, our Chief Financial Officer, is not employed by our company on a full- time basis. As intended** to ~~Our~~ **be provided in her employment agreement with our company, she works on a part- time and as- needed basis. Because she does not work full time for our company, instances may occur where she may not be immediately available to provide solutions to problems or address concerns that arise in the course of us conducting our** ~~Business~~ **business** and ~~Our Industry~~ **thus adversely affect our business. In addition, she can become subject to conflicts of interest because she devotes part of her working time to other business endeavors and may have responsibilities to other entities. Although Mrs. Yanez is aware of her duties and accountability to our company and to applicable laws and policies relating to corporate opportunity and conflicts of interest, such conflicts of interest may include deciding how much time to devote to our affairs, as well as what business opportunities should be presented to us.** Our future viability will largely depend on the positive development of Ketamir- 2 and MIRA- 55, and any future product candidates, which development will require significant capital resources and years of clinical development effort. We currently have no drug products on the market, and all of our drug development projects are in a pre- clinical stage of development **or moving into clinical stages** . Our business depends almost entirely on the successful pre- clinical and clinical development, FDA regulatory approval, and commercialization of our product candidates, principally Ketamir- 2 and MIRA- 55. Investors need to be aware that substantial additional investments including pre- clinical and clinical development and FDA regulatory submission and approval efforts will be required before we are permitted to undertake clinical studies and market and commercialize our product candidates, if ever. It may be several years before we can commence clinical trials, if ever. Any clinical trial will be subject to extensive and rigorous review and regulation by numerous government authorities in the United States and other jurisdictions where we intend, if approved, to market our product candidates. Before obtaining regulatory approvals for any of our product candidates, we must demonstrate through pre- clinical testing and clinical trials that the product candidate is safe and effective for its specific application. This process can take many years and may include post- marketing studies and surveillance, which would require the expenditure of substantial resources. Of the large number of drugs in development for approval in the United States

(and the rest of the world), only a small percentage will successfully complete the FDA regulatory approval financing to fund our planned research, development, and clinical programs, we cannot assure you that any of our product candidates will be successfully developed or commercialized. We may be unable to formulate or scale up any or all of our product candidates. There is no guarantee that any of the product candidates will be or are able to be manufactured or produced in a manner to meet the FDA' s criteria for product stability, content uniformity and all other criteria necessary for product approval in the United States and other markets. Any of our product candidates may fail to achieve their specified endpoints in clinical trials. Furthermore, product candidates may not be approved even if they achieve their specified endpoints in clinical trials. The FDA may disagree with our trial design and our interpretation of data from clinical trials or may change the requirements for approval even after it has reviewed and commented on the design for our clinical trials. The FDA may also approve a drug for fewer or more limited indications than we request or may grant approval contingent on the performance of costly post- approval clinical trials (i. e., Phase IV trials). In addition, the FDA may not approve the labeling claims that we believe are necessary or desirable for the successful commercialization of our product candidates. If we are unable to obtain regulatory approval for Ketamir- 2 and MIRA- 55 within the timeline we anticipate, we will not be able to execute our business strategy effectively and our ability to substantially grow our revenues will be limited, which would have a material adverse impact on our long- term business, results of operations, financial condition, and prospects ~~. We are dependent on our current and future product candidates, some of which may not receive regulatory approval or be successfully commercialized~~ . Our ability to progress our plan will depend on our ability to clinically develop, gain regulatory approval for and ultimately commercialize our product candidates. Our ability to successfully commercialize our product candidates will depend on, among other things, our ability to: ● successfully complete pre- clinical and other nonclinical studies and clinical trials in a manner that allows us to progress our studies; ● receive IND acceptance and regulatory approvals from the FDA; ● produce, through a validated process, in manufacturing facilities inspected and approved by regulatory authorities, including the FDA, sufficiently large quantities of product candidates to permit successful commercialization; ● obtain reimbursement from payers such as government health care programs and insurance companies and achieve commercially attractive levels of pricing; ● secure acceptance of our product candidates from physicians, health care payers, patients, and the medical community; ● create positive publicity surrounding our product candidates; ● manage our spending as costs and expenses increase due to clinical trials and commercialization; and ● obtain and enforce sufficient intellectual property for our product candidates. Our failure or delay with respect to any of the factors above could have a material adverse effect on our business, results of operations and financial condition. Impact of global tensions may increase uncertainty of our future operations. The global tensions arising from the Palestine- Israel war and the war in Ukraine may result in disruptions in the broader global economic environment. The uncertain nature, magnitude, and duration of hostilities stemming from such conflicts, including the potential effects of sanctions and countersanctions, or retaliatory cyber- attacks on the world economy and markets, have contributed to increased market volatility and uncertainty, which could have an adverse impact on macroeconomic factors that affect our business and operations, such as pre- clinical study issues, manufacturer delays or shipping delays. Moreover, the conflict between Palestine and Israel could impact future business decisions to locate potential clinical trials in Israel. It is not possible to predict the short and long- term implications of military conflicts or wars or geopolitical tensions which could include further sanctions, uncertainty about economic and political stability, increases in inflation rate and energy prices, cyber- attacks, supply chain challenges and adverse effects on currency exchange rates and financial markets. ~~Results of pre- clinical studies and earlier clinical trials are not necessarily predictive indicators of future results.~~ Any positive results from future pre- clinical testing of our product candidates and potential future clinical trials may not necessarily be predictive of the results from Phase ~~1~~ **I** , Phase ~~2~~ **II** or Phase ~~3~~ **III** clinical trials. In addition, our interpretation of results derived from clinical data or our conclusions based on our pre- clinical data may prove inaccurate. Frequently, pharmaceutical and biotechnology companies have suffered significant setbacks in clinical trials after achieving positive results in pre- clinical testing and early phase clinical trials, and we cannot be certain that we will not face similar setbacks. These setbacks may be caused by the fact that pre- clinical and clinical data can be susceptible to varying interpretations and analyses. Furthermore, certain product candidates may perform satisfactorily in pre- clinical studies and clinical trials ~~,~~ but nonetheless fail to obtain FDA approval or appropriate approvals by the appropriate regulatory authorities in other countries. If we fail to produce positive results in our clinical trials for our product candidates, the development timeline and regulatory approval and commercialization prospects for them and as a result our business and financial prospects ~~,~~ would be materially adversely affected ~~. We have limited marketing experience, and we do not anticipate at this time establishing a sales force or distribution and reimbursement capabilities, and we may not be able to successfully commercialize any of our product candidates if they are approved in the future~~ . If regulatory approval of our products is ever obtained, our ability to generate revenues ultimately depends on our ability to sell our approved products and secure adequate third- party reimbursement. We currently have limited experience in marketing and selling our products. We currently do not have any products approved for sale in the United States or in any other country. The commercial success of our product candidates will not even be possible for the foreseeable future and will depend on a number of factors beyond our control, including the willingness of physicians to prescribe our products to patients, payers' willingness and ability to pay for the drugs, the level of pricing achieved, patients' response to our drugs and the ability of our marketing partners to generate sales. There can be no guarantee that we will be able to establish or maintain the personnel, systems, arrangements and capabilities necessary to successfully commercialize Ketamir- 2 and MIRA- 55 or any product candidate approved by the FDA in the future. If we fail to establish or maintain successful marketing, sales and reimbursement capabilities or fail to enter into successful marketing arrangements with third parties, our product revenues may suffer. Should we later determine **if** it is in our best interest to develop a sales force **,** we may be unable to effectively train and equip our sales force, therefore our ability to successfully commercialize our products may be harmed. We will be required to expend significant time and resources to train our sales force to be credible, persuasive and compliant with applicable laws in marketing Ketamir- 2 and MIRA- 55 or our other product

candidates to physicians for their approved uses. In addition, we must continue to train our sales force to ensure that a consistent and appropriate message about Ketamir- 2 and MIRA- 55 or our other product candidates are being delivered to our potential customers. If we are unable to effectively train our sales force and equip them with effective materials, including medical and sales literature **,** to help them inform and educate potential customers about the benefits of Ketamir- 2 and MIRA- 55 and our product candidates and its proper administration, our efforts to successfully commercialize Ketamir- 2 and MIRA- 55 and our product candidates could be jeopardized, which would negatively impact our ability to generate product revenues ~~. We will need to further increase the size and complexity of our organization in the future, and we may experience difficulties in managing our growth and executing our growth strategy~~ . Our management and personnel, systems, and facilities currently in place may not be adequate to support our business plan and future growth. As a result, we may need to further expand certain areas of our organization. Our need to effectively manage our operations, growth and various projects requires that we: ● continue to improve our operational, financial, management and regulatory compliance controls and reporting systems and procedures; ● attract and retain enough talented employees; ● manage our clinical trials effectively; ● manage our external manufacturing operations with contract research organizations effectively and in a cost- effective manner; ● manage our development efforts effectively while carrying out our contractual obligations to contractors and other third parties; andIn addition, we may utilize the services of part- time outside consultants and contractors to perform several tasks for us, including tasks related to compliance programs, clinical trial management, regulatory affairs, formulation development and other drug development functions. Our growth strategy may entail expanding our use of consultants and contractors to implement these and other tasks going forward. If we are not able to effectively expand our organization by hiring new employees and expanding our use of consultants and contractors, we may be unable to successfully implement the tasks necessary to effectively execute on our planned research, development, manufacturing, and commercialization activities and, accordingly, may not achieve our research, development and commercialization goals. Our product candidates, if approved, may be unable to achieve the expected market acceptance and, consequently, limit our ability to generate revenue from new products. Even when product development is successful and regulatory approval has been obtained, our ability to generate sufficient revenue depends on the acceptance of our products by physicians and patients. We cannot assure you that our product candidates will achieve the expected level of market acceptance and revenue if and when they obtain the requisite regulatory approvals. The market acceptance of any product depends on a number of factors, including the indication statement and warnings required by regulatory authorities in the product label. Market acceptance can also be influenced by continued ~~demonstration~~ **demonstrations** of efficacy and safety in commercial use, physicians' willingness to prescribe the product, reimbursement from third- party payers such as government health care programs and private third- party payers, the price of the product, the nature of any post- approval risk, management activities mandated by regulatory authorities, competition, and marketing and distribution support. Further, an ineffective or inefficient distribution model at launch may lead to the inability to fulfill demand, and consequently a loss of revenue. Any factors preventing or limiting the market acceptance of our products could have a material adverse effect on our business, results of operations and financial condition. If the price for any future approved products decreases or if government and other third- party payers do not provide coverage and adequate reimbursement levels, our revenue and prospects for profitability will suffer. Patients who are prescribed medicine for the treatment of their conditions generally rely on third- party payers to reimburse all or part of the costs associated with their prescription drugs. Reimbursement systems in international markets vary significantly by country and by region, and reimbursement approvals generally must be obtained on a country- by- country basis. Coverage and adequate reimbursement from governmental healthcare programs, such as Medicare and Medicaid, and commercial payers is critical to new product acceptance. Coverage decisions may depend upon clinical and economic standards that disfavor new drug products when more established or lower- cost therapeutic alternatives are already available or subsequently become available. Even if we obtain coverage for products we may market, the resulting reimbursement payment rates may require co- payments that patients find unacceptably high. Patients may not use our products if coverage is not provided, or reimbursement is inadequate to cover a significant portion of ~~its~~ **their** cost. In addition, the market for our products will depend significantly on access to third- party payers' drug formularies or lists of medications for which third- party payers provide coverage and reimbursement. The industry competition to be included in such formularies often leads to downward pricing pressures on pharmaceutical companies. Also, third- party payers may refuse to include a particular branded drug in their formularies or otherwise restrict patient access to a branded drug when a less costly generic equivalent or other alternative is available, even if not approved for the indications for which our products are approved. Third- party payers or governmental or commercial entities are developing increasingly sophisticated methods of controlling healthcare costs. The current environment is putting pressure on companies to price products below what they may feel is appropriate. Selling our products at less than an optimized price could impact our revenues and overall success as a company. It will be difficult to determine the optimized price for our products. In addition, in the U. S., no uniform policy of coverage and reimbursement for drug products exists among third- party payers. Therefore, coverage and reimbursement for our products may differ significantly from payer to payer. As a result, the coverage determination process is often a time- consuming and costly process that will require us to provide scientific and clinical support for the use of our products to each payer separately, with no assurance that coverage will be obtained. If we are unable to obtain coverage of, and adequate payment levels for, products we may market to third- party payers, physicians may limit how much or under what circumstances they will prescribe or administer them, and patients may decline to purchase them. This in turn could affect our ability to successfully commercialize products we may market, and thereby adversely impact our profitability, results of operations, financial condition, and future success. In addition, where we have chosen to collaborate with a third party on product candidate development and commercialization, our partner may elect to reduce the price of our products in order to increase the likelihood of obtaining reimbursement approvals. In many countries, products cannot be commercially launched until reimbursement is approved and the negotiation process in some countries can exceed 12 months. In addition, pricing and reimbursement decisions

in certain countries can be affected by decisions taken in other countries, which can lead to mandatory price reductions and / or additional reimbursement restrictions across a number of other countries, which may thereby adversely affect our sales and profitability. In the event that countries impose prices that are not sufficient to allow us or our partners to generate a profit, our partners may refuse to launch the product in such countries or withdraw the product from the market, which would adversely affect sales and profitability. Events, such as price decreases, government mandated rebates or unfavorable reimbursement decisions, could affect the pricing and reimbursement of Ketamir- 2 and MIRA- 55 and our other product candidates and could have a material adverse effect on our business, reputation, results of operations and financial condition. We expect to face intense competition, often from companies with greater resources and experience than we have. Demand for ketamine analogs like Ketamir- 2 and synthetic cannabinoids such as MIRA- 55 and will likely be dependent on a number of social, political, legislative, and economic factors that are beyond our control. While we believe that there will be a demand for such drugs, and that the demand will grow, there is no assurance that such demand will happen, that we will benefit from any demand or that our business, in fact, will ever generate revenues from our drug development programs or become profitable. The emerging markets for product candidates like ours and related medical research and development is and will likely remain competitive. The development and commercialization of drugs and medicines is highly competitive. We compete with a variety of multinational pharmaceutical companies and specialized biotechnology companies, as well as products and processes being developed by universities and other research institutions. Many of our competitors have developed, are developing, or will develop drugs and processes which may be competitive with our drug candidates. Competitive therapeutic treatments include those that have already been approved by medicines regulators and accepted by the medical community and any new treatments that may enter the market. For some of our drug development programs / areas of therapeutic interest, other treatment options are currently available, under development, and may become commercially available in the future. If any of our product candidates are approved for the diseases and conditions we are currently pursuing, they may compete with a range of medicines or therapeutic treatments that are either in development, will be developed in the future or currently marketed. Established companies may have a competitive advantage over us due to their size and experiences, financial resources, and institutional networks. Many of our competitors may have significantly greater financial, technical, and human resources than we do. Due to these factors, our competitors may have an advantage in marketing their approved drugs and may obtain regulatory approval of their drug candidates before we are able to, which may limit our ability to develop or commercialize our drug candidates. Our competitors may also develop drugs / medicines that are safer, more effective, more widely used and less expensive than ours. These advantages could materially impact our ability to develop and, if approved, commercialize our product candidates successfully. Furthermore, some of these competitors may make acquisitions or establish collaborative relationships among themselves or with third parties to increase their ability to rapidly gain market share. Our product candidates may compete with other synthetic cannabinoids, as well as with cannabinoid or cannabis- based drugs, in addition to competing with state- licensed medical and recreational marijuana, in markets where the recreational and / or medical use of marijuana is legal. There is continuing support in the U. S. for further state legalization of marijuana. In markets where recreational and / or medical marijuana is not legal, our product candidates, once approved by regulators, may compete with marijuana or marijuana- based products purchased in the illegal drug market. This may or may not affect the commercial price that we may be able to achieve for our synthetic regulatory- approved medicines, should they be approved by the FDA. Moreover, as generic versions of drug products enter the market, the price for such medicines may be expected to decline rapidly and substantially. Even if we are the first to obtain FDA approval of one of our product candidates, the future potential approval of generics could adversely affect the price we are able to charge, and the profitability of our product (s) will likely decline. Mergers and acquisitions in the pharmaceutical and biotechnology industries may result in more resources being concentrated among a smaller number of our competitors. Smaller and other early- stage companies may also prove to be significant competitors, particularly through collaborative arrangements with large and established companies. These companies may compete with us in recruiting and retaining qualified scientific, management and commercial personnel, utilizing contract manufacturing facilities or contract research organizations (CROs), or establishing clinical trial sites and subject registration for clinical trials, as well as in acquiring technologies complementary to our research projects. Product shipment delays could have a material adverse effect on our business, results of operations and financial condition. The shipment, import and export of Ketamir- 2 and MIRA- 55 and our other product candidates require import and export licenses. In the U. S., FDA, U. S. Customs and Border Protection and the DEA, and in other countries similar regulatory authorities, regulate the import and export of pharmaceutical products that contain controlled substances. Specifically, the import and export process require the issuance of import and export licenses by the relevant controlled substance authority in both the importing and exporting ~~country~~ **countries** . We may not be granted, or if granted, maintain ~~,~~ such licenses from the authorities in certain countries. Even if we obtain the relevant licenses, shipments of Ketamir- 2 and MIRA- 55 and our product candidates may be held up in transit, which could cause significant delays and may lead to product batches being stored outside required temperature ranges. Inappropriate storage may damage the product shipment resulting in a partial or total loss of revenue from one or more shipments of Ketamir- 2 and MIRA- 55 or our other product candidates. A partial or total loss of revenue from one or more shipments of Ketamir- 2 and MIRA- 55 or our other product candidates could have a material adverse effect on our business, results of operations and financial condition. Even though the DEA has confirmed in writing that it conducted a scientific review of the chemical structure of MIRA1a and Ketamir- 2 in accordance with the definitions within the CSA and its implementing regulations and determined that MIRA1a and Ketamir- 2 is not a controlled substance or listed chemical, there is no assurance that the DEA may not change its position. We have filed the necessary requirements with the DEA to review MIRA- 55, however, there can be no assurance that the DEA will conclude that MIRA- 55 is not a controlled substance or listed chemical. The manufacture of our product candidates is complex and uncertain, and until we develop a validated manufacturing process, we may encounter difficulties in supplying our planned and future clinical trials. If we encounter such difficulties, or fail to meet quality standards, our ability to meet clinical timelines and expand

our development strategy could be impacted. The processes involved in manufacturing Ketamir- 2, MIRA- 55 and other product candidates are complex, expensive, highly regulated and subject to multiple risks and uncertainties. We have been faced with issues such as this in the initial synthesis of MIRA- 55 (which we initially believed was based on our patented MIRA1a molecule). In addition, as product candidates are developed through early to late- stage clinical trials and then to approval and commercialization, it is common that various aspects of the development program, such as manufacturing methods, are modified along the way to optimize the scale, process and results. Any changes to the manufacturing processes carry the risk that they will not achieve these intended objectives, or that the product candidates may not meet the rigorous quality standards necessary for use in our pre- clinical or clinical trials. Also, if planned or future manufacturing of Ketamir- 2, MIRA- 55 or other product candidates fails to meet the quality standards for use in our pre- clinical or clinical trials, or the active drug substance does not meet our quality specifications, it could impact our timelines and limit our development strategy. For example, and as discussed above, in the first quarter of 2024, we concluded that during the manufacturing and scale- up process of MIRA1a, the intended MIRA1a compound was in fact synthesized as MIRA- 55. Moreover, our contract manufacturing organizations (" CMOs ") or contract development and manufacturing organization (" CDMOs ") may be unable to successfully increase the manufacturing scale for our product candidates in a timely or cost- effective manner and may experience delays due to limited manufacturing capacity. In addition, quality issues may arise during manufacturing activities. If our CMOs or CDMOs are unable to successfully manufacture our product candidates in sufficient quantity in a timely manner or produce active drug substances that do not meet our quality specifications, our planned pre- clinical or clinical trials may be delayed or modified. We may fail to expand our manufacturing capability in time to meet market demand for our products and product candidates, and the FDA may refuse to accept our facilities or those of our contract manufacturers as being suitable for the production of our products and product candidates. Any problems in our manufacturing process could have a material adverse effect on our business, results of operations and financial condition. Before we can begin commercial manufacture of any product candidates for sale in the U. S., we must obtain FDA regulatory approval for the product, which requires a successful FDA inspection of our manufacturing facilities and those of our contract manufacturers, processes, and quality systems in addition to other product- related approvals. Although we may successfully navigate this pre- approval inspection process as it relates in the U. S., pharmaceutical manufacturing facilities are continuously subject to post- approval inspection by the FDA and foreign regulatory authorities. Due to the complexity of the processes used to manufacture our product candidates, we may be unable to initially or continue to pass federal, state or international regulatory inspections in a cost- effective manner. If we are unable to comply with manufacturing regulations, we may be subject to fines, unanticipated compliance expenses, recall or seizure of any approved products, total or partial suspension of production and / or enforcement actions, including injunctions, and criminal or civil prosecution. These possible sanctions would adversely affect our business, results of operations and financial condition. Business interruptions could delay us in the process of developing our product candidates and could disrupt our product sales. Our research and development activities are conducted through outside contractors and manufacturers. Loss of our contracted manufacturing facilities, stored inventory or laboratory facilities through fire, theft or other causes, or loss of our raw material, could have an adverse effect on our ability to continue product development activities and to conduct our business. Failure to supply our partners with commercial product may lead to adverse consequences, including the right of partners to take over responsibility for product supply. We currently do not have insurance coverage to compensate us for such business interruptions. Our contract manufacturers and suppliers provide that in their separate operations; however, such coverage may prove insufficient to fully compensate us for the damage to our business resulting from any significant property or casualty loss to those facilities. If product liability lawsuits are successfully brought against us, we will incur substantial liabilities and may be required to limit the commercialization of Ketamir- 2 and MIRA- 55 and our product candidates. Although we have never had any product liability claims or lawsuits brought against us, we face potential product liability exposure related to the testing of our product candidates in human clinical trials. We may face exposure to claims by an even greater number of persons when we begin to market and distribute our products commercially in the U. S., Europe and elsewhere. Now, and in the future, an individual may bring a liability claim against us alleging that Ketamir- 2, MIRA- 55 or one of our other product candidates caused an injury. While we continue to take what we believe are appropriate precautions, we may be unable to avoid significant liability if any product liability lawsuit is brought against us. Large judgments have been awarded in class action or individual lawsuits based on drugs that had unanticipated side effects. If we cannot successfully defend ourselves against product liability claims, we will incur substantial liabilities. Regardless of merit or eventual outcome, liability claims may result in: ● decreased demand for Ketamir- 2, MIRA- 55 or our other product candidates if such product candidates are approved; ● injury to our reputation; ● withdrawal of clinical trial participants; ● costs of related litigation; ● substantial monetary awards to patients and others; ● increased cost of liability insurance; ● loss of revenue; and ● the inability to successfully commercialize our products. Counterfeit versions of our products could harm our business. Counterfeiting activities and the presence of counterfeit products in a number of markets and over the Internet continue to be a challenge for maintaining a safe drug supply for the pharmaceutical industry. Counterfeit products are frequently unsafe or ineffective and can be life- threatening. To distributors and users, counterfeit products may be visually indistinguishable from the authentic version. Reports of adverse reactions to counterfeit drugs along with increased levels of counterfeiting could be mistakenly attributed to the authentic product, affect patient confidence in the authentic product and harm the business of companies such as ours. If our products were to be the subject of counterfeits, we could incur reputational and financial harm. We depend upon our key personnel and our ability to attract and retain employees. Our future growth and success depend on our ability to recruit, retain, manage, and motivate our employees. The inability to hire or retain experienced management personnel could adversely affect our ability to execute our business plan and harm our operating results. Due to the specialized scientific and managerial nature of our business, we rely heavily on our ability to attract and retain qualified scientific, technical, and managerial personnel. The competition for qualified personnel in the pharmaceutical field is intense. Due to this intense competition, we may be unable to continue to attract and

retain the qualified personnel necessary for the development of our business or to recruit suitable replacement personnel. Our employees may engage in misconduct or other improper activities, including noncompliance with regulatory standards and requirements. We are exposed to the risk of employee fraud or other misconduct. Misconduct by employees could include intentional failures to comply with FDA or foreign regulations, provide accurate information to FDA or other regulatory authorities, comply with applicable manufacturing standards, comply with other foreign, federal, and state laws and regulations, report information or data accurately or disclose unauthorized activities to us. Employee misconduct could also involve the improper use of information, including information obtained during clinical trials, or illegal appropriation of drug products, which could result in government investigations and serious harm to our reputation. The precautions we take to detect and prevent these prohibited activities may not be effective in controlling unknown or unmanaged risks or losses or in protecting us from governmental investigations or other actions or lawsuits stemming from a failure to comply with such laws or regulations. If any such actions are instituted against us, and we are not successful in defending ourselves or asserting our rights, those actions could have a significant impact on our business, including the imposition of significant fines or other sanctions. We are subject to the U. S. Foreign Corrupt Practices Act and other anti- corruption laws, as well as export control laws, customs laws, sanctions laws and other laws governing our operations. If we fail to comply with these laws, we could be subject to civil or criminal penalties, other remedial measures, and legal expenses, which could adversely affect our business, results of operations and financial condition. Our operations are subject to anti- corruption laws, including the U. S. Foreign Corrupt Practices Act of 1977, as amended (the " FCPA "), and other anti- corruption laws that apply in countries where we do business. The FCPA and these other laws generally prohibit us and our employees and intermediaries from bribing, being bribed or making other prohibited payments to government officials or other persons to obtain or retain business or gain some other business advantage. We and our commercial partners operate in a number of jurisdictions that pose a high risk of potential FCPA violations, and we participate in collaborations and relationships with third parties whose actions could potentially subject us to liability under the FCPA or local anti- corruption laws. In addition, we cannot predict the nature, scope, or effect of future regulatory requirements to which our international operations might be subject or the manner in which existing laws might be administered or interpreted. We are also subject to other laws and regulations governing our international operations, including regulations administered by the government of the U. S. and other countries in which we operate or plan to operate, including applicable export control regulations, economic sanctions on countries and persons, customs requirements, and currency exchange regulations, (collectively referred to as the " Trade Control laws "). However, there is no assurance that we will be completely effective in ensuring our compliance with all applicable anti- corruption laws, including the FCPA or other legal requirements, including Trade Control laws. If we are not in compliance with the FCPA and other anti- corruption laws or Trade Control laws, we may be subject to criminal and civil penalties, disgorgement and other sanctions and remedial measures, and legal expenses, which could have an adverse impact on our business, financial condition, results of operations and liquidity, as well as our reputation. Likewise, any investigation of any potential violations of the FCPA, other anti- corruption laws or Trade Control laws by the U. S. or other authorities could also have an adverse impact on our reputation, our business, results of operations and financial condition. Our proprietary information, or that of our suppliers and business partners, may be lost or we may suffer security breaches. In the ordinary course of our business, we will collect and store sensitive data, including valuable and commercially sensitive intellectual property, clinical trial data, our proprietary business information and that of our suppliers and business partners, and personally identifiable information of our clinical trial subjects and employees, on our networks, and with our third- party cloud service providers. The secure processing, maintenance and transmission of this information is critical to our operations. Despite our security measures, our information technology and infrastructure, and that of our third parties, may be vulnerable to attacks by hackers or breached due to employee error, malfeasance, or other disruptions. Any breach could compromise our networks and the information stored there could be accessed, publicly disclosed, lost, or stolen. Any such access, disclosure or other loss of information could result in legal claims or proceedings, liability under laws that protect the privacy of personal information, regulatory penalties, disrupt our operations, damage our reputation, and cause a loss of confidence in our products and our ability to conduct clinical trials, which could adversely affect our business and reputation and lead to delays in gaining regulatory approvals for Ketamir- 2 and MIRA- 55 or other product candidates. Failure of our information technology systems, including cybersecurity attacks or other data security incidents, could significantly disrupt the operation of our business. Our business is increasingly dependent on critical, complex, and interdependent information technology (" IT ") systems, including internet- based systems, some of which are managed or hosted by third parties, to support business processes as well as internal and external communications. The size and complexity of our IT systems make us potentially vulnerable to IT system breakdowns, malicious intrusion, and computer viruses, which may result in the impairment of our ability to operate our business effectively. We are continuously evaluating and, where appropriate, enhancing our IT systems to address our planned growth, including to support our planned manufacturing operations. There are inherent costs and risks associated with implementing the enhancements to our IT systems, including potential delays in access to, or errors in, critical business and financial information, substantial capital expenditures, additional administrative time and operating expenses, retention of sufficiently skilled personnel to implement and operate the enhanced systems, demands on management time, and costs of delays or difficulties in transitioning to the enhanced systems, any of which could harm our business and results of operations. In addition, the implementation of enhancements to our IT systems may not result in productivity improvements at a level that outweighs the costs of implementation, or at all. In addition, our systems and the systems of our third- party providers and collaborators are potentially vulnerable to data security breaches which may expose sensitive data to unauthorized persons or to the public. Such data security breaches could lead to the loss of confidential information, trade secrets or other intellectual property, could lead to the public exposure of personal information (including personally identifiable information or individually identifiable health information) of our employees, clinical trial patients, customers, business partners, and others, could lead to potential identity theft, or could lead to reputational harm. Data security breaches could also

result in loss of clinical trial data or damage to the integrity of that data. In addition, the increased use of social media by our employees and contractors could result in inadvertent disclosure of sensitive data or personal information, including but not limited to, confidential information, trade secrets and other intellectual property. Any such disruption or security breach, as well as any action by us or our employees or contractors that might be inconsistent with the rapidly evolving data privacy and security laws and regulations applicable within the United States and elsewhere where we conduct business, could result in enforcement actions by U. S. states, the U. S. federal government or foreign governments, liability or sanctions under data privacy laws, including healthcare laws such as HIPAA, that protect certain types of sensitive information, regulatory penalties, other legal proceedings such as but not limited to private litigation, the incurrence of significant remediation costs, disruptions to our development programs, business operations and collaborations, diversion of management efforts and damage to our reputation, which could harm our business and operations. Because of the rapidly moving nature of technology and the increasing sophistication of cybersecurity threats, our measures to prevent, respond to and minimize such risks may be unsuccessful. Security breaches, loss of data and other disruptions could compromise sensitive information related to our business, prevent us from accessing critical information or expose us to liability, which could adversely affect our business and our reputation. In the ordinary course of our business, we, our vendors, and our third- party cloud service providers may collect and store sensitive data, including legally protected patient health information, credit card information, personally identifiable information about our employees and patients, intellectual property, and proprietary business information. We manage and maintain our applications and data utilizing cloud- based and on- site systems. These applications and data encompass a wide variety of business- critical information including research and development information, commercial information and business and financial information. The secure processing, storage, maintenance, and transmission of this critical information is vital to our operations and business strategy, and we devote significant resources to protecting such information. Although we take measures to protect sensitive information from unauthorized access or disclosure, our information technology and infrastructure may be vulnerable to attacks by hackers, or viruses, breaches, or interruptions due to employee error, malfeasance or other disruptions, or lapses in compliance with privacy and security mandates. Any such virus, breach or interruption could compromise our networks and the information stored there could be accessed by unauthorized parties, publicly disclosed, lost or stolen. We have measures in place that are designed to prevent, and if necessary to detect and respond to such security incidents, breaches of privacy, and security mandates. However, in the future, any such access, disclosure or other loss of information could result in legal claims or proceedings, liability under laws that protect the privacy of personal information, such as HIPAA in the United States and the General Data Protection Regulation in the European Union, or GDPR, government enforcement actions and regulatory penalties. Unauthorized access, loss or dissemination could also disrupt our operations, including our ability to process samples, provide test results, share and monitor safety data, bill payers or patients, provide customer support services, conduct research and development activities, process and prepare company financial information, manage various general and administrative aspects of our business and may damage our reputation, any of which could adversely affect our business, financial condition and results of operations. Legislative or regulatory reform of the health care system in the U. S. may affect our ability to profitably sell our products, if approved. Our ability to commercialize our future products successfully, alone or with collaborators, will depend in part on the extent to which coverage and reimbursement for the products will be available from government and health administration authorities, private health insurers and other third- party payers. The continuing efforts of the U. S. government, insurance companies, managed care organizations and other payers for health care services to contain or reduce health care costs may adversely affect our ability to set prices for our products which we believe are fair, and our ability to generate revenues and achieve and maintain profitability. Specifically, in the U. S., there have been a number of legislative and regulatory proposals to change the health care system in ways that could affect our ability to sell our products profitably. For example, certain states in the U. S. are proposing legislation mandating publicly funded health program coverage of medical cannabis. In addition, the 2010 Affordable Care Act, or the ACA, substantially changed the way healthcare is financed by both governmental and private insurers. Both Congress and the U. S. President have already taken some actions that are intended to significantly limit the ACA, and we expect efforts to further modify or repeal the ACA to continue. The success and potential effects of these efforts to repeal or modify the ACA are not clear. We expect additional federal and state legislative proposals for health care reform, which could limit the prices that can be charged for the products we develop and may limit our commercial opportunity. The continuing efforts of government and other third- party payers to contain or reduce the costs of health care through various means may limit our commercial opportunity. It will be time- consuming and expensive for us to go through the process of seeking coverage and reimbursement from Medicare, Medicaid, and other governmental health programs and from private payers. Our products may not be considered cost- effective, and government and third- party private health insurance coverage and reimbursement may not be available to patients for any of our future products or sufficient to allow us to sell our products on a competitive and profitable basis. Our results of operations could be adversely affected by ACA, changes to the ACA, and by other health care reforms that may be enacted or adopted in the future. In addition, increasing emphasis on managed care in the U. S. will continue to put downward pressure on the pricing of pharmaceutical products. Cost- control initiatives could decrease the price that we or any potential collaborators could receive for any of our future products and could adversely affect our ability to generate revenue in the U. S. market and maintain profitability.

Unfavorable global economic and geopolitical conditions could adversely affect our business, financial condition, stock price, and results of operations. Our business could be adversely affected by unstable economic and political conditions within the United States and foreign jurisdictions, including as a result of an economic downturn and geopolitical events, such as changes in U. S. federal policy that affect the geopolitical landscape. Changes to policy implemented by the U. S. Congress, the Trump administration or any new administration have impacted and may in the future impact, among other things, the U. S. and global economy, international trade relations, unemployment, immigration, healthcare, taxation, the U. S. regulatory environment, inflation and other areas. For example, during the prior Trump

administration, increased tariffs were implemented on goods imported into the U. S., particularly from China, Canada, and Mexico. On February 1, 2025, the U. S. imposed a 25 % tariff on imports from Canada and Mexico, which were subsequently suspended for a period of one month, and a 10 % additional tariff on imports from China. Historically, tariffs have led to increased trade and political tensions, between not only the U. S. and China, but also between the U. S. and other countries in the international community. In response to tariffs, other countries have implemented retaliatory tariffs on U. S. goods. Political tensions as a result of trade policies could reduce trade volume, investment, technological exchange and other economic activities between major international economies, resulting in a material adverse effect on global economic conditions and the stability of global financial markets. Any changes in political, trade, regulatory, and economic conditions, including U. S. trade policies, could have a material adverse effect on our financial condition or results of operations. Until we know what policy changes are made, whether those policy changes are challenged and subsequently upheld by the court system and how those changes impact our business and the business of our competitors over the long term, we will not know if, overall, we will benefit from them or be negatively affected by them. The global credit and financial markets have also generally experienced extreme volatility and disruptions (including as a result of actual or perceived changes in interest rates, inflation and macroeconomic uncertainties), which has included severely diminished liquidity and credit availability, declines in consumer confidence, declines in economic growth, high inflation, uncertainty about economic stability, global supply chain disruptions, and increases in unemployment rates. The financial markets and the global economy may also be adversely affected by military conflict, including the ongoing conflicts between Russia and Ukraine, and Israel and Hamas, terrorism, or other geopolitical events. Sanctions imposed by the United States and other countries in response to such conflicts, including the one in Ukraine, may also continue to adversely impact the financial markets and the global economy, and any economic countermeasures by the affected countries or others could exacerbate market and economic instability. There can be no assurance that further deterioration in credit and financial markets and confidence in economic conditions will not occur. A severe or prolonged economic downturn could result in a variety of risks to our business. In addition, current inflationary trends in the global economy may impact salaries and wages, costs of goods and transportation expenses, among other things, and recent and potential future disruptions in access to bank deposits or lending commitments due to bank failures may create market and economic instability. We cannot anticipate all of the ways in which the foregoing, and the current economic climate and financial market conditions generally, could adversely impact our business. We may acquire other companies which could divert our management' s attention, result in additional dilution to our shareholders and otherwise disrupt our operations and harm our operating results. We may in the future seek to acquire businesses, products, or technologies that we believe could complement or expand our product offerings, enhance our technical capabilities or otherwise offer growth opportunities. The pursuit of potential acquisitions may divert the attention of management and cause us to incur various expenses in identifying, investigating, and pursuing suitable acquisitions, whether or not they are consummated. If we acquire additional businesses, we may not be able to integrate the acquired personnel, operations and technologies successfully, **or** effectively manage the combined business following the acquisition or realize anticipated cost savings or synergies. We also may not achieve the anticipated benefits from the acquired business due to a number of factors, including: ● incurrence of acquisition- related costs; ● diversion of management' s attention from other business concerns; ● unanticipated costs or liabilities associated with the acquisition; ● harm to our existing business relationships with collaboration partners as a result of the acquisition; ● harm to our brand and reputation; ● the potential loss of key employees; ● use of resources that are needed in other parts of our business; and ● use of substantial portions of our available cash to consummate the acquisition. In the future, if our acquisitions do not yield expected returns, we may be required to take charges to our operating results arising from the impairment assessment process. Acquisitions may also result in dilutive issuances of equity securities or the incurrence of debt, which could adversely affect our operating results. In addition, if an acquired business fails to meet our expectations, our business, results of operations and financial condition may be adversely affected. ~~Risks Related to Development and Regulatory Approval of Our Product Candidates Clinical trials for our product candidates are expensive, time- consuming, uncertain, and susceptible to change, delay or termination. The results of clinical trials are open to differing interpretations.~~ Clinical trials are expensive, time consuming and difficult to design and implement. Regulatory agencies may analyze or interpret the results differently than us. Even if the results of our clinical trials are favorable, the clinical trials for a number of our product candidates are expected to continue for several years and may take significantly longer to complete. In addition, we, the FDA, or other regulatory authorities, including state and local authorities, or an Institutional Review Board, or IRB, with respect to a trial at its institution, may suspend, delay or terminate our clinical trials at any time, require us to conduct additional clinical trials, require a particular clinical trial to continue for a longer duration than originally planned, require a change to our development plans such that we conduct clinical trials for a product candidate in a different order, e. g., in a step- wise fashion rather than running two trials of the same product candidate in parallel, or the DEA could suspend or terminate the registrations and quota allotments we require in order to procure and handle controlled substances, for various reasons, including: ● lack of effectiveness of any product candidate during clinical trials; ● discovery of serious or unexpected toxicities or side effects experienced by trial participants or other safety issues, such as drug interactions, including those which cause confounding changes to the levels of other concomitant medications; ● slower than expected rates of subject recruitment and enrollment rates in clinical trials; ● difficulty in retaining subjects who have initiated a clinical trial but may withdraw at any time due to adverse side effects from the therapy, insufficient efficacy, fatigue with the clinical trial process or for any other reason; ● delays or inability in manufacturing or obtaining sufficient quantities of materials for use in clinical trials due to regulatory and manufacturing constraints; ● inadequacy of or changes in our manufacturing process or product formulation; ● delays in obtaining regulatory authorization to commence a trial, including " clinical holds " or delays requiring suspension or termination of a trial by a regulatory agency, such as the FDA, before or after a trial is commenced; ● changes in applicable regulatory

policies and ~~regulation~~ **regulations**, including changes to requirements imposed on the extent, nature, or timing of studies; ● delays or failure in reaching agreement on acceptable terms in clinical trial contracts or protocols with prospective clinical trial sites; ● uncertainty regarding proper dosing; ● delay or failure to supply product for use in clinical trials which conforms to regulatory specification; ● unfavorable results from ongoing pre- clinical studies and clinical trials; ● failure of our contract research organizations, or CROs, or other third- party contractors to comply with all contractual requirements or to perform their services in a timely or acceptable manner; ● failure by us, our employees, our CROs or their employees to comply with all applicable FDA or other regulatory requirements relating to the conduct of clinical trials or the handling, storage, security, and recordkeeping; ● scheduling conflicts with participating clinicians and clinical institutions; ● failure to design appropriate clinical trial protocols; ● regulatory concerns with cannabinoid products generally and the potential for abuse; ● insufficient data to support regulatory approval; ● inability or unwillingness of medical investigators to follow our clinical protocols; or ● difficulty in maintaining contact with patients during or after treatment, which may result in incomplete data. Any of the foregoing could have a material adverse effect on our business, results of operations and financial condition. Clinical trials of synthetic cannabinoid drug candidates and ketamine analogs are novel with very limited or non- existing history; we face a significant risk that the trials will not result in commercially viable drugs and treatments. At present, there is only a very limited documented clinical trial history from which we can derive any scientific conclusions for our product candidates or prove that our present assumptions for the current and planned research are scientifically compelling. The active pharmaceutical ingredient (or API) content shown in INDs can vary from one IND to another ~~—~~ **-** hence it is not necessarily possible to extrapolate results from studies with one product and predict efficacy of safety with another product containing a similar API and different source. Whilst the principal synthetic cannabinoid component may be similar, the APIs may differ in terms of minor cannabinoid content, impurity profiles or degradant profiles. While we are encouraged by the results of clinical trials by others (where they exist), there can be no assurance that any pre- clinical study or clinical trial will result in in commercially viable drugs or treatments. Clinical trials are expensive, time consuming and difficult to design and implement. We, as well as the regulatory authorities **,** may suspend, delay or terminate our clinical trials at any time, may require us, for various reasons, to conduct additional clinical trials, or may require a particular clinical trial to continue for a longer duration than originally planned, including, among others: ● lack of effectiveness of any API, formulation, or delivery system during clinical trials; ● discovery of serious or unexpected toxicities or side effects experienced by trial participants or other safety issues; ● slower than expected rates of subject recruitment and enrollment rates in clinical trials; ● delays or inability in manufacturing or obtaining sufficient quantities of GMP- grade materials for use in clinical trials due to regulatory and manufacturing constraints; ● delays in obtaining regulatory authorization to commence a trial, including Institutional Review Board (“ IRB ”) approvals or DEA approvals, licenses required for obtaining and using synthetic cannabinoids or cannabinoid- like substances for research, either before or after a trial is commenced; ● unfavorable results from ongoing pre- clinical studies and clinical trials; ● patients or investigators failing to comply with clinical trial protocols; ● patients failing to return for post- treatment follow- up at the expected rate; ● sites participating in an ongoing clinical trial withdraw, requiring us to engage new sites; ● third- party clinical investigators decline to participate in our clinical trials, do not perform the clinical trials on the anticipated schedule, or act in ways inconsistent with the established investigator agreement, clinical trial protocol, good clinical practices, and other IRB requirements; ● third- party entities do not perform data collection and analysis in a timely or accurate manner or at all; or ● regulatory inspections of our clinical trials require us to undertake corrective action or suspend or terminate our clinical trials ~~. Any failure by us to comply with existing regulations could harm our reputation and operating results~~. We are subject to extensive regulation by U. S. federal and state governments in each of the markets where we have product candidates progressing through the approval process. We must also adhere to all regulatory requirements including FDA’ s Good Laboratory Practice, Good Clinical Practice, and current Good Manufacturing Practices requirements (“ cGMP ”) pharmacovigilance requirements, advertising, and promotion restrictions, reporting and recordkeeping requirements. If we or our suppliers fail to comply with applicable regulations, including FDA pre- or post- approval cGMP requirements, then FDA could sanction us. Even if a drug is FDA- approved, regulatory authorities may impose significant restrictions on a product’ s indicated uses or marketing or impose ongoing requirements for potentially costly post- marketing trials. Ketamir- 2 and MIRA-55, and any of our product candidates that may be approved in the U. S. in the future, will be subject to ongoing regulatory requirements for manufacturing, labeling, packaging, storage, distribution, import, export, advertising, promotion, sampling, recordkeeping and submission of safety and other post- market information, including both federal and state requirements in the U. S. In addition, manufacturers and manufacturers’ facilities are required to comply with extensive FDA requirements, including ensuring that quality control and manufacturing procedures conform to GMP. As such, we, and our contract manufacturers (in the event contract manufacturers are appointed in the future) are subject to continual review and periodic inspections to assess compliance with GMP. Accordingly, we and others with whom we work must continue to spend time, money, and effort in all areas of regulatory compliance, including manufacturing, production, quality control and quality assurance. We will also be required to report certain adverse reactions and production problems, if any, to the FDA, and to comply with requirements concerning advertising and promotion for our products. Promotional communications with respect to prescription drugs are subject to a variety of legal and regulatory restrictions and must be consistent with the information in the product’ s approved label. If a regulatory agency discovers previously unknown problems with a product, such as adverse events of unanticipated severity or frequency, or problems with the facility where the product is manufactured, or disagrees with the promotion, marketing or labeling of the product, it may impose restrictions on that product or us, including requiring withdrawal of the product from the market. If we fail to comply with applicable regulatory requirements, a regulatory agency or enforcement authority may: ● issue untitled or warning letters; ● seek to enjoin our activities; ● impose civil or criminal penalties; ● suspend regulatory approval; ● suspend any of our ongoing clinical trials; ● refuse to approve pending applications or supplements to approved applications submitted by us; ● impose restrictions on our operations, including by requiring us to

enter into a Corporate Integrity Agreement or closing our contract manufacturers' facilities, if any; or ● seize or detain products or require a product recall. In addition, any government investigation of alleged violations of law could require us to expend significant time and resources in response and could generate negative publicity. Any failure to comply with ongoing regulatory requirements may significantly and adversely affect our ability to commercialize and generate revenue from our product candidates. If regulatory sanctions are applied or if regulatory approval is withdrawn, the value of our business and our operating results may be adversely affected. Any action against us for violation of these laws, even if we successfully defend against it, could cause us to incur significant legal expenses, divert our management' s attention from the operation of our business and damage our reputation. We expend significant resources on compliance efforts and such expenses are unpredictable and might adversely affect our results. Changing laws, regulations and standards might also create uncertainty, higher expenses and increase insurance costs. As a result, we intend to invest all reasonably necessary resources to comply with evolving standards, and this investment might result in increased management and administrative expenses and a diversion of management time and attention from revenue- generating activities to compliance activities. We are subject to federal and state healthcare laws and regulations and implementation of or changes to such healthcare laws and regulations could adversely affect our business and results of operations. In the United States, there have been a number of legislative and regulatory proposals to change the healthcare system in ways that could impact our ability to sell our product candidates. If we are found to be in violation of any of these laws or any other federal or state regulations, we may be subject to administrative, civil and / or criminal penalties, damages, fines, individual imprisonment, exclusion from federal health care programs and the restructuring of our operations. Any of these could have a material adverse effect on our business and financial results. Since many of these laws have not been fully interpreted by the courts, there is an increased risk that we may be found in violation of one or more of their provisions. Any action against us for violation of these laws, even if we ultimately are successful in our defense, will cause us to incur significant legal expenses and divert our management' s attention away from the operation of our business. We expect that the ACA, as well as other healthcare reform measures that may be adopted in the future, may result in more rigorous coverage criteria and in additional downward pressure on the price that we may receive for any approved product. There have been judicial challenges to certain aspects of the ACA and numerous legislative attempts to repeal and / or replace the ACA in whole or in part, and we expect there will be additional challenges and amendments to the ACA in the future. At this time, the full effect that the ACA will have on our business in the future remains unclear. An expansion in the government' s role in the U. S. healthcare industry may cause general downward pressure on the prices of prescription drug products, lower reimbursements, or any other product for which we obtain regulatory approval, reduce product utilization, and adversely affect our business and results of operations. Any reduction in reimbursement from Medicare or other government programs may result in a similar reduction in payments from private payers. The implementation of cost containment measures or other healthcare reforms may prevent us from being able to generate revenue, attain profitability, or commercialize products for which we may receive regulatory approval. **We plan to conduct clinical trials at sites outside the United States.** The **FDA may not accept data from trials conducted in such locations, and the conduct of trials outside the United States could subject us to additional delays and expense. We plan to conduct one or more clinical trials with one or more trial sites that are located outside the United States. The acceptance by the FDA or other** regulatory **authorities of study data from clinical trials conducted outside their jurisdiction may be subject to certain conditions or may not be accepted at all. In cases where data from foreign clinical trials are intended to serve as the sole basis for marketing** approval ~~processes~~ **in the United States, the FDA will generally not approve the application on the basis of foreign data alone unless (i) the data are applicable to the United States population and United States medical practice; (ii) the trials were performed by clinical investigators of recognized competence and pursuant to GCP regulations and (iii) the data may be considered valid without the need for an on- site inspection by the FDA, or if the FDA considers such inspection to be necessary, the FDA is able to validate the data through an on- site inspection or other appropriate means. In addition, even where the foreign study data are not intended to serve as the sole basis for approval, the FDA will not accept the data as support for an application for marketing approval unless the study is well- designed and well- conducted in accordance** with **GCP requirements and** the FDA **is able to validate the data from the study through an onsite inspection if deemed necessary. Many foreign regulatory authorities have similar approval requirements. In addition, such foreign trials would be subject to the applicable local laws of the foreign jurisdictions where the trials** are ~~lengthy~~ **conducted. There can be no assurance that the FDA or any comparable foreign regulatory authority will accept data from trials conducted outside of the United States or the applicable jurisdiction. If the FDA or any comparable foreign regulatory authority does not accept such data, it would result in the need for additional trials, which could be costly** and ~~inherently unpredictable~~ **time-consuming, and which may result in current or future product candidates that we may develop not receiving approval for commercialization in the applicable jurisdiction. Conducting clinical trials outside the United States also exposes us to additional risks, including risks associated with: ● additional foreign regulatory requirements; ● foreign exchange fluctuations; ● compliance with foreign manufacturing, customs, shipment and storage requirements; ● cultural differences in medical practice and clinical research; ● diminished protection of intellectual property in some countries; and ● interruptions or delays in our trials resulting from geopolitical events, such as war or terrorism** . We are not permitted to market our drug candidates as medicines in the United States or other countries until we receive approval of a New Drug Application (" NDA ") from the FDA or in any foreign countries until we receive the approval from the regulatory authorities of such countries. Prior to submitting an NDA to the FDA for approval of our drug candidates we will need to have completed our pre- clinical studies and clinical trials and demonstrate that our products meet all applicable standards of identity, strength, quality, and purity throughout their expiration date. Successfully completing any clinical program and obtaining approval of an NDA is a complex, lengthy, expensive, and uncertain process, and the FDA (or other country medicines regulatory body) may delay, limit, or deny approval of product candidates for many reasons, including, among others, because:

● an inability to demonstrate that our product candidates are safe and effective in treating patients to the satisfaction of the FDA; ● results of clinical trials that may not meet the level of statistical or clinical significance required by the FDA; ● disagreements with the FDA with respect to the number, design, size, conduct or implementation of clinical trials; ● requirements by the FDA to conduct additional clinical trials; ● disapproval by the FDA of certain formulations, labeling or specifications of product candidates; ● findings by the FDA that the data from pre- clinical studies and clinical trials are insufficient; ● findings by the FDA that our API or finished products do not meet all applicable standards of identity, strength, quality, and purity; ● the FDA may disagree with the interpretation of data from pre- clinical studies and clinical trials; and ● the FDA may change their approval policies or adopt new regulations. Any of these factors, many of which are beyond our control, could increase development time and / or costs or jeopardize our ability to obtain regulatory approval for our drug candidates ~~. There is a high rate of failure for drug candidates proceeding through clinical trials~~ . Generally, there is a high rate of failure for drug candidates proceeding through clinical trials. We may suffer significant setbacks in our clinical trials similar to the experience of a number of other companies in the pharmaceutical and biotechnology industries, even after receiving promising results in earlier trials. Further, even if we view the results of a clinical trial to be positive, FDA may disagree with our interpretation of the data. In the event that we obtain negative results from clinical trials for product candidates or other problems related to potential chemistry, manufacturing and control issues or other hurdles occur and our product candidates are not approved, we may not be able to generate sufficient revenue or obtain financing to continue our operations, our ability to execute on our current business plan may be materially impaired, our reputation in the industry and in the investment community might be significantly damaged and the price of our common stock could decrease significantly. In addition, our inability to properly design, commence and complete clinical trials may negatively impact the timing and results of our clinical trials and ability to seek approvals for our drug candidates. If we are found in violation of federal or state " fraud and abuse " laws, we may be required to pay a penalty and / or be suspended from participation in federal or state health care programs, which may adversely affect our business, financial condition, and results of operations. In the United States, we are subject to various federal and state health care " fraud and abuse " laws, including anti- kickback laws, false claims laws and other laws intended to reduce fraud and abuse in federal and state health care programs, which could affect us particularly upon successful commercialization of our products in the U. S. The Medicare and Medicaid Patient Protection Act of 1987, or federal Anti- Kickback Statute, makes it illegal for any person, including a prescription drug manufacturer (or a party acting on its behalf), to knowingly and willfully solicit, receive, offer or pay any remuneration that is intended to induce the referral of business, including the purchase, order or prescription of a particular drug for which payment may be made under a federal health care program, such as Medicare or Medicaid. Under federal law, some arrangements, known as safe harbors, are deemed not to violate the federal Anti- Kickback Statute. Although we seek to structure our business arrangements in compliance with all applicable requirements, it is often difficult to determine precisely how the law will be applied in specific circumstances. Accordingly, it is possible that our practices may be challenged under the federal Anti- Kickback Statute and Federal False Claims Act. Violations of fraud and abuse laws may be punishable by criminal and / or civil sanctions, including fines and / or exclusion or suspension from federal and state health care programs such as Medicare and Medicaid and debarment from contracting with the U. S. government. In addition, private individuals have the ability to bring actions on behalf of the government under the federal False Claims Act as well as under the false claims laws of several states. Many states have adopted laws similar to the federal anti- kickback statute, some of which apply to the referral of patients for health care services reimbursed by any source, not just governmental payers. There are ambiguities as to what is required to comply with these state requirements and if we fail to comply with an applicable state law requirement, we could be subject to penalties. Neither the government nor the courts have provided definitive guidance on the application of fraud and abuse laws to our business. Law enforcement authorities are increasingly focused on enforcing these laws, and it is possible that some of our practices may be challenged under these laws. While we believe we have structured our business arrangements to comply with these laws, it is possible that the government could allege violations of, or convict us of violating, these laws. If we are found in violation of one of these laws, we could be required to pay a penalty and could be suspended or excluded from participation in federal or state health care programs, and our business, results of operations and financial condition may be adversely affected. Serious adverse events or other safety risks could require us to abandon development and preclude, delay or limit approval of our product candidates, limit the scope of any approved label or market acceptance, or cause the recall or loss of marketing approval of products that are already marketed. If any of our product candidates prior to or after any approval for commercial sale, cause serious or unexpected side effects, or are associated with other safety risks such as misuse, abuse or diversion, a number of potentially significant negative consequences could result, including: ● regulatory authorities may interrupt, delay or halt clinical trials; ● regulatory authorities may deny regulatory approval of our product candidates; ● regulatory authorities may require certain labeling statements, such as warnings or contraindications or limitations on the indications for use, and / or impose restrictions on distribution in the form of a REMS in connection with approval or post-approval; ● regulatory authorities may withdraw their approval, require more onerous labeling statements, impose a more restrictive Risk Evaluation and Mitigation Strategy (" REMS "), or require us to recall any product that is approved; ● we may be required to change the way the product is administered or conduct additional clinical trials; ● our relationships with our collaboration partners may suffer; ● we could be sued and held liable for harm caused to patients; or ● our reputation may suffer. The reputational risk is heightened with respect to those of our product candidates that are being developed for pediatric indications. We may voluntarily suspend or terminate our clinical trials if at any time we believe that they present an unacceptable risk to participants or if preliminary data demonstrate that our product candidates are unlikely to receive regulatory approval or unlikely to be successfully commercialized. Following receipt of approval for commercial sale of a product we may voluntarily withdraw or recall that product from the market if at any time we believe that its use, or a person' s exposure to it, may cause adverse health consequences or death. To date we have not withdrawn, recalled, or taken any other action, voluntary or mandatory, to remove an approved product from the market. In addition, regulatory agencies, IRBs, or data safety monitoring

boards may at any time recommend the temporary or permanent discontinuation of our clinical trials or request that we cease using investigators in the clinical trials if they believe that the clinical trials are not being conducted in accordance with applicable regulatory requirements, or that they present an unacceptable safety risk to participants. Although we have never been asked by a regulatory agency, IRB, or data safety monitoring board to discontinue a clinical trial temporarily or permanently, if we elect or are forced to suspend or terminate a clinical trial of any of our product candidates, the commercial prospects for that product will be harmed and our ability to generate product revenue from that product may be delayed or eliminated. Furthermore, any of these events may result in labeling statements such as warnings or contraindications. In addition, such events or labeling could prevent us or our partners from achieving or maintaining market acceptance of the affected product and could substantially increase the costs of commercializing our product candidates and impair our ability to generate revenue from the commercialization of these products either by us or by our collaboration partners. ~~Risks Related to Our Reliance Upon Third Parties Our existing collaboration arrangements and any that we may enter into in the future may not be successful, which could adversely affect our ability to develop and commercialize our product candidates.~~ We may seek additional collaboration arrangements with pharmaceutical or biotechnology companies for the development or commercialization of our product candidates. We may, with respect to our product candidates, enter into new arrangements on a selective basis depending on the merits of retaining commercialization rights for ourselves as compared to entering into selective collaboration arrangements with leading pharmaceutical or biotechnology companies for each product candidate, both in the U. S. and internationally. To the extent that we decide to enter into collaboration agreements, we will face significant competition in seeking appropriate collaborators and the terms of any collaboration or other arrangements that we may establish may not be favorable to us. Any existing or future collaboration that we enter may not be successful. The success of our collaboration arrangements will depend heavily on the efforts and activities of our collaborators. Collaborators generally have significant discretion in determining the efforts and resources that they will apply to these collaborations. Disagreements between parties to a collaboration arrangement regarding development, intellectual property, regulatory or commercialization matters can lead to delays in the development process or commercialization of the applicable product candidate and, in some cases, termination of the collaboration arrangement. These disagreements can be difficult to resolve if neither of the parties has final decision- making authority. Any such termination or expiration could harm our business reputation and may adversely affect us financially. We depend on a limited number of suppliers for materials and components required to manufacture our product candidates. The loss of these suppliers, or their failure to supply us on a timely basis, could cause delays in our current and future capacity and adversely affect our business. We depend on a limited number of suppliers for the materials and components required to manufacture our product candidates. As a result, we may not be able to obtain sufficient quantities of critical materials and components in the future. A delay or interruption by our suppliers may also harm our business, results of operations and financial condition. In addition, the lead time needed to establish a relationship with a new supplier can be lengthy, and we may experience delays in meeting demand in the event we must switch to a new supplier. The time and effort to qualify for and, in some cases, obtain regulatory approval for a new supplier could result in additional costs, diversion of resources or reduced manufacturing yields, any of which would negatively impact our operating results. Our dependence on single- source suppliers exposes us to numerous risks, including the following: our suppliers may cease or reduce production or deliveries, raise prices or renegotiate terms; our suppliers may become insolvent or cease trading; we may be unable to locate a suitable replacement supplier on acceptable terms or on a timely basis, or at all; and delays caused by supply issues may harm our reputation, frustrate our customers and cause them to turn to our competitors for future needs. We maintain our cash at financial institutions, at times in balances that exceed federally insured limits. The failure of financial institutions could adversely affect our ability to pay operational expenses or make other payments. Our cash held in non- interest- bearing and interest- bearing accounts can at times exceed the Federal Deposit Insurance Corporation (" FDIC ") insurance limits. If such banking institutions were to fail, we could lose all or a portion of those amounts held in excess of such insurance limitations. In addition, even if account holders are ultimately made whole with respect to a future bank failure, account holders' access to their accounts and assets held in their accounts may be substantially delayed. Any material loss that we may experience in the future or inability for a material time period to access our cash and cash equivalents could have an adverse effect on our ability to pay our operational expenses or make other payments, which could adversely affect our business. We rely on, and expect to continue to rely on, third parties to conduct clinical trials for our product candidates. If these third parties do not successfully carry out their contractual duties, comply with regulatory requirements or meet expected deadlines, we may not be able to obtain marketing approval for or commercialize our product candidates, and our business could be substantially harmed. We have agreements with third- party CROs to operationalize, provide monitors for and to manage data for our ongoing clinical trials. We rely heavily on these parties for the execution of clinical trials and control only certain aspects of their activities. As a result, we have less direct control over the start- up, conduct, timing and competition of these clinical trials, and the management of data developed through the clinical trials than would be the case if we were relying entirely upon our own staff. Communicating with outside parties can also be challenging, potentially leading to mistakes as well as difficulties in coordinating activities. However, we remain responsible for the conduct of these trials and are subject to enforcement which may include civil and criminal liabilities for any violations of FDA rules and regulations and the comparable foreign regulatory provisions during the conduct of our clinical trials. Outside parties may: ● have staffing difficulties; ● fail to comply with contractual obligations; ● Devote inadequate resources to our clinical trials; ● Experience regulatory compliance issues; ● Undergo changes in priorities or become financially distressed; or ● Form more favorable relationships with other entities, some of which may be our competitors. These factors, among others, may materially adversely affect the willingness or ability of third parties to conduct our clinical trials and may subject us to unexpected cost increases that are beyond our control. Nevertheless, we are responsible for ensuring that each of our studies is conducted in accordance with the applicable protocol, legal, regulatory and scientific standards, and our reliance on CROs does not relieve us of our regulatory responsibilities. We and our CROs are required to comply with GCPs, which are guidelines

enforced by the FDA, the competent authorities of the EU member states and equivalent competent authorities in foreign jurisdictions for any products in clinical development. The FDA and foreign regulatory authorities enforce these regulations and GCP guidelines through periodic inspections of clinical trial sponsors principal investigators, and trial sites, and IRBs. If we or our CROs fail to comply with applicable GCPs, the clinical data generated in our clinical trials may be deemed unreliable and the FDA or other equivalent competent authorities in foreign jurisdictions may require us to perform additional clinical trials before approving our marketing applications. We cannot assure you that, upon inspection, the FDA or foreign regulatory authorities will determine that any of our clinical trials comply with GCPs. In addition, our clinical trials must be conducted with products produced under current Good Manufacturing Practices, or cGMPs and similar foreign requirements. Our failure or the failure of our CROs to comply with these regulations may require us to repeat clinical trials, which would delay the regulatory approval process and could also subject us to enforcement action up to and including civil and criminal penalties. If any of our relationships with these third- party CROs terminate, we may not be able to enter into arrangements with alternative CROs. If CROs do not successfully carry out their contractual duties or obligations or meet expected deadlines, if they need to be replaced or if the quality or accuracy of the clinical data they obtain are compromised due to the failure to adhere to our clinical protocols, regulatory requirements or for other reasons, any such clinical trials may be extended, delayed or terminated, and we may not be able to obtain regulatory approval for, or successfully commercialize, Ketamir- 2, MIRA- 55 or our other product candidates. As a result, our financial results and the commercial prospects for Ketamir- 2 MIRA- 55 or our other product candidates would be harmed, our costs could increase and our ability to generate revenue could be delayed. We rely and expect to continue to rely on third parties to manufacture our clinical product supplies and clinical candidates, and we may rely on third parties for at least a portion of the manufacturing process of our product candidates, if approved. Our business could be harmed if those third parties fail to provide us with sufficient quantities of product supplies or product candidates or fail to do so at acceptable quality levels or prices. We do not currently own any facility that may be used as a clinical- scale manufacturing and processing facility, and we rely on outside vendors and collaborators to manufacture supplies and process our product candidates. For certain of our components or product candidates, we rely on single suppliers or manufacturers to supply or manufacture, but we plan to expand the number of suppliers and manufacturers as we advance our product candidates through clinical development. Our product candidates are not yet manufactured or processed on a commercial scale and we may remain unable to do so for any of our product candidates. Although in the future we may develop our own manufacturing facilities, we may also continue to use third parties as part of our manufacturing processes and may, in any event, never be successful in developing our own manufacturing facilities. Our anticipated reliance on third- party manufacturers exposes us to the following risks: ● We may be unable to identify manufacturers on acceptable terms or at all because the number of potential manufacturers is limited and the FDA must inspect any manufacturers for current cGMP. ● Non- compliance of our third- party manufacturers with requirements of our marketing application (s). In addition, a new manufacturer would have to be educated in, or develop substantially equivalent processes for, the production of our product candidates. ● Third- party manufacturers may have little or no experience with our product candidates , and therefore may require a significant amount of support from us in order to implement and maintain the infrastructure and processes required to manufacture our product candidates. ● Third- party manufacturers might be unable to timely manufacture our product candidates or produce the quantity and quality required to meet our clinical and commercial needs, if any. ● Third- party manufacturers may not be able to execute our manufacturing procedures and other logistical support requirements appropriately. ● Third- party manufacturers may not perform as agreed, may not devote sufficient resources to our product candidates or may not remain in the contract manufacturing business for the time required to supply our clinical trials or to successfully produce, store, and distribute our products, if any. ● Manufacturers are subject to ongoing periodic unannounced inspection by the FDA and corresponding state or foreign agencies to ensure strict compliance with cGMP and other government regulations and corresponding foreign standards. We do not have control over third- party manufacturers' compliance with these regulations and standards. ● We may not own, or may have to share, the intellectual property rights to any improvements made by our third- party manufacturers in the manufacturing processes for our product candidates. ● Our third- party manufacturers could breach or terminate their agreements with us, and we may be required to pay fees upon suspension or termination of the agreement even if the manufacturers do not deliver adequate supply of the product candidates or their components. ● Raw materials and components used in the manufacturing processes, particularly those for which we have no other source or supplier, may not be available or may not be suitable or acceptable for use due to factors beyond our control. ● Our third- party manufacturers may have unacceptable or inconsistent product quality success rates and yields, and we have no direct control over their ability to maintain adequate quality control, quality assurance and qualified personnel. Each of these risks could delay or prevent the completion of our clinical trials or the approval of any of our product candidates by the FDA, result in higher costs or adversely impact commercialization of our product candidates. In addition, we will rely on third parties to perform certain specification tests on our product candidates prior to delivery to patients. If these tests are not appropriately done and test data are not reliable, patients could be put at risk of serious harm and the FDA could place significant restrictions on our company until deficiencies are remedied. Furthermore, our or a third party' s failure to execute on our manufacturing requirements, to do so on commercially reasonable terms or to comply with cGMP could adversely affect our business in a number of ways, including: ● An inability to initiate or continue clinical trials of our product candidates under development; ● Delay in submitting regulatory applications, or receiving marketing approvals, for our product candidates; ● Loss of the cooperation of future collaborators; ● Subjecting third- party manufacturing facilities or our manufacturing facilities to additional inspections by regulatory authorities; ● Requirements to cease development or to recall batches of our product candidates; and ● In the event of approval to market and commercialize our product candidates, an inability to meet commercial demands for our product or any other future product candidates. If any CMO or CDMO with whom we contract fails to perform its obligations, we may be forced to enter into an agreement with a different CMO or CDMO, which we may not be able to do on reasonable terms, if at all. In such scenario, our clinical trials supply could be delayed significantly

as we establish alternative supply sources. In some cases, the technical skills required to manufacture our products or product candidates may be unique or proprietary to the original CMO or CDMO and we may have difficulty, or there may be contractual restrictions prohibiting us from, transferring such skills to a back- up or alternate supplier, or we may be unable to transfer such skills at all. In addition, if we are required to change CMOs or CDMOs for any reason, we will be required to verify that the new CMO or CDMO maintains facilities and procedures that comply with quality standards and with all applicable regulations. We will also need to verify, such as through a manufacturing comparability study, that any new manufacturing process will produce our product candidate according to the specifications previously submitted to the FDA or another regulatory authority. The delays associated with the verification of a new CMO or CDMO could negatively affect our ability to develop product candidates or commercialize our products in a timely manner or within budget. In addition, changes in manufacturers often involve changes in manufacturing procedures and processes, which could require that we conduct bridging studies between our prior clinical supply used in our clinical trials and that of any new manufacturer. We may be unsuccessful in demonstrating the comparability of clinical supplies which could require the conduct of additional clinical trials. We are dependent on third parties to conduct our clinical trials and preclinical and nonclinical studies. Specifically, we rely on, and intend to continue to rely on, medical institutions, clinical investigators, contract research organizations, or CROs, and consultants to conduct nonclinical studies and clinical trials, in each case in accordance with our study protocols and applicable regulatory requirements. These CROs, investigators and other third parties play a significant role in the conduct and timing of these studies or trials and the subsequent collection and analysis of data. Though we expect to carefully manage our relationships with our CROs, investigators and other third parties, there can be no assurance that we will not encounter challenges or delays in the future or that these delays or challenges will not have a material adverse impact on our business, financial condition and prospects. Further, while we have and will have agreements governing the activities of our third- party contractors, we have limited influence over their actual performance. Nevertheless, we are responsible for ensuring that each of our clinical trials is conducted in accordance with the applicable protocol and legal, regulatory and scientific standards and requirements, and our reliance on our CROs and other third parties does not relieve us of our regulatory responsibilities. In addition, we and our CROs are required to comply with GLP and GCP requirements, as applicable, which are regulations and guidelines enforced by the FDA and comparable foreign regulatory authorities related to the conduct of nonclinical studies and clinical trials, respectively. Regulatory authorities enforce GCPs through periodic inspections of trial sponsors, principal investigators and trial sites. If we or any of our CROs or trial sites fail to comply with applicable GLP or GCP or other requirements, the collected nonclinical data or the clinical data generated in our clinical trials may be deemed unreliable, and the FDA or comparable foreign regulatory authorities may require us to perform additional nonclinical studies or clinical trials before approving our marketing applications, if ever. Furthermore, our clinical trials must be conducted with materials manufactured in accordance with cGMP regulations. Failure to comply with these regulations may require us to repeat clinical trials, which would delay the regulatory approval process. There is a risk that our CROs, investigators or other third parties will be unable to devote adequate time and resources to such trials or studies or perform as contractually required. If any of these third parties fail to meet expected deadlines, adhere to our clinical protocols or meet regulatory requirements, or otherwise perform in a substandard manner, our clinical trials may be extended, delayed or terminated. In addition, many of the third parties with whom we contract may also have relationships with other commercial entities, including our competitors, for whom they may also be conducting clinical trials or other development activities that could harm our competitive position. In addition, principal investigators for our clinical trials are expected to serve as scientific advisors or consultants to us from time to time and may receive cash or equity compensation in connection with such services. If these relationships and any related compensation result in perceived or actual conflicts of interest, or the FDA concludes that the financial relationship may have affected the interpretation of the study, the integrity of the data generated at the applicable clinical trial site may be questioned and the utility of the clinical trial itself may be jeopardized, which could result in the delay or rejection by the FDA of any NDA we submit. Any such delay or rejection could prevent us from receiving regulatory approval for, or commercializing, TELOIR- 1 and any future product candidates. Our CROs have the right to terminate their agreements with us in the event of an uncured material breach and under other specified circumstances. If any of our relationships with these third parties terminate, we may not be able to enter into arrangements with alternative third parties on commercially reasonable terms, in a timely manner or at all. Switching or adding CROs, investigators and other third parties involves additional cost and requires our management' s time and focus. In addition, there is a natural transition period when a new CRO commences work. As a result, delays occur, which can materially impact our ability to meet our desired clinical development timelines. Though we work to carefully manage our relationships with our CROs, investigators and other third parties, there can be no assurance that we will not encounter challenges or delays in the future or that these delays or challenges will not have a material adverse impact on our business, financial condition and prospects. ~~Risks Related to Our Intellectual Property We may not be able to adequately protect our product candidates or our proprietary technology in the marketplace.~~ Our success will depend, in part, on our ability to obtain patents, protect our trade secrets and operate without infringing on the proprietary rights of others. We may rely upon a combination of patents, trade secret protection (i. e., know-how), trademarks, licenses, and confidentiality agreements to protect the intellectual property of our product candidates. The strengths of patents in the pharmaceutical field involve complex legal and scientific questions and can be uncertain. Where appropriate, we seek patent protection for certain aspects of our products and technology. However, patent protection for naturally occurring compounds is exceedingly difficult to obtain, defend and enforce. Filing, prosecuting and defending patents throughout the world would be prohibitively expensive, so our policy is to look to patent technologies with commercial potential in jurisdictions with significant commercial opportunities. However, patent protection may not be available for some of the products or technology we are developing. If we must spend significant time and money protecting, defending, or enforcing our patents, designing around patents held by others or licensing, potentially for large fees, patents or other proprietary rights held by others, our business, results of operations and financial condition may be harmed. We may not develop additional proprietary

products that are patentable. The patent positions of pharmaceutical products are complex and uncertain. The scope and extent of patent protection for our product candidates are particularly uncertain. To date, our principal product candidates have been based on specific formulations of certain previously known cannabinoids found in nature in the cannabis sativa plant. While we have sought patent protection, where appropriate, directed to, among other things, composition- of- matter for our specific formulations, their methods of use, and methods of manufacture, we do not have and will not be able to obtain composition of matter protection on these previously known cannabinoids per se. We anticipate that the products we develop in the future will continue to be based on the same or other naturally occurring compounds, as well as additional synthetic compounds we may discover. Although we have sought and expect to continue to seek patent protection for our product candidates, their methods of use, and methods of manufacture, any, or all of them may not be subject to effective patent protection. If any of our products are approved and marketed for an indication for which we do not have an issued patent, our ability to use our patents to prevent a competitor from commercializing a non- branded version of our commercial products for that non- patented indication could be significantly impaired or even eliminated. Publication of information related to our product candidates by us, or others may prevent us from obtaining or enforcing patents relating to these products and product candidates. Furthermore, others may independently develop similar products, may duplicate our products, or may design around our patent rights. In addition, any of our issued patents may be opposed and / or declared invalid or unenforceable. If we fail to adequately protect our intellectual property, we may face competition from companies who attempt to create a generic product to compete with our product candidates. We may also face competition from companies who develop a substantially similar product to one of our product candidates that is not covered by any of our patents ~~. If third parties claim that our intellectual property, products, processes, or anything else used by us infringes upon their intellectual property, our operating profits could be adversely affected~~ . There is a substantial amount of litigation, both within and outside the U. S., involving patent and other intellectual property rights in the pharmaceutical industry. We may, from time to time, be notified of claims that we are infringing upon patents, trademarks, copyrights, or other intellectual property rights owned by third parties, and we cannot provide assurances that other companies will not, in the future, pursue such infringement claims against us, our commercial partners or any third- party proprietary technologies we have licensed. If we were found to infringe upon a patent or other intellectual property right, or if we failed to obtain or renew a license under a patent or other intellectual property right from a third party, or if a third party that we were licensing technologies from was found to infringe upon a patent or other intellectual property rights of another third party, we may be required to pay damages, including damages of up to three times the damages found or assessed, if the infringement is found to be willful, suspend the manufacture of certain products or reengineer or rebrand our products, if feasible, or we may be unable to enter certain new product markets. Any such claims could also be expensive and time consuming to defend and divert management' s attention and resources. Our competitive position could suffer as a result. In addition, if we have declined or failed to enter into a valid non- disclosure or assignment agreement for any reason, we may not own the invention or our intellectual property, and our products may not be adequately protected. Thus, we cannot guarantee that our product candidates, or our commercialization thereof, does not and will not infringe any third party' s intellectual property. If we are unable to obtain and maintain intellectual property protection for our technology and products, or if the scope of the intellectual property protection obtained is not sufficiently broad, our competitors could commercialize technology and products similar or identical to ours, and our ability to successfully commercialize our technology and products may be impaired. Our success depends in large part on our ability to obtain and maintain patent protection in relevant countries with respect to our proprietary technology and products. We seek to protect our proprietary position by filing patent applications in the United States and internationally that are related to our novel technologies and product candidates. This patent portfolio includes issued patents and pending patent applications covering pharmaceutical compositions and methods of use. The patent prosecution process is expensive and time- consuming, and we may not be able to file and prosecute all necessary or desirable patent applications at a reasonable cost or in a timely manner. We may choose not to seek patent protection for certain innovations and may choose not to pursue patent protection in certain jurisdictions, and under the laws of certain jurisdictions, patents or other intellectual property rights may be unavailable or limited in scope. It is also possible that we will fail to identify patentable aspects of our discovery and nonclinical development output before it is too late to obtain patent protection. Moreover, in some circumstances, we may not have the right to control the preparation, filing and prosecution of patent applications, or to maintain the patents, covering technology that we license from third parties. Therefore, these patents and applications may not be prosecuted and enforced in a manner consistent with the best interests of our business. The patent position of biotechnology and pharmaceutical companies generally is highly uncertain, involves complex legal and factual questions and has in recent years been the subject of much litigation. In addition, the laws of foreign countries may not protect our rights to the same extent as the laws of the United States. For example, India and China do not allow patents for methods of treating the human body. Publications of discoveries in the scientific literature often lag behind the actual discoveries, and patent applications in the United States and other jurisdictions are typically not published until 18 months after filing, or in some cases not at all. Therefore, we cannot know with certainty whether we were the first to make the inventions claimed in our owned or licensed patents or pending patent applications, or that we were the first to file for patent protection of such inventions. As a result, the issuance, scope, validity, enforceability and commercial value of our patent rights are highly uncertain. Our pending and future patent applications may not result in patents being issued which protect our technology or products, in whole or in part, or which effectively prevent others from commercializing competitive technologies and products. Changes in either the patent laws or interpretation of the patent laws in the EU, the United States and other countries may diminish the value of our patents or narrow the scope of our patent protection. The risks described pertaining to our patents and other intellectual property rights also apply to the intellectual property rights that we license, and any failure to obtain, maintain and enforce these rights could have a material adverse effect on our business. In some cases, we may not have control over the prosecution, maintenance or enforcement of the patents that we license, and our licensors may fail to take the steps that we believe are necessary or desirable in order to obtain, maintain and enforce the licensed patents. Any

inability on our part to protect adequately our intellectual property may have a material adverse effect on our business, operating results and financial position. The USPTO and various non- U. S. governmental patent agencies require compliance with several procedural, documentary, fee payment and other similar provisions during the patent application process. In certain situations, non- compliance can result in abandonment or lapse of the patent or patent application, resulting in partial or complete loss of patent rights in the relevant jurisdiction. In such an event, our competitors might be able to enter the market and this circumstance would have a material adverse effect on our business. In addition, we acquired rights to Ketomir- 2 through a license agreement with MIRALOGX and may in the future enter into other license agreements with third parties for other intellectual property rights or assets. These license agreements may impose various diligence, milestone payment, royalty, and other obligations on us. If we fail to comply with our obligations under these agreements, or we are subject to a bankruptcy, we may be required to make certain payments to the licensor, we may lose the exclusivity of our license, or the licensor may have the right to terminate the license, in which event we would not be able to develop or market products covered by the license. Additionally, the milestone and other payments associated with these licenses will make it less profitable for us to develop our drug candidates than if we had developed the licensed technology internally. In some cases, patent prosecution of our licensed technology may be controlled solely by the licensor. If our licensors fail to obtain and maintain patent or other protection for the proprietary intellectual property we license from them, we could lose our rights to the intellectual property or our exclusivity with respect to those rights, and our competitors could market competing products using the intellectual property. In certain cases, we may control the prosecution of patents resulting from licensed technology. In the event we breach any of our obligations related to such prosecution, we may incur significant liability to our licensing partners. If disputes over intellectual property and other rights that we have licensed prevent or impair our ability to maintain our current licensing arrangements on acceptable terms, we may be unable to successfully develop and commercialize the affected product candidates. We have no patent protection for MIRA- 55, which could adversely impact MIRA- 55' s potential competitive position. We have no issued patents relating to MIRA- 55 and our patent application for MIRA- 55 may not result in an issued patent. While we attempt to protect our proprietary information as trade secrets through certain agreements with our employees, consultants, agents and other organizations to which we disclose our proprietary information, we cannot give assurance that these agreements will provide effective protection for our proprietary information in the event of unauthorized use or disclosure of such information. If other products similar to MIRA- 55 are approved and marketed, we may be unable to prevent them from competing with MIRA- 55 in MIRA- 55' s potential marketplace. We expect that the presence of one or more competing products could reduce our potential market share and could negatively impact potential price levels and third- party reimbursement for MIRA- 55, any of which would materially affect our business. Risks Relating to the Ownership of our Common Stock Because of the speculative nature of investment risk, you may lose your entire investment. An investment in our securities carries a high degree of risk and should be considered as a speculative investment. We have a limited operating history, no revenues, have not paid dividends, and are unlikely to pay dividends in the immediate or near future. The likelihood of our success must be considered in light of the problems, expenses, difficulties, complications and delays frequently encountered in connection with the establishment of any business. An investment in our securities may result in the loss of an investor' s entire investment. Only potential investors who are experienced in high- risk investments and who can afford to lose their entire investment should consider an investment in our securities. Certain of our founding stockholders, plus our existing officers and directors, control a substantial interest in us and thus may influence certain actions requiring stockholder vote. Our founding stockholders, which include the Bay Shore Trust, and MIRALOGX, collectively own in excess of ~~30~~ **27** % of our issued and outstanding common stock **, as well as outstanding warrants** . Our officers and directors also own shares of our common stock. Therefore, these entities and individuals could influence the outcome of matters requiring stockholder approval, including the election of directors and approval of significant corporate transactions. Sales of a significant number of shares of our common stock in the public markets, or the perception that such sales could occur, could depress the market price of our common stock. Sales of a significant number of shares of our common stock in the public markets, or the perception that such sales could occur as a result of our utilization of a universal shelf registration statement or otherwise could depress the market price of our common stock and impair our ability to raise capital through the sale of additional equity securities. Notably, a large number of shares of our common stock held by Bay Shore Trust and MIRALOGX have been registered for public resale and could be sold in the public market, depressing our stock price. Moreover, we cannot in general predict the effect that future sales of our common stock or the market perception that we are permitted to sell a significant number of our securities would have on the market price of our common stock. The requirements of being a public company may strain our resources, divert management' s attention and affect our ability to attract and retain executive management and qualified board members. As a reporting issuer, we are subject to the reporting requirements of applicable securities legislation of the jurisdiction in which we are a reporting issuer, the listing requirements of Nasdaq and other applicable securities rules and regulations. Compliance with these rules and regulations increase our legal and financial compliance costs, make some activities more difficult, time- consuming or costly and increase demand on its systems and resources. Applicable securities laws require us to, among other things, file certain annual and quarterly reports with respect to its business and results of operations. In addition, applicable securities laws require us to, among other things, maintain effective disclosure controls and procedures and internal control over financial reporting. In order to maintain and, if required, improve its disclosure controls and procedures and internal control over financial reporting to meet this standard, significant resources and management oversight are required and, as a result, management' s attention may be diverted from other business concerns, which could harm our business and results of operations. To comply with these requirements, we may need to hire more employees in the future or engage outside consultants, which will increase ~~its~~ **our** costs and expenses. In addition, changing laws, regulations and standards relating to corporate governance and public disclosure are creating uncertainty for public companies, increasing legal and financial compliance costs and making some activities more time consuming. These laws, regulations and standards are subject to varying interpretations, in many cases due to their lack of specificity, and, as a

result, their application in practice may evolve over time as new guidance is provided by regulatory and governing bodies. This could result in continuing uncertainty regarding compliance matters and higher costs necessitated by ongoing revisions to disclosure and governance practices. We intend to continue to invest resources to comply with evolving laws, regulations and standards, and this investment may result in increased general and administrative expenses and a diversion of management' s time and attention from revenue- generating activities to compliance activities. If our efforts to comply with new laws, regulations and standards differ from the activities intended by regulatory or governing bodies due to ambiguities related to their application and practice, regulatory authorities may initiate legal proceedings against us, which could adversely affect our business and financial results. As a public company subject to these rules and regulations, it may be more expensive to obtain director and officer liability insurance, and we may be required to accept reduced coverage or incur substantially higher costs to obtain coverage. These factors could also make it more difficult for us to attract and retain qualified members of the Board, particularly to serve on the Audit Committee and Compensation Committee, and qualified executive officers. We are an " emerging growth company, " and any decision on our part to comply only with certain reduced reporting and disclosure requirements applicable to emerging growth companies could make shares of our common stock less attractive to investors. We are an " emerging growth company, " as defined in Section 2 (a) of the Securities Act. For as long as we continue to be an emerging growth company, we may choose to take advantage of exemptions from various reporting requirements applicable to other public companies that are not emerging growth companies, including, but not limited to, not being required to have our independent registered public accounting firm audit our internal control over financial reporting under Section 404 of the Sarbanes- Oxley Act, reduced disclosure obligations regarding executive compensation in our periodic reports and exemptions from the requirements of holding a nonbinding advisory vote on executive compensation and shareholder approval of any golden parachute payments not previously approved. We could be an emerging growth company until the fifth anniversary of the fiscal year end date following the completion of our initial public offering, however, our status would change more quickly if we have more than US $ 1. 235 billion in annual revenue, if the market value of our shares of common stock held by non-affiliates equals or exceeds US $ 700 million as of June 30 of any year, or we issue more than US $ 1. 0 billion of non-convertible debt over a three- year period before the end of that period. Investors could find our shares less attractive if we choose to rely on these exemptions. If some investors find shares less attractive as a result of any choice to reduce future disclosure, there may be a less active trading market for our shares and our share price may be more volatile. For as long as we are an " emerging growth company ", our independent registered public accounting firm will not be required to attest to the effectiveness of our internal controls over financial reporting pursuant to Section 404. We could be an " emerging growth company " until the fifth anniversary of the fiscal year end date following the completion of our initial public offering. An independent assessment of the effectiveness of our internal controls could detect problems that our management' s assessment might not. Undetected material weaknesses in our internal controls could lead to financial statement restatements and require us to incur the expense of remediation. If we identify material weaknesses in our internal control over financial reporting, or if we are unable to comply with the requirements of Section 404 in a timely manner or assert that our internal control over financial reporting is effective, or if our independent registered public accounting firm is unable to express an opinion as to the effectiveness of our internal control over financial reporting when required, investors may lose confidence in the accuracy and completeness of our financial reports and the market price of our securities could be negatively affected, and we could become subject to investigations by the stock exchange on which our securities are listed, the SEC, or other regulatory authorities, which could require additional financial and management resources. Additionally, we are a " smaller reporting company " as defined in Item 10 (f) (1) of Regulation S- K. Smaller reporting companies may take advantage of certain reduced disclosure obligations, including, among other things, providing only two years of audited financial statements. We will remain a smaller reporting company until the last day of any fiscal year for so long as either: (i) the market value of our shares of common stock held by non- affiliates does not equal or exceed $ 250 million as of the prior June 30th; or (ii) our annual revenues did not equal or exceed $ 100 million during such completed fiscal year. To the extent we take advantage of such reduced disclosure obligations, it may also make the comparison of our financial statements with other public companies difficult or impossible. If we fail to maintain compliance with Nasdaq Listing Rules, our shares may be delisted from Nasdaq, which would result in a limited trading market for our shares and make obtaining future debt or equity financing more difficult for the us. Our common stock is listed on the Nasdaq Capital Market under the symbol " MIRA ". However, there is no assurance that we will be able to continue to maintain our compliance with the Nasdaq continued listing requirements. If we fail to do so, our securities may lose their status on Nasdaq and they would likely be traded on the over- the- counter markets, including the Pink Sheets market. As a result, selling our securities could be more difficult because smaller quantities of shares or warrants would likely be bought and sold, transactions could be delayed, and security analysts' coverage of us may be reduced. In addition, in the event our securities are delisted, broker dealers would bear certain regulatory burdens which may discourage broker dealers from effecting transactions in the securities and further limit the liquidity of the securities. These factors could result in lower prices and larger spreads in the bid and ask prices for the securities. Such delisting from Nasdaq and continued or further declines in the share price of the securities could also greatly impair our ability to raise additional necessary capital through equity or debt financing and could significantly increase the ownership dilution to shareholders caused by our issuing equity in financing or other transactions. If our shares were to be delisted from Nasdaq, they may become subject to the SEC' s " penny stock " rules. Delisting from Nasdaq may cause our securities to become subject to the SEC' s " penny stock " rules. The SEC generally defines a penny stock as an equity security that has a market price of less than $ 5. 00 per share or an exercise price of less than $ 5. 00 per share, subject to certain exemptions. One such exemption is to be listed on Nasdaq. Therefore, if shares of our common stock were to be delisted from Nasdaq, our securities could become subject to the SEC' s " penny stock " rules. These rules require, among other things, that any broker engaging in a purchase or sale of our securities provide its customers with: (i) a risk disclosure document, (ii) disclosure of market quotations, if any, (iii) disclosure of the compensation of the broker and its

salespersons in the transaction, and (iv) monthly account statements showing the market values of our securities held in the customer' s accounts. A broker would be required to provide the bid and offer quotations and compensation information before effecting the transaction. This information must be contained in the customer' s confirmation. Generally, brokers are less willing to effect transactions in penny stocks due to these additional delivery requirements. These requirements may make it more difficult for shareholders to purchase or sell the shares of our common stock. Since the broker, not us, prepares this information, we would not be able to assure that such information is accurate, complete or current. Some provisions of Florida law and our amended and restated articles of incorporation and amended and restated bylaws may have anti- takeover effects that could discourage an acquisition of us by others, even if an acquisition would be beneficial to our shareholders and may prevent attempts by our shareholders to replace or remove our current management. Our status as a Florida corporation and the anti- takeover provisions of the Florida Business Corporation Act, which we sometimes refer to as the FBCA, may discourage, delay or prevent a change in control even if a change in control would be beneficial to our shareholders. The control share acquisition statute, Section 607. 0902 of the FBCA, generally provides that in the event a person acquires voting shares of the company in excess of 20 % of the voting power of all of our issued and outstanding shares, such acquired shares will not have any voting rights unless such rights are restored by the holders of a majority of the votes of each class or series entitled to vote separately, excluding shares held by the person acquiring the control shares or any of our officers or employees who are also directors of the company. Certain acquisitions of shares are exempt from these rules, such as shares acquired pursuant to the laws of intestate succession or pursuant to a gift or testamentary transfer, pursuant to a merger or share exchange effected in compliance with the FBCA if we are a party to the agreement, or pursuant to an acquisition of our shares if the acquisition has been approved by our board of directors before the acquisition. The control share acquisition statute generally applies to any " issuing public corporation, " which means a Florida corporation which has: ● One hundred or more shareholders; ● Its principal place of business, its principal office, or substantial assets within Florida; and ● Either (i) more than 10 % of its shareholders are resident in Florida; (ii) more than 10 % of its shares are owned by residents of Florida; or (iii) one thousand shareholders are resident in Florida. The affiliated transaction (or so- called " business combination ") statute, Section 607. 0901 of the FBCA, provides that we may not engage in certain mergers, consolidations, sales of assets, issuances of stock, reclassifications, recapitalizations, and other affiliated transactions with any " interested shareholder " for a period of three years following the time that such shareholder became an interested shareholder, unless: ● Prior to the time that such shareholder became an interested shareholder, our board of directors approved either the affiliated transaction or the transaction which resulted in the shareholder becoming an interested shareholder; or; ● Upon consummation of the transaction that resulted in the shareholder becoming an interested shareholder, the interested shareholder owned at least 85 % of our voting shares outstanding at the time the transaction commenced; or ● At or subsequent to the time that such shareholder became an interested shareholder, the affiliated transaction is approved by our board of directors and authorized at an annual or special meeting of shareholders, and not by written consent, by the affirmative vote of at least two- thirds of the outstanding voting shares which are not owned by the interested shareholder. An " interested shareholder " is generally defined as any person who is the beneficial owner of more than 15 % of our outstanding voting shares. Currently, Bay Shore Trust would be considered an " interested shareholder. " The voting requirements set forth above do not apply to a particular affiliated transaction if one or more conditions are met, including, but not limited to, the following: if the affiliated transaction has been approved by a majority of our disinterested directors; if we have not had more than 300 shareholders of record at any time during the three years preceding the date the affiliated transaction is announced; if the interested shareholder has been the beneficial owner of at least 80 % of our outstanding voting shares for at least three years preceding the date the affiliated transaction is announced; or if the consideration to be paid to the holders of each class or series of voting shares in the affiliated transaction meets certain requirements of the statute with respect to form and amount, among other things. Both the control share acquisition statute and the affiliated transactions statute may have the effect of discouraging or preventing certain change of control or takeover transactions involving us. In addition, our amended and restated articles of incorporation and amended and restated bylaws contain provisions that may make it more difficult for a third party to acquire us or increase the cost of acquiring us, even if doing so would benefit our shareholders, including transactions in which shareholders might otherwise receive a premium for their shares. These provisions include: ● nothing in our amended and restated articles of incorporation precludes future issuances without shareholder approval of the authorized but unissued shares of our common stock; ● advance notice procedures apply for shareholders to nominate candidates for election as directors or to bring matters before an annual meeting of shareholders; ● a special meeting of shareholders can only be called by our chairman of the board of directors, our chief executive officer, our president (in the absence of a chief executive officer), a majority of our board of directors or the holders of 10 % or more of all of our votes entitled to be cast on any issue proposed to be considered at the special meeting of shareholders; ● no provision in our amended and restated articles of incorporation or amended and restated bylaws provides for cumulative voting, which limits the ability of minority shareholders to elect director candidates; ● directors will only be able to be removed for cause; ● our amended and restated articles of incorporation authorizes undesignated preferred stock, the terms of which may be established and shares of which may be issued, without the approval of the holders of our capital stock; and ● certain litigation against us can only be brought in Florida. These provisions could discourage, delay or prevent a transaction involving a change in control of our company. These provisions could also discourage proxy contests and make it more difficult for you and other shareholders to elect directors of your choosing and cause us to take corporate actions other than those you desire. See " Description of Capital Stock. " Our amended and restated bylaws designates the state courts located within the state of Florida as the exclusive forum for substantially all disputes between us and our shareholders and the federal district courts as the exclusive forum for Securities Act claims, which could limit our shareholders' ability to obtain a favorable judicial forum for disputes with us. Our amended and restated bylaws provide that, unless we consent in writing to the selection of an alternative forum, the sole and exclusive forum for (i) any derivative action or proceeding brought on our behalf, (ii) any action asserting a

claim of breach of a fiduciary duty owed by any of our current or former directors, officers or other employees to us or our shareholders, (iii) any action arising pursuant to any provision of the FBCA, our amended and restated articles of incorporation or our amended and restated bylaws, or (iv) any other action asserting a claim that is governed by the internal affairs doctrine shall be a state court located within the state of Florida (or, if a state court located within the state of Florida does not have jurisdiction, the federal district court for the Middle District of Florida); provided that, the exclusive forum provision will not apply to suits brought to enforce any liability or duty created by the Exchange Act, or to any claim for which the federal courts have exclusive jurisdiction. Our amended and restated bylaws also provide that, unless we consent in writing to the selection of an alternative forum, the U. S. federal district courts shall be the exclusive forum for the resolution of any claims arising under the Securities Act. Under the Securities Act, federal and state courts have concurrent jurisdiction over all suits brought to enforce any duty or liability created by the Securities Act, and investors cannot waive compliance with the federal securities laws and the rules and regulations thereunder. Accordingly, there is uncertainty as to whether a court would enforce such a forum selection provision as written in connection with claims arising under the Securities Act. By becoming a shareholder in our company, you will be deemed to have notice of and have consented to the provisions of our amended and restated bylaws related to choice of forum. The choice of forum provisions in our amended and restated bylaws may limit our shareholders' ability to obtain a favorable judicial forum for disputes with us. Additionally, the enforceability of choice of forum provisions in other companies' governing documents has been challenged in legal proceedings, and it is possible that, in connection with any applicable action brought against us, a court could find the choice of forum provisions contained in our amended and restated bylaws to be inapplicable or unenforceable in such action. If so, we may incur additional costs associated with resolving such action in other jurisdictions, which could harm our business, results of operations, and financial condition. Securities or industry analysts may not regularly publish reports on us, which could cause the price of our securities or trading volumes to decline. The trading market for our securities could be influenced by research and reports that industry and / or securities analysts may publish us, our business, the market or our competitors. We do not have any control over these analysts and cannot be assured that such analysts will cover us or provide favorable coverage. If any of the analysts who may cover our business change their recommendation regarding our securities adversely, or provide more favorable relative recommendations about our competitors, the price of our securities would likely decline. If any analysts who may cover our business were to cease coverage or fail to regularly publish reports on us, we could lose visibility in the financial markets, which in turn could cause the price of our securities or trading volumes to decline. We will likely conduct further offerings of our equity securities in the future, in which case your proportionate interest may become diluted. We will likely be required to conduct equity offerings in the future to finance our current projects or to finance subsequent projects that we decide to undertake. If our common stock shares are issued in return for additional funds, the price per share could be lower than that paid by our current shareholders. We anticipate continuing to rely on equity sales of our common stock shares in order to fund our business operations. If we issue additional common stock shares or securities convertible into shares of our common stock, your percentage interest in us could become diluted. We may issue shares of preferred stock in the future, which could make it difficult for another company to acquire us or could otherwise adversely affect holders of our common stock, which could depress the price of our common stock. Our certificate of incorporation authorizes us to issue one or more series of preferred stock. Our board of directors will have the authority to determine the preferences, limitations and relative rights of the shares of preferred stock and to fix the number of shares constituting any series and the designation of such series, without any further vote or action by our shareholders. Our preferred stock could be issued with voting, liquidation, dividend and other rights superior to the rights of our common stock. The potential issuance of preferred stock may delay or prevent a change in control of us, discouraging bids for our common stock at a premium to the market price, and materially adversely affect the market price and the voting and other rights of the holders of our common stock. We have never declared or paid any cash dividends or distributions on our capital stock. We do not anticipate paying any cash dividends on our common stock in the foreseeable future. We have never declared or paid any cash dividends or distributions on our capital stock. We currently intend to retain our future earnings, if any, to support operations and to finance expansion and therefore we do not anticipate paying any cash dividends on our common stock in the foreseeable future. The declaration, payment and amount of any future dividends will be made at the discretion of the board of directors, and will depend upon, among other things, the results of our operations, cash flows and financial condition, operating and capital requirements, and other factors as the board of directors considers relevant. There is no assurance that future dividends will be paid, and, if dividends are paid, there is no assurance with respect to the amount of any such dividend. Item 1B. Unresolved Staff Comments. None. Item 1C. Cybersecurity. Cybersecurity Risk Management and Strategy We recognize the importance of assessing, identifying, and managing material risks associated with cybersecurity threats, as such term is defined in Item 106 (a) of Regulation S- K. These risks include, among other things: operational risks, intellectual property theft, fraud, extortion, harm to employees or customers and violation of data privacy or security laws. Identifying and assessing cybersecurity risk is integrated into our overall risk management systems and processes. Cybersecurity risks related to our business, technical operations, privacy and compliance issues are identified and addressed through a multi- faceted approach including third party assessments, internal IT Audit, IT security, governance, risk and compliance reviews. To defend, detect and respond to cybersecurity incidents, we, among other things: conduct proactive privacy and cybersecurity reviews of systems and applications, audit applicable data policies, conduct employee training, monitor emerging laws and regulations related to data protection and information security and implement appropriate changes. Our risk management program also assesses third party risks, and we perform third- party risk management to identify and mitigate risks from third parties such as vendors, suppliers, and other business partners associated with our use of third- party service providers. Cybersecurity risks are evaluated when determining the selection and oversight of applicable third- party service providers and potential fourth- party risks when handling and / or processing our employee, business or customer data. To date, we have not identified any cybersecurity threats or past incidents that have had, or are likely to have, a material impact on our company' s operations, business strategy, financial

performance, or results of operations. Cybersecurity Governance To manage our cybersecurity governance, we use Coalition Control, a cyber risk management platform that combines insurance, technology, and services from Coalition and its partners into an online experience. It allows us to detect, assess, and mitigate cyber risks proactively. Coalition Control monitors and detects risks across our entire external digital footprint, including assets, apps, services, and data leaks. The tool shows us where any potential vulnerabilities are identified and how to fix them. Our CFO is responsible for the day- to- day oversight of cybersecurity risks, and who utilizes the Coalition management platform for such risk management. Our CFO keeps the Board apprised of ongoing cybersecurity risk mitigation and any breaches if presented. Item 2. Description of Property. Refer to Note ~~2~~ **6** , " Leases " to our consolidated financial statements included in Part IV of this Report on Form 10- K, which is incorporated into this item by reference. Item 3. Legal Proceedings. Item 4. Mine Safety Disclosures. Not applicable. PART II Item 5. Market for Registrant' s Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities. Market Information Our common stock **has been public traded** ~~began trading August 3, 2023,~~ on The Nasdaq Capital Market under the symbol " MIRA ~~.~~ " **since August 3, 2023. Prior to that date, there was no public trading market for our common stock.** Holders of Common Stock As of March 28, ~~2024~~ **2025** , we had approximately ~~91~~ **55** holders of record of our common stock. No cash dividends have been paid on the common stock to date. We currently intend to retain earnings for further business development and do not expect to pay cash dividends in the foreseeable future. Securities Authorized for Issuance Under Equity Compensation Plans See Item 12.- Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters Unregistered Sales of Equity Securities and Use of Proceeds Issuer Purchases of Equity Securities Item 6. Reserved MANAGEMENT' S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS The following discussion and analysis provide information which our management believes is relevant to an assessment and understanding of our results of operations and financial condition. You should read the following discussion and analysis of our results of operations and financial condition together with our financial statements and related notes and other information included elsewhere in this Report. In addition to historical financial information, this discussion contains forward- looking statements based upon our current expectations that involve risks and uncertainties. Our actual results could differ materially from such forward- looking statements as a result of various factors, including those set forth under " Risk Factors " and " Cautionary Note Regarding Forward- Looking Statements " included elsewhere in this Report. Additionally, our historical results are not necessarily indicative of the results that may be expected for any period in the future. Overview ~~We are~~ **MIRA Pharmaceuticals, Inc. (NASDAQ: MIRA) is** a ~~pre-~~ clinical- stage pharmaceutical development company ~~with~~ **advancing** two neuroscience programs targeting ~~a broad range of~~ neurologic and neuropsychiatric disorders. ~~We have an~~ **The company holds** exclusive ~~licensing agreement~~ **rights in the U. S., Canada, and Mexico** for Ketamir- 2 **and MIRA- 55** , **two** ~~a unique, patent pending~~ novel **drug candidates designed** ~~oral ketamine analog under investigation~~ to ~~potentially deliver ultra- rapid antidepressant effects~~ **address unmet medical needs in pain management** , ~~providing hope for individuals battling treatment- resistant~~ depression ~~(TRD)~~ , ~~major depressive disorder with suicidal ideation (MDSI) and potentially post- traumatic stress disorder (~~ PTSD ~~). Additionally, our novel oral pharmaceutical marijuana, MIRA- 55, is currently under investigation for treating adult patients suffering from anxiety~~ and cognitive **function** ~~decline, often associated with early- stage dementia. MIRA- 55, if approved by the FDA, could mark a significant advancement in addressing various neuropsychiatric, inflammatory, and neurologic diseases and disorders~~ . The U. S. Drug Enforcement Administration (DEA)' s scientific review of Ketamir- 2 **and MIRA- 55** concluded that it would not be considered a controlled substance or listed chemical under the Controlled Substances Act (CSA) and its governing regulations. ~~Additionally, we have filed the required paperwork for MIRA- 55 to be evaluated by the U. S. DEA.~~ We had net losses of $ **7. 9 million and $** 12 ~~million and $ 7~~ . ~~1~~ **0** million for the year ended December 31, ~~2023~~ **2024** and December 31, ~~2022~~ **2023** , respectively ~~. Recent Developments In early February 2024, we made a significant discovery during the manufacturing and scale- up process of our patented molecule known as " MIRA1a, " which we had been utilizing with a contract manufacturer. Through this process, we identified a novel and improved version of the molecule, MIRA- 55. MIRA- 55 exhibits enhanced potency and holds promise for improved efficacy compared to MIRA1a. As part of our due diligence and subsequent testing, we discovered that the pre- clinical studies we conducted, previously attributed to MIRA1a, were in fact performed on MIRA- 55. Following this revelation, we promptly filed a provisional patent for MIRA- 55, which encompasses all pre- clinical studies disclosed in our two registration statements on Form S- 1, declared effective on August 2, 2023 and December 27, 2023 (File Nos. 333- 273024 and 333- 276118, respectively). Moreover, based on our pre- clinical analyses to date, we believe that MIRA- 55 is an improvement over MIRA1a in that it displays enhanced potency and potential for efficacy. In early March 2024, we filed a provisional patent application for MIRA- 55, aiming for global patent protection. If such patent is issued, we would own the patent rights to both MIRA1a and MIRA- 55. Based on our discoveries to date, we have decided to advance MIRA- 55 as our lead compound for our oral pharmaceutical marijuana drug candidate while still retaining our rights to MIRA1a~~ . Reverse Stock Split Effective June 28, 2023, we completed a 1- for- 5 reverse stock split of our outstanding common stock. Unless otherwise noted, the share and per share information in this Report reflects the reverse stock split. Components of our Results of Operations Research and Development Expenses Research and development expenses represent costs incurred to conduct research and development of our product candidate. We recognize all research and development costs as they are incurred. Research and development expenses consist primarily of the following: ● ~~salaries~~ **contracted research** and ~~benefits~~ **manufacturing** ; ● ~~contracted research and manufacturing~~ **patent- related costs** ; ● consulting arrangements; and ● other expenses incurred to advance our research and development activities. Our operating expenses have historically been the costs associated with our patent prosecution and initial investment in pre- clinical research and development activities. We expect research and development expenses will increase in the future as we advance Ketamir- 2 and MIRA- 55 into and through clinical trials and pursue regulatory approvals, which will require a significant investment in costs of clinical trials, regulatory support, and contract manufacturing. In addition, we will evaluate opportunities to acquire or in- license additional product candidates and technologies, which may result in higher research and development expenses due

to license fee and / or milestone payments, as well as added clinical development costs. The process of conducting clinical trials necessary to obtain regulatory approval is costly and time consuming. We may never succeed in timely development and achieving regulatory approval for our product candidates. The probability of success of our product candidates may be affected by numerous factors, including clinical data, competition, manufacturing capability and commercial viability. As a result, we are unable to determine the duration and completion costs of our development projects or when and to what extent we will generate revenue from the commercialization and sale of our product candidates. General and Administrative Expenses General and administrative expenses consist of employee- related expenses, including salaries, benefits, and travel, and other administrative functions, as well as fees paid for legal, accounting and tax services, consulting fees and facilities costs not otherwise included in research and development expense. Legal costs include general corporate legal fees ~~and patent costs~~. We expect to incur additional expenses as a result of becoming a public company, including expenses related to compliance with the rules and regulations of the SEC and Nasdaq, additional insurance, investor relations and other administrative expenses and professional services. Interest expense Interest expense, net consists of accrued interest on a related party line of credit, net of earned interest income. Results of Operations for the year ended December 31, **2024 and** 2023 ~~and 2022~~ Year Ended December 31, **2024** 2023 ~~2022~~ Revenues $- $- Operating costs: General and administrative expenses **4, 712, 753** 6, 499, 537 ~~2, 992, 125~~ Related party travel costs **-** 453, 550 ~~1, 704, 350~~ Research and development expenses **3, 305, 575** 1, 572, 963 ~~2, 351, 465~~ Total operating costs 8, **018, 328 8,** 526, 049 ~~7, 047, 940~~ Interest **income (** expense **)**, net **165, 669** (3, 456, 294 ~~) (10, 250~~) Net loss attributable to common stockholders $ (~~11~~ **7**, ~~982~~ **852**, ~~343~~ **659**) $ (~~7~~ **11**, ~~058~~ **982**, ~~190~~ **343**) Basic and diluted loss per share $ (0. ~~64~~ **51**) $ (0. ~~40~~ **85**) Weighted average common stock shares outstanding ~~18, 566, 158~~ **15** ~~17~~, ~~566~~ **444**, ~~533~~ **149 13, 924, 619** General and Administrative Expenses. We incurred $ **4. 7 million and $** 6. 5 ~~million and $ 2. 9~~ million in general and administrative expenses during the year ended December 31, ~~2023~~ **2024** and December 31, ~~2022~~ **2023**, respectively. General and administrative expenses ~~are composed~~ **in 2024 consisted of stock compensation expense of $ 1. 9 million, payroll expense of $ 0. 9 million, accounting and legal expenses of $ 0. 4 million, marketing, investor relations, advertising, and general corporate expenses of $ 1. 0 million and insurance expenses of $ 0. 5 million. The decrease in general and administrative expenses during 2024 relate** primarily **to a** ~~of compensation, insurance, professional fees, stock- based compensation, administration and other related costs. The increase~~ **decrease** ~~is primarily due~~ **in personnel in 2024 compared** to **2023** ~~an~~ **and a concerted** ~~increase in stock- based compensation, debt issuance costs, and compensation related to the IPO efforts~~ **effort** ~~of~~ **to conserve cash until** the ~~executive team~~ **shelf registration statement and at- the- market offering was put into place in August 2024**. Related Party Travel Costs. We incurred $ 0. **5** ~~4 million and $ 1. 7~~ million in related party travel costs during the year ended December 31, 2023 ~~and~~ **. There were no related party travel costs incurred during the year ended** December 31, ~~2022~~ **2024** ~~respectively~~. Related party travel costs consisted of a lease and use of an airplane with an entity under common control. The **airplane** ~~decrease in related party travel costs in 2023 is due to the termination of the~~ lease **was terminated** in March 2023 **, and hence, we ceased use of the airplane and there were no further costs incurred**. Interest **income (** expense **). We earned $ 0. 2 million, in interest income (expense) net, during the year ended December 31, 2024, which consisted of income earned from funds in a money market account**. We incurred $ 3. 5 million, ~~net~~ in ~~interest expense and~~ interest income **(expense) net,** during the year ended December 31, 2023, ~~and~~ **which consisted of $ 2. 8 million of write- off of unamortized deferred financing costs,** $ 0. ~~01~~ **7** million **of debt issuance costs, offset by $ 0. 02 million of** interest **income. Research and Development** ~~expense~~ **Expenses .** ~~during~~ **During** the year ended December 31, ~~2022~~ **2024**, **we** ~~respectively. Interest expense during 2023 included~~ **incurred** $ ~~2~~ **3**. ~~8~~ **3** million **in research** ~~of write- off of unamortized deferred financing costs, $ 0. 44 million of debt issuance costs~~ and **development** ~~$ 0. 02 million of interest income. The remaining 2023 and 2022 interest expense~~ **expenses , which were primarily** ~~consists of accrued interest on a~~ related ~~party line of credit. Research~~ **to pre- IND submission work, consultants** and ~~Development Expenses~~ **stock compensation**. During the year ended December 31, 2023, we incurred $ 1. 6 million in research and development expenses, which were primarily related to initial payments for toxicology studies, consultants and stock compensation. **The increase** ~~We incurred $ 2. 4 million~~ in research and development expenses during ~~the three months ended December 31, 2022~~ **2024** ~~, relating~~ **are related** to **the IND enabling studies** ~~initial payment for toxicology study costs. Research~~ and **submission** ~~development expenses include pre- clinical, toxicology and consultant expenses~~. Major components of research and development expenses during the year ended December 31, ~~2023~~ **2024** are as follows: R & D Category Expense R & D consultants $ 0. ~~25~~ **53** million R & D research $ 0. ~~37~~ **96** million R & D toxicology $ ~~0~~ **1**. ~~21~~ **72** million R & D stock compensation $ 0. ~~74~~ **10** million Liquidity and Capital Resources Since our inception in September 2020, we have financed our operations primarily through an unsecured line of credit with a major shareholder and an affiliated company and through a private placement of shares of our common stock that occurred during the fourth quarter 2021 and during 2022. We intend to finance our clinical development programs and working capital needs from existing cash, potential new sources of debt and equity financing, including the proceeds from our completed IPO in August 2023 **, and through proceeds of an ATM offering**. We may **also** enter into new licensing and commercial partnership agreements. **On August 12, 2024, the Company filed a shelf registration statement on Form S- 3 with the SEC. The terms of any offering under the shelf registration statement will be established at the time of such offering and will be described in a prospectus supplement filed with the SEC prior to completion of any such offering** On April 28, 2023, we entered into a Promissory Note and Loan Agreement with the Bay Shore Trust, a trust established by our founder, and under which various of his family members are beneficiaries (the " Bay Shore Trust "). Under this Promissory Note and Loan Agreement (the " Bay Shore Note "), we have the right to borrow up to an aggregate of $ 5, 000, 000 from the Bay Shore Trust at any time up to the second anniversary of the issuance of the Bay Shore Note or, if earlier, upon the completion of our initial public offering. Our right to borrow funds under the Bay Shore Note is subject to the absence of a material adverse change in our assets, operations, or prospects. The Bay Share Note, together with accrued interest, will become due and payable on the second anniversary of the issuance of the note, provided that it may be prepaid at any time without penalty. The Bay Shore Note

will accrue interest at a rate equal 7 % per annum, simple interest, during the first year that the note is outstanding and 10 % per annum, simple interest, thereafter. The Bay Shore Note is unsecured. As of December 31, ~~2023~~ **2024**, the Bay Shore Note was paid in full ~~except for an unpaid interest balance of $. 01 million~~. In consideration of the loan facility provided by the Bay Shore Trust, we issued to the Bay Shore Trust a common stock purchase warrant on April 28, 2023, giving the Bay Shore Trust the right to purchase up to 1, 000, 000 shares of common stock at an exercise price of $ 5. 00 per share, which warrant will expire five years after the date of grant. Since January 1, 2023, MIRALOGX, LLC, an intellectual property development and holding company owned by Bay Shore Trust (" MIRALOGX "), has advanced funds on behalf of Bay Shore Trust to our company in order to fund operating activities. The total amount advanced and outstanding from MIRALOGX was $ 1. 6 million immediately prior to being consolidated into the Bay Shore Note in 2023, and such amounts become a part of the outstanding balance of the Bay Shore Note, which as of December 31, 2023, is $ 0. On July 20, 2023, we entered into a conversion agreement with the Bay Shore Trust under which the Bay Shore Trust agreed to convert, upon the completion of our initial public offering, $ 1, 100, 190 of the outstanding principal balance of the Bay Shore Note into shares of our common stock at a conversion price equal to our initial public offering price, which resulted in the issuance of 157, 170 shares to the Bay Shore Trust upon the completion of our initial public offering (the " Bay Shore Trust Conversion Agreement "). In August 2023, we completed our IPO of common stock selling 1, 275, 000 shares at an offering price of $ 7. 00 per share, resulting in gross proceeds of $ 8. 9 million. Net proceeds received after underwriting fees and offering expenses were $ 8. 1 million. We raised $ 3. 2 million in 2022. Substantially all our equity capital had been raised at $ 1. 00 per share (pre- reverse split). We used $ ~~3~~ **5**. ~~4~~ **6** million in operating activities during the year ended December 31, ~~2023~~ **2024**, compared to $ **4.** 5 ~~. 6~~ million in operating activities during the year ended December 31, ~~2022~~ **2023**. We have incurred significant losses and negative cash flows from operations since inception and expect to incur additional losses until such time that we can generate significant revenue and profit. We had negative cash flow from operations of approximately $ ~~3~~ **5**. ~~4~~ **6** million for the year ended December 31, ~~2023~~ **2024** and an accumulated deficit of approximately $ ~~21~~ **29**. ~~2~~ **1** million as of December 31, ~~2023~~ **2024**. As of December 31, ~~2023~~ **2024**, we had cash and cash equivalents of approximately $ ~~4~~ **2**. **8** ~~6 million and working capital of $ 4. 4~~ million. We currently expect that our cash and cash equivalents be sufficient to fund our operations, development plans, and capital expenditures through at least the ~~fourth~~ **third** quarter of ~~2024~~ **2025**. We did not have any material non- cancellable contractual obligations as of December 31, ~~2023~~ **2024**. Cash Flows The following table provides information regarding our cash flows for the periods presented: Year ended December 31, **2024** 2023 ~~2022~~ Net cash provided by (used in): Operating activities $ (~~4~~ **5**, ~~532~~ **560**, ~~403~~ **606**) $ (~~5~~ **4**, ~~604~~ **532**, ~~759~~ **403**) Financing activities **3, 790, 971** 8, 783, 991 ~~3, 146, 185~~ Net change in cash $ **(1, 769, 635) $** 4, 251, 588 ~~$ (2, 458, 574)~~ Net Cash Used in Operating Activities The cash used in operating activities resulted primarily from our net losses, stock- based compensation expense ~~, amortization of debt issuance costs~~ and changes in components of accounts payable and accrued liabilities **. For the year ended December 31, 2024, operating activities used $ 5. 6 million of cash, primarily due to a net loss of $ 7. 9 million, offset by $ 1. 9 million in stock- based compensation expense, and a $ 0. 4 million change in accounts payable, accrued and prepaid expenses. Accounts payable, accrued and prepaid expenses was primarily composed of research and development payables, consultant costs, insurance costs and investor relations expenses**. For the year ended December 31, 2023, operating activities used $ 4. 5 million of cash, primarily due to a net loss of $ 12 million, a $ 0. 6 million change in accounts payable, accrued and prepaid expenses, offset by $ 2. 5 million in stock- based compensation expense, $ 0. 7 million in amortization of debt issuance costs, $ 3. 5 million of interest expense, and $ 1. 1 million of repayments under related party line of credit. Interest **income (** expense **)**, net was primarily composed of **debt issuance costs** ~~warrant expense and line of credit expense~~, offset by interest income ~~. Accounts payable, accrued and prepaid expenses was primarily composed of research and development payables, consultant costs, insurance costs and investor relations expenses. For the year ended December 31, 2022, operating activities used $ 5. 6 million of cash, primarily due to a net loss of $ 7. 1 million, a $ 0. 06 million change in accounts payable, accrued and prepaid expenses, offset by $ 1. 3 million in stock- based compensation expense~~. Accounts payable, accrued and prepaid expenses was primarily composed of research and development payables, consultant costs, insurance costs and investor relations expenses. Net Cash Provided by Financing Activities For the year ended December 31, **2024, financing activities provided $ 3. 8 million of cash, resulting primarily from $ 3. 6 million in proceeds from sale of common stock, less offering costs, $ 0. 1 million from the Bay Shore Trust short- swing disgorgement, and $ 0. 03 million in advances from related party. For the year ended December 31,** 2023, financing activities provided $ 8. 8 million of cash, resulting primarily from $ 7. 7 million in proceeds from sale of common stock, less offering costs and $ 2. 1 million in advances from related party line of credit, offset by $ 1. 1 ~~million of repayments under related party line of credit. For the year ended December 31, 2022, financing activities provided $ 3. 1 million of cash, resulting primarily from $ 2. 9 million in proceeds from sale of common stock, less offering costs, offset by $ 0. 16~~ million of repayments under related party line of credit. We currently anticipate that we will seek to monetize our product candidates, Ketamir- 2 and MIRA- 55, at the end of our planned Phase ~~2~~ **II** studies. Prior to that time, we anticipate that additional capital may be required to support ongoing activities and further phases of development. Should that be required, our available capital may be consumed more rapidly than currently anticipated, resulting in the need for additional funding. In addition, there can be no assurance that additional funding, when and if required, will be available at commercially favorable terms, if at all. Accordingly, we may need to raise additional capital, which may be available to us through a variety of sources, including: ● public equity markets; ● private equity financings; ● commercialization agreements and collaborative arrangements; ● sale of product royalty; ● grants and new license revenues; ● bank loans; and ● public or private debt. Additional funding, capital, or loans (including, without limitation, milestone, or other payments from potential commercialization agreements) may be unavailable on favorable terms, if at all. If adequate funds are not available, we may be required to significantly reduce or refocus our operations or to obtain funds through arrangements that may require us to relinquish rights to certain technologies and drug formulations or potential markets, any of which could have a material adverse

effect on us, our financial condition, and our results of operations. To the extent that additional capital is raised through the sale of equity or convertible debt securities or exercise of warrants and options, the issuance of such securities would result in ownership dilution to existing stockholders. If we are unable to attract additional funds on commercially acceptable terms, it may adversely affect our ability to achieve our development and commercialization goals, which could have a material and adverse effect on our business, results of operations and financial condition. We believe that we have sufficient resources available to support our development activities and business operations and timely satisfy our obligations as they become due into the ~~fourth~~ **third** quarter of ~~2024~~ **2025** . We do not have sufficient cash and cash equivalents as of the date of filing this Annual Report on Form 10- K to support our operations for at least the 12 months following the date the financial statements are issued. These conditions raise substantial doubt about our ability to continue as a going concern through 12 months after the date that the financial statements are issued. To alleviate the conditions that raise substantial doubt about our ability to continue as a going concern, we plan to secure additional capital, potentially through a combination of public or private equity offerings and strategic transactions, including potential alliances and drug product collaborations; however, none of these alternatives are committed at this time. There can be no assurance that we will be successful in obtaining sufficient funding on terms acceptable to us to fund continuing operations, if at all, identify and enter into any strategic transactions that will provide the capital that we will require or achieve the other strategies to alleviate the conditions that raise substantial doubt about our ability to continue as a going concern. If none of these alternatives are available, or if available, are not available on satisfactory terms, we will not have sufficient cash resources and liquidity to fund our business operations for at least the 12 months following the date the financial statements are issued. The failure to obtain sufficient capital on acceptable terms when needed may require us to delay, limit, or eliminate the development of business opportunities and our ability to achieve our business objectives and our competitiveness, and our business, financial condition, and results of operations will be materially adversely affected. In addition, the perception that we may not be able to continue as a going concern may cause others to choose not to deal with us due to concerns about our ability to meet our contractual obligations. The accompanying financial statements have been prepared on a going concern basis, which contemplates the realization of assets and satisfaction of liabilities in the normal course of business, and do not include any adjustments relating to recoverability and classification of recorded asset amounts or the amounts and classification of liabilities that might be necessary should we be unable to continue as a going concern. Recently Issued and Adopted Accounting Pronouncements A description of recently issued and adopted accounting pronouncements that may potentially impact our financial position and results of operations is disclosed in Note ~~8~~ **1** to our financial statements appearing at the end of this Report. Off- Balance Sheet Arrangements During the periods presented, we did not have, nor do we currently have, any off- balance sheet arrangements as defined under SEC rules. Summary of Critical Accounting Policies ~~Income taxes We are a C corporation. Deferred tax assets~~ and **Estimates** ~~liabilities are recognized for the future tax consequences attributable to differences between the financial statement carrying amount of existing assets and liabilities and their respective tax bases. Deferred tax assets are recognized for temporary differences that will result in deductible amounts in future years and for loss carryovers. A valuation allowance is recognized regarding deferred tax assets, if any, if it is more likely than not that some portion of the deferred tax asset will not be realized.~~ Research and development costs are expensed in the period in which they are incurred and include the expenses paid to third parties, such as contract research organizations and consultants, who conduct research and development activities on our behalf. Patent- related costs, including registration costs, documentation costs and other legal fees associated with the application, are expensed in the period in which they are incurred ~~. Use of estimates The preparation of financial statements in accordance with generally accepted accounting principles in the United States of America requires our company' s management to make estimates and assumptions that affect the reported amounts of assets and liabilities, and the disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of expenses during the reporting period. Actual results may differ from such estimates and such differences could be material~~ . Stock- based compensation We account for stock- based compensation under the provisions of FASB ASC 718, " Compensation- Stock Compensation ", which requires the measurement and recognition of compensation expense for all stock- based awards made to employees, directors and consultants based on estimated fair values on the grant date. We estimate the fair value of stock- based awards on the date of grant using the Black- Scholes model. The value of the portion of the award that is ultimately expected to vest is recognized as expense over the requisite service periods using the straight- line method. We have elected to account for forfeiture of stock- based awards as they occur. Emerging Growth Company Election We are an " emerging growth company " as defined in Section 2 (a) of the Securities Act and have elected to take advantage of the benefits of the extended transition period for new or revised financial accounting standards. We expect to continue to take advantage of the benefits of the extended transition period, although we may decide to early adopt such new or revised accounting standards to the extent permitted by such standards. We expect to use this extended transition period for complying with new or revised accounting standards that have different effective dates for public and non- public companies until the earlier of the date we (i) are no longer an emerging growth company or (ii) affirmatively and irrevocably opt out of the extended transition period provided in the JOBS Act. This may make it difficult or impossible to compare our financial results with the financial results of another public company that is either not an emerging growth company or is an emerging growth company that has chosen not to take advantage of the extended transition period exemptions because of the potential differences in accounting standards used. In addition, we intend to rely on the other exemptions and reduced reporting requirements provided by the JOBS Act. Subject to certain conditions set forth in the JOBS Act and compliance with applicable laws, if, as an emerging growth company, we rely on such exemptions, we are not required to, among other things: (a) provide an auditor' s attestation report on our system of internal control over financial reporting pursuant to Section 404 (b) of the Sarbanes- Oxley Act of 2002; (b) provide all of the compensation disclosures that may be required of non- emerging growth public companies under the Dodd- Frank Wall Street Reform and Consumer Protection Act of 2010; (c) comply with any requirement that may be adopted by the Public Company Accounting Oversight Board regarding mandatory audit firm rotation or a supplement to the

auditor' s report providing additional information about the audit and the financial statements (auditor discussion and analysis); and (d) disclose certain executive compensation- related items such as the correlation between executive compensation and performance and comparisons of the Chief Executive Officer' s compensation to median employee compensation. We will remain an emerging growth company under the JOBS Act until the earliest of (a) December 31, 2028, (b) the last date of our fiscal year in which we had total annual gross revenue of at least $ 1. 07 billion, (c) the date on which we are deemed to be a " large accelerated filer " under the rules of the SEC or (d) the date on which we have issued more than $ 1. 0 billion in non- convertible debt securities during the previous three years. Item 7A. Quantitative and Qualitative Disclosures About Market Risk. Smaller reporting companies are not required to provide the information required by this item. Item 8. Financial Statements and Supplementary Data. Our ~~Consolidated~~ Financial Statements and Notes thereto and the ~~report~~ **reports** of **Salberg & Company P. A for the year ended December 31, 2024 and** Cherry Bekaert **for the year ended December 31, 2023** , our independent registered public accounting ~~firm~~ **firms** ~~(PCAOB ID: 677)~~ **, for the respective years ended listed above** , are set forth on pages F- 1 through F- 22 of this Report. Item 9. Changes In and Disagreements With Accountants on Accounting and Financial Disclosure. Item 9A. Controls and Procedures. Evaluation of Disclosure Controls and Procedures ~~We have established~~ **Our management, our Chief Executive Officer (our principal executive officer) and our Chief Financial Officer (our principal financial officer) (the " Certifying Officers "), has evaluated the effectiveness of our** disclosure controls and procedures **(as defined in Rules 13a- 15 (e) or 15d- 15 (e) under the Exchange Act) as of December 31, 2024. The term " disclosure controls and procedures, " as defined in Rules 13a- 15 (e) and 15d- 15 (e) under the Exchange Act, means controls and other procedures of a company that are** designed to ensure that information required to be disclosed **by the company** in the reports that ~~we~~ **it** ~~file~~ **files** or ~~submit~~ **submits** under the Exchange Act is recorded, processed, summarized and reported **,** within the time periods specified in the SEC' s rules and forms **. Disclosure controls** and **procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act** is accumulated and communicated to **the company' s** management, including ~~the~~ **its** principal executive ~~officer (our Chief Executive Officer)~~ and principal ~~financial~~ **accounting** ~~officer~~ **officers** ~~(~~ **,** ~~our~~ **or** ~~Chief Financial Officer)~~ **persons performing similar functions** , **as appropriate** to allow timely decisions regarding required disclosure. Our management ~~, under the supervision and with the participation of our Chief Executive Officer and Chief Financial Officer, has evaluated the effectiveness of our disclosure controls and procedures (as defined in Rules 13a- 15 (e) and 15d- 15 (e) under the Exchange Act) as of the end of the period covered by this Annual Report on Form 10- K. Management~~ recognizes that any ~~disclosure~~ controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving their objectives **and our management necessarily applies its judgment in evaluating the cost- benefit relationship of possible controls and procedures** . ~~Our~~ **The Certifying Officers have concluded, based on their evaluation as of the end of the period covered by this Report, that our** disclosure controls and procedures **were effective** ~~have been designed~~ to provide reasonable assurance **that** ~~of achieving their~~ -- **the** objectives **of our disclosure control system were met. Management' s Annual Report on Internal Control over Financial Reporting Management of the Company is responsible for establishing and maintaining adequate internal control over financial reporting (as defined in Section 13a- 15 (f) of the Securities Exchange Act of 1934, as amended). Internal control over financial reporting is a process designed by, or under the supervision of, the Company' s principal financial officer to provide reasonable assurance regarding the reliability of financial reporting and the preparation of the Company' s financial statements for external reporting purposes in conformity with U. S. generally accepted accounting principles and include those policies and procedures that (i) pertain to the maintenance of records that in reasonable detail accurately and fairly reflect the transactions and disposition of the assets of the company; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the Company are being made only in accordance with authorization of management and directors of the Company; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of the Company' s assets that could have a material effect on the financial statements. During 2024, we designed and implemented new and enhanced controls to strengthen our internal controls over financial reporting, including hiring additional experienced accounting personnel, among other enhancements. Management believes these enhancements were sufficient to remediate previously identified material weaknesses. As of December 31, 2024, management conducted an assessment of the effectiveness of the Company' s internal control over financial reporting based on the framework established in Internal Control- Integrated Framework issued by the Committee of Sponsoring Organizations (COSO) of the Treadway Commission** . Based on **the criteria established by COSO management** ~~such evaluation, our Chief Executive Officer and Chief Financial Officer~~ concluded that ~~our disclosure~~ **the Company' s internal** ~~controls~~ - **control** ~~and procedures were~~ **over financial reporting was effective as of December 31, 2024. This Report does** not ~~effective at~~ **include an attestation report of the Company' s independent registered public accounting firm regarding internal control over financial reporting as smaller reporting companies are not required to include such report and emerging growth companies (" EGC' s ") are exempt from this requirement entirely until** ~~the~~ **they** ~~end of fiscal year 2023~~ **are no longer an EGC. Management' s report is not subject to attestation by the Company' s independent registered public accounting firm** . Changes in Internal Control over Financial Reporting There were no **additional** changes in our internal control over financial reporting **(as defined in Rule 13 (a)- 15 (f) of the Exchange Act)** that occurred during the ~~year ended December 31, 2023~~ **period covered by this annual report** that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting ~~. Management' s Report on Internal Control Over Financial Reporting This annual report does not include a report of management' s assessment regarding internal control over financial reporting or an attestation report of the company' s registered public accounting firm due to a transition period established by rules of the Securities and Exchange Commission for newly~~

~~public companies~~ . Item 9B. Other Information. Item 9C. Disclosure Regarding Foreign Jurisdictions that Prevent Inspections PART III Item 10. Directors, Executive Officers and Corporate Governance. ~~March 2024 Changes to Our Management and Board of Directors Restructuring of the Board of Directors On March 9, 2024, after a series of discussions between our board of directors (the " Board ") and senior management regarding the need to have additional scientific expertise among the members of the Board, Ms. Talhia Tuck, Mr. Brad Kroenig and Mr. Hugh McColl, each voluntarily resigned from the Board, effective immediately. This action allowed the remaining members of the Board to appoint new members of the Board, as discussed below. The resignations of Ms. Tuck, Mr. Kroenig, and Mr. McColl were not the result of any disagreement with our company on any matter relating to its operations, policies or practices. Also on March 9, 2024, Dr. Chris Chapman notified the Board and senior company management of his resignation both as Executive Chairman and as an employee of our company, effective immediately, citing his desire to focus his time on his role as Chairman and Chief Executive Officer of Telomir Pharmaceuticals, Inc., given the recent initial public offering of that company. Dr. Chapman' s resignation was not the result of any disagreement with our company on any matter relating to its operations, policies or practices. On March 13, 2024, the remaining members of the Board (Erez Aminov and Michael Jerman) unanimously approved the appointment of (i) Mr. Aminov, our Chief Executive Officer, as Chairman of the Board and (ii) Dr. Matthew P. Del Giudice, Dr. Denil N. Shekhat and Mr. Edward MacPherson as members of the Board, to fill the vacancies on the Board occasioned by the resignations from the Board described above, for a term expiring at our 2024 annual meeting of shareholders. Resignation of Chief Science Officer We are focused on strengthening our clinical and regulatory development expertise with a view towards a future IND for one of our product candidates. As part of this development, on March 7, 2024, following discussions with our management, Adam Kaplin, M. D., Ph. D. resigned from his position as President and Chief Scientific Officer of the company to pursue other business endeavors, effective immediately. As described under " Key Consultants " below, in light of Mr. Kaplin' s resignation, we expanded the role of an existing consultant to assist in clinical and regulatory affairs. Current Directors and Executive Officers~~ Our directors and executive officers and their ages as of the date of this Report are as follows: Name Age Position Erez Aminov Chief Executive Officer and Chairman Michelle Yanez Chief Financial Officer, Secretary and Treasurer ~~Michael Jerman~~ **Matthew Pratt Whalen** Director Matthew Paul Del Giudice, M. D. Director Denil Nanji Shekhat, M. D. Director Edward MacPherson DirectorThe following is a brief biography of each of our current executive officers and directors: Erez Aminov has served as a director and our Chief Executive Officer since April 2023 and our Chairman since March 2024. Mr. Aminov is an experienced biotechnology consultant and investor and initially joined our as a consultant in 2022. Mr. Aminov' s experience in the biotech consulting sector began in 2021 when he founded Locate Venture Corp. in September 2021. Locate Venture is a strategy and investment consulting firm focused on advancing and supporting early- stage biotech startups. Prior to founding Locate Venture Corp., from February 2015 to September 2020, Mr. Aminov served as the President of Finds4less Inc., a global distributor of electronics and gaming products. In this role, Mr. Aminov provided strategic oversight and direction for all aspects of the company' s operations, while also spearheading new business development initiatives to capitalize on emerging market opportunities. Mr. Aminov' s more than two decades of experience includes experience with the biotech industry' s particular challenges, including creating strategic alliances and guiding startups toward growth and prosperity. Mr. Aminov earned a B. A. in Accounting from Touro University in New York. We believe that Mr. Aminov is qualified to serve as one of our directors based on his finance and investment experience, particularly with early stage life sciences companies. Michelle Yanez, MBA has served as our Chief Financial Officer since April 2023, prior to which she served as our Corporate Controller since May 2022. Ms. Yanez is a senior financial executive with over 25 years of experience in public and privately held biotech, pharmaceutical, and life science companies. Ms. Yanez' experience includes a broad range of responsibilities in a highly complex and regulated market. She also brings deep corporate governance experience through her work with corporate boards, including audit and finance committees. Since ~~May~~ **June** ~~2022~~ **2024** , Ms. Yanez ~~is part- time Corporate Controller at~~ **also serves as Chief Financial Officer for** Telomir Pharmaceuticals ~~, Inc., a publicly traded pre- clinical- stage pharmaceutical company, focusing on the development and commercialization of therapeutic treatment for human stem cells~~ (Nasdaq: TELO) **, a pre- clinical- stage pharmaceutical company, seeking to lead development in age- reversal science, by focusing on the development of a novel small molecule designed to lengthen the DNA' s protective telomere caps, which are crucial in the aging process** . From May 2002 until its acquisition in April 2022, Ms. Yanez held various **leadership** positions **at** ~~, including the Director of Financial Reporting, of~~ BioDelivery Sciences International, Inc. (Nasdaq: BDSI). In her role, she led financial offerings, managed due diligence for product acquisitions and financings and managed finance documents and filings for the tender offer, leading to the acquisition of BioDelivery Sciences in April 2022. Ms. Yanez also serves as a non- employee director of Inhibitor Therapeutics, Inc. (OTCQB: INTI), a publicly traded pharmaceutical development company focused on therapeutics for certain cancers and non- cancerous proliferation disorders, since December 2022. Ms. Yanez is ~~a member~~ **also Co- Founder and Chief Financial Officer** of ~~the Institute~~ **Santander Pharma Consulting, a privately held life sciences consulting firm that provides business development and commercial strategy services to pharmaceutical, medical device, and life science companies offering guidance throughout all stages** of **commercial development, from inception to product launch, since February 2024. Ms. Yanez earned her B. A. in Business** Management ~~Accountants~~ **from University South Florida** and **further distinguished** ~~a member of the SEC Professionals Group. Ms. Yanez received~~ her **acumen with an** MBA ~~degree cum laude~~ **in Strategic Leadership** from Rutgers **School of** Business ~~School~~ **, Cum Laude** . ~~Michael Jerman~~ **Matthew Pratt Whalen** , CPA **, is** ~~joined our company as~~ a ~~director~~ **Certified Public Accountant with over two decades of experience** in ~~December 2023~~ **public accounting and corporate finance** . ~~He also~~ **Mr. Whalen currently** serves as ~~a member~~ **the Chief Financial Officer** of **Power Digital Marketing Inc., an industry leading digital marketing agency, where** ~~the~~ ~~board~~ **he has driven significant revenue growth and led key financial transactions. Specifically, Mr. Whalen oversees the finance team, manages tax and audit relationships, and handles treasury management. Prior to joining Power Digital, from 2010 to May 2021, Mr. Whalen was the Chief Financial Officer** of **MRC Smart Technology Solutions, a subsidiary**

of Xerox Corporation where he played a pivotal role in growing the company' s revenue and managed diverse teams across multiple departments. Mr. Whalen holds a B. A. in Accounting from the University of San Diego and is a Certified Public Accountant in California. Mr. Whalen has also served on the Finance Committee of United Way San Diego. We believe that Mr. Whalen is qualified to serve as one of our directors ~~of Inhibitor Therapeuties, Inc. (OTC: INTI)~~ **based on his extensive experience in finance and as a Certified Public Accountant** . Mr. ~~Jerman~~ **Whalen** has **also** served as ~~the managing partner at Hollywell Partners,~~ a ~~professional accounting and finance consulting firm, since May 2019, and has provided chief financial officer and other services to multiple private equity- backed companies in the energy, SaaS, and manufacturing industries. Prior to his role with Hollywell Partners, he was a Director~~ **director** ~~with PwC in the US and UK from January 2007 to August~~ of **MIRA Pharmaceuticals** ~~2019 and was a Captain with the United States Air Force from July 2003 to June 2015. He has led global public and private client engagements in the industries of retail and consumer~~ , **Inc** ~~energy, utilities and mining, and transportation and logistics~~ . **(Nasdaq TELO)** ~~Mr. Jerman has significant experience in client equity and debt offerings, business combinations inclusive of public listing and reporting requirements, initial valuations and ongoing goodwill impairment analyses, share- based awards, restructuring, and global taxes, as well as stakeholder management, specifically with board and management presentation experience to include annual and quarterly requirements, fee negotiations, technical accounting and finance discussions, and fraud and non- compliance investigations. Mr. Jerman has specialized in rapid project mobilization and deployment of skilled resources for emergency issues, design, and implementation of small to large scale assurance requirements and advisory projects. Mr. Jerman' s additional experience includes leading PwC' s data acquisition methods and tools, client acquisitions and systems implementations to include new SOX- compliant control plan implementations across multiple systems, leading co- sourced internal audit projects, and time spent driving PwC' s lean efficiency initiatives. Mr. Jerman was a member of the PwC national office within the SEC PCAOB quality group supporting Europe and the EMEA regions with complex accounting and audit consultations. He earned a B. S. in accounting from the University of South Florida, an M. S. in accounting from the University of Tampa, and an M. B. A. from the University of Oxford.~~ Dr. Matthew Paul Del Giudice joined our company as a director in March 2024. Dr. Del Giudice has practiced as a radiologist since 2014. He currently serves as a general overnight emergency radiologist at the Cleveland Clinic and as a real estate investor with Comfort Living, LLC. Prior to joining the Cleveland Clinic, from March 2021 to May 2022, Dr. Del Giudice was a general radiologist with Radiology and Imaging Specialists in Lakeland, Florida. From July 2015 to February 2021, Dr. Del Giudice was a radiologist with Radiology Partners Phoenix, and from July 2014 to June 2015, he practiced as a musculoskeletal radiologist at the University of Arizona Health Sciences Center ~~—~~ - Tucson. Dr. Del Giudice received his B. S. from the University of Illinois at Urbana- Champaign, his M. D. from Loyola University Stritch School of Medicine, completed his radiology residency at Loyola University Medical Center, and his musculoskeletal radiology fellowship at the University of Arizona Health Sciences Center ~~—~~ - Tucson. Dr. Del Giudice is licensed to practice medicine in Florida and Ohio. Dr. Denil Nanji Shekhat joined our company as a director in March 2024. Dr. Shekhat has practiced as a radiologist since 2014 and currently practices at DNS Teleradiology in Wellington, Florida. Prior to starting DNS Teleradiology, Dr. Shekhat was a musculoskeletal specialist for Radiology Associates of Florida / Radiology Partners from July 2018 to December 2023. From July 2015 to August 2018, Dr. Shekhat practiced as a general and musculoskeletal radiologist with Bethesda Radiology Associates. Dr. Shekhat received his B. A. in economics from Bowdoin College, his M. D. from the University of Tennessee Health Science Center, College of Medicine, completed his radiology residency at Baptist Memorial Hospital and his musculoskeletal radiology fellowship at the University of Arizona. Dr. Shekhat is currently licensed to practice medicine in Florida. Edward MacPherson joined our company as a director in March 2024. Mr. MacPerson currently serves as Chief Growth Officer for Power Digital, an industry leading digital marketing agency. Prior to joining Power Digital, from May 2016 to December 2023, he served as CEO and Head of Growth for Endrock Growth & Analytics, a company he founded and sold to Power Digital. Prior to founding Endrock Growth & Analytics, Mr. MacPherson held senior marketing and leadership positions at sunglass maker Prive Revaux (March 2018 to April 2020), curated meal company Menud (October 2014 to April 2018) and Rejuvenetics, LLC, a distributor of health and wellness products (December 2012 to March 2016). Mr. Macpherson holds a BA in Economics from Gettysburg College. Key Consultants On March ~~13~~ **8** , 2024 **, and subsequently amended on January 24, 2025** , we entered into an Amended and Restated Consulting Agreement with Angel Pharmaceutical Consulting & Technologies Ltd., an Israeli consulting firm (" APCT "). All services provided to our company by APCT (which began in October 2023) are provided directly by Dr. Itzchak Angel, who shall be our Chief Scientific Advisor. Dr. Angel has over 30 years of experience in the pharmaceutical industry, guiding strategic drug and business development initiatives in both large and emerging companies. Dr. Angel has served as Head of Pharmacology of Synthelabo (Paris, France, now Sanofi) for numerous years, where he was instrumental in the development and bringing into the market of several drugs such as Xatral (Alfuzosin), Ambien (Zolpidem) and Mizollen (Mizolastine). He formerly served as President and Chief Executive Officer of stem- cell company Accellta (Haifa, Israel) and Vice President for Research and Development at Proteologics Ltd, and at D- Pharm Biopharmaceuticals (Rehovot, Israel) where he developed several neurology compounds (stroke, Alzheimer' s and Parkinson' s Disease) into advanced clinical development and was involved in submitting numerous INDs of drugs under development. Dr. Angel is the author of more than 100 book chapters, papers, and abstracts as well as the named inventor of a number of pharmaceutical patents. Dr. Angel received his B. S. and M. Sc. in Biology from Tel- Aviv University, Israel, cum laude in 1979, and received Ph. D. cum laude from the Hamburg University, Germany in 1982. As part of his consulting services, Dr. Angel shall assist our company with (i) pharmaceutical regulatory affairs, toxicology, drug research and pre- clinical and clinical testing, (ii) outsourcing and helping our company in managing third party vendors and (iii) working with our company in our interactions with regulatory bodies. Board Composition Our business and affairs are managed under the direction of our board of directors, which currently consists of five members. The number of directors is determined by our board of directors, subject to the terms of our amended and restated articles of incorporation and bylaws that. Our directors are elected for one- year terms. Family

Relationships There are no family relationships among any of our directors and executive officers. Director Independence Our board of directors has undertaken a review of the independence of each director. Based on information provided by each director concerning his or her background, employment, and affiliations, our board of directors has determined that ~~Michael Jerman~~ **Matthew Whalen** , Dr. Matthew Del Giudice, Dr. Denil Shekhat and Edward MacPherson do not have any relationship that would interfere with the exercise of independent judgment in carrying out the responsibilities of a director and are independent directors under the Nasdaq Listing Rules. In making these determinations, our board of directors considered the current and prior relationships that each non- employee director has with our company and all other facts and circumstances our board of directors deemed relevant in determining their independence, including the transactions described in the section of this Report titled " Item 13. Certain Relationships and Related Party Transactions. " Committees of the Board of Directors Our board of directors has established an audit committee, a compensation committee, and a nominating and corporate governance committee. The functions of these committees are described below. Members will serve on these committees until their resignation or until otherwise determined by our board of directors. Our board of directors may establish other committees as it deems necessary or appropriate from time to time. Audit Committee Our audit committee consists of ~~Michael Jerman~~ **Matthew Whalen** , Dr. Denil Shekhat and Edward MacPherson, with ~~Michael Jerman~~ **Matthew Whalen** serving as the chair of the audit committee. Each member of the committee meets the requirements for independence under the listing standards of Nasdaq and SEC rules and regulations, including Rule 10A- 3 (b) (1) under the Exchange Act. Each member of our audit committee also meets the financial literacy requirements of the listing standards of Nasdaq. In addition, our board of directors has determined that Michael Jerman is an audit committee financial expert within the meaning of Item 407 (d) of Regulation S- K under the Securities Act. The audit committee' s main purpose is to oversee our corporate accounting and financial reporting process. Our audit committee is responsible for, among other things: ● selecting a qualified firm to serve as the independent registered public accounting firm to audit our financial statements; ● helping to ensure the independence and performance of the independent registered public accounting firm; ● discussing the scope and results of the audit with the independent registered public accounting firm, and reviewing, with management and the independent registered public accounting firm, our interim and year-end results of operations; ● developing procedures for employees to submit concerns anonymously about questionable accounting or audit matters; ● reviewing our policies on risk assessment and risk management; ● reviewing related party transactions; ● reviewing and pre- approving, as required, all audit and all permissible non- audit services to be performed by the independent registered public accounting firm; and ● assisting our board of directors in monitoring the performance of our internal audit function. Our audit committee operates under a written charter that satisfies the applicable rules and regulations of the SEC and the listing standards of Nasdaq, a copy of which is available on our website at www. mirapharmaceuticals. com. Our compensation committee consists of Dr. Denil Shekhat and Edward MacPherson, with Dr. Denil Shekhat serving as the chair of the compensation committee. Each member of the committee meets the requirements for independence under the listing standards of Nasdaq and SEC rules and regulations. Each member of our compensation committee is also a non- employee director, as defined pursuant to Rule 16b- 3 promulgated under the Exchange Act, or Rule 16b- 3. In arriving at these determinations, our board of directors examined all factors relevant to determining whether any compensation committee member has a relationship to us that is material to that member' s ability to be independent from management in connection with carrying out such member' s duties as a compensation committee member. The compensation committee' s main purpose is to review and recommend policies relating to compensation and benefits of our officers and employees. Our compensation committee is responsible for, among other things: ● reviewing, approving, and determining, or making recommendations to our board of directors regarding, the compensation and compensation arrangements of our executive officers; ● administering our equity compensation plans; ● reviewing and approving, or making recommendations to our board of directors regarding, incentive compensation and equity compensation plans; and ● establishing and reviewing general policies relating to compensation and benefits of our employees. Our compensation committee operates under a written charter that satisfies the applicable rules and regulations of the SEC and the listing standards of Nasdaq, a copy of which is available on our website. Nominating and Corporate Governance Committee Our nominating and corporate governance committee consists of Dr. Matthew ~~DelGuidice~~ **Del Giudice** and Dr. Denil Shekhat with Dr. Matthew ~~DelGuidice~~ **Del Giudice** serving as the chair of the nominating and corporate governance committee. Each member of the committee meets the requirements for independence under the listing standards of Nasdaq and SEC rules and regulations. Our nominating and corporate governance committee is responsible for, among other things: ● identifying, evaluating, and selecting, or making recommendations to our board of directors regarding, nominees for election to our board of directors and its committees; ● developing and overseeing the annual evaluation of our board of directors and of its committees; ● considering and making recommendations to our board of directors regarding the composition of our board of directors and its committees; ● overseeing our corporate governance practices; and ● making recommendations to our board of directors regarding corporate governance guidelines. Our nominating and corporate governance committee operates under a written charter that satisfies the applicable listing standards of Nasdaq, a copy of which is available on our website. Compensation Committee Interlocks and Insider Participation None of the members of our compensation committee is a current or former executive officer or employee of our company. None of our executive officers serves as a member of the compensation committee of any entity that has one or more executive officers serving on our compensation committee. Risk Oversight One of the key functions of our board of directors is informed oversight of our risk management process. Our board of directors administers this oversight function directly through our board of directors as a whole, and through various standing committees of our board of directors that address risks inherent in their respective areas of oversight. In particular, our board of directors is responsible for monitoring and assessing strategic risk exposure, including risks associated with cybersecurity and data protection, and our audit committee has the responsibility to consider our major financial risk exposures and the steps our management has taken to monitor and control these exposures, including guidelines and policies to govern the process by which risk assessment and management is undertaken. Our audit committee will review legal,

regulatory, and compliance matters that could have a significant impact on our financial statements. Our nominating and corporate governance committee will monitor the effectiveness of our corporate governance practices, including whether they are successful in preventing illegal or improper liability- creating conduct. Our compensation committee will assess and monitor whether any of our compensation policies and programs has the potential to encourage excessive risk taking. While each committee is responsible for evaluating certain risks and overseeing the management of such risks, our entire board of directors will be regularly informed through committee reports about such risks ~~. Board Diversity Our nominating and corporate governance committee is responsible for reviewing with the board of directors, on an annual basis, the appropriate characteristics, skills, and experience required for the board of directors as a whole and its individual members. Although our board of directors does not have a formal written diversity policy with respect to the evaluation of director candidates, in its evaluation of director candidates, our nominating and corporate governance committee will consider factors including, without limitation, issues of character, integrity, judgment, potential conflicts of interest, other commitments, and diversity, and with respect to diversity, such factors as gender, race, ethnicity, experience, and area of expertise, as well as other individual qualities and attributes that contribute to the total diversity of viewpoints and experience represented on the board of directors. The nominating and corporate governance committee will ensure compliance with the new rule by Nasdaq for board diversity (the " Nasdaq Diversity Rule "), on or before the date required under the Nasdaq Diversity Rule. The Nasdaq Diversity Rule requires, assuming our shares of common stock are listed on the Nasdaq Capital Market and that we are a smaller reporting company, that we will have at least two directors serving on our board of directors, at least one of which identifies as female and the second of which identifies as female, underrepresented minority or LGBTQ , by December 31, 2026, unless our board of directors is comprised of five or less directors~~ . Code of Business Conduct and Ethics Our board of directors has adopted a code of business conduct and ethics applicable to all of our directors, officers (including our principal executive officer, principal financial officer, and principal accounting officer) and all global employees in accordance with applicable federal securities laws and corporate governance rules of the Nasdaq Capital Market. Our code of business conduct and ethics is available on our website. Any amendments to the code of business conduct and ethics, or waivers of its requirements, will, if required, be disclosed on our website. Insider Trading Policy Our board of directors has adopted an insider trading policy filed hereto as Exhibit 19. 1 and is incorporated herein by this reference. Corporate Governance Guidelines Our board of directors has adopted corporate governance guidelines, a copy of which is available on our website. Director Compensation We did not provide any cash compensation to any of our directors during the year ended December 31, ~~2023~~ **2024** in their capacity as directors. However, on April ~~28~~ **25** , ~~2023~~ **2024 , Matthew Del Giudice, Edward MacPherson, and Denil Shekhat were granted an option to purchase up to 50, 000 shares of our common stock under the 2022 Omnibus Plan for joining the board. Additionally, on December 6, 2024** , each non- employee director was granted an additional option to purchase up to ~~10~~ **25** , 000 shares of our common stock under the 2022 Omnibus Plan. Each such option ~~was immediately~~ vested in ~~full upon~~ **terms ranging from immediate vesting to one year following the** grant ~~and~~ **. Each grant** has a 10- year term ~~. Certain of our former directors have received option grants as a result of their service to our company in a non- director capacity. Prior to his appointment as Executive Chairman, Dr. Chapman was a party to a consulting agreement with our company entered into in April 2022 and was granted additional options in his capacity as a consultant on June 15, 2022. Dr. Chapman also received employee related grants in April 2023 and August 2023. Mr. Kroenig previously provided consulting services to our company in 2022 and received an additional option grant on June 15, 2022, under which he has the right to purchase up to 10, 000 shares of our common stock. Upon his appointment as our General Counsel, Mr. Christos Nicholoudis was granted an option to purchase shares of our common of 15, 000 shares in April 2023, and 10, 000 shares in August 2023~~ . Item 11. Executive Compensation This section discusses the material components of the executive compensation program for the following persons: (i) all persons serving as our principal executive officers during ~~2023~~ **2024** and (ii) the most highly compensated of our other executive officers who received compensation during ~~2023~~ **2024** of at least $ 100, 000 and who were executive officers on December 31, ~~2023~~ **2024** . We refer to these persons as our " named executive officers " elsewhere in this Report. Our " named executive officers " and their positions are as follows: ● Erez Aminov, Chief Executive Officer and Chairman; ● Michelle Yanez, MBA, Chief Financial Officer, Secretary and Treasurer ~~and; ● Adam Kaplin, MD, PhD, former President and Chief Scientific Officer; In April 2023, Mr. Aminov succeeded Mr. Uzonwanne as our Chief Executive Officer, and Ms. Yanez succeeded Mr. McNulty as our Chief Financial Officer~~ . Summary Compensation Table The following table shows the compensation paid by us during the **2024 and** 2023 ~~and 2022~~ fiscal years to our named executive officers. Name and principal position Year Salary ($) Bonus ($) Stock Awards ($) Option Awards ($) (6) Non- Equity Incentive Plan Compensation ($) Nonqualified Deferred Compensation Earnings ($) All Other Compensation ($) Total ($) Erez Aminov, ~~2023~~ **2024** ~~83~~ **259** , ~~333 208~~ **999 300** , ~~006~~ **000** (1) **595** ~~- 1~~ , **000** ~~368, 600-- 5, 625~~ (2) 1, **919, 120--** ~~665~~ - **66** , **194** ~~564 CEO 2022-------- Michelle Yanez, 2023 165, 000 88, 475 (1)- 282, 215-- 5, 934 (2) 541, 624 CFO 2022 110, 000- 36, 950-- 6, 071 (2) 153, 021 Adam Kaplin, 2023 50, 000-- 149, 600--- 199, 600 former President & CSO 2022- 50, 001~~ (3) **3** ~~- 739~~ , **140** ~~000--- 789~~ , **313 CEO** ~~001 Jude Uzonwanne,~~ 2023 ~~75~~ **83** , **333 208** ~~000----- 6~~ , **006** ~~569 (2) 81, 569 former CEO 2022 125, 000 50, 000~~ (4)- ~~739~~ **1** , ~~000~~ **368, 600-- 5, 625** (5) **1** ~~-- 8~~ , ~~385~~ **665, 564 Michelle Yanez, 2024 158, 219-- 258, 900-- 26, 902** (~~2~~ **5**) ~~922~~ **444** , **021 CFO** ~~385 Jim McNulty,~~ 2023 ~~154~~ **165** , 000 **88** ~~-- ---- 154~~ , **475** ~~000 former CFO 2022 266, 869 100, 000~~ (~~3~~ **4**)- **282** ~~---- 366~~ , ~~869~~ **215-- 5, 934 (5) 541, 624** (1) The amounts represent ~~IPO bonuses~~ -- **bonus** ~~paid in 2023.~~ **earned as part of CEO Executive Scorecard** (2 **) On December 6, 2024, Mr. Aminov was awarded an RSU Stock Award (3**) Amount represents health insurance premiums paid **, car** ~~. (3) The amounts represent milestone~~ payments ~~pursuant to prior employment agreements.~~ **, car insurance, and club memberships** (4) ~~The~~ **Amount represents IPO** bonus ~~represents a~~ paid ~~sign- on amount.~~ (5) **Amounts represent health insurance premiums paid** ~~Of these 2022 option grants, 75 % were cancelled and non- exercisable as of April 2023, pursuant to the termination of Mr. Uzonwanne.~~ (6) The reported amounts represent the aggregate grant date fair value of the awards computed in accordance with Financial Accounting Standards Board Account Standards Codification Topic 718, Stock Compensation, as modified or

supplemented, or FASB ASC Topic 718. The assumptions used in calculating the grant date fair value of the stock options reported in this column are set forth in Note 8 to our Consolidated Financial Statements for the year ended December 31, ~~2022~~ **2024** included in this Report ~~. In April 2023, we entered into an agreement with Mr. Uzonwanne in which the number of shares subject to his option agreement was reduced from 200, 000 to 40, 000~~ . Narrative Disclosure to Summary Compensation Table Employment Agreements Except as set forth below, we currently have no written employment agreements with any of our named executive officers. Effective April 28, 2023, we entered into an employment agreement with Mr. Aminov, as amended on August 28, 2023, pursuant to which Mr. Aminov will serve as our Chief Executive Officer. Under his employment agreement, as amended, Mr. Aminov has agreed to devote at least 50 % of his business time to the affairs of the Company. Mr. Aminov' s employment agreement provides that his employment will be on an at- will basis and can be terminated by either Mr. Aminov or our company at any time and for any reason. Under the agreement, Mr. Aminov will receive a base salary of $ 0. 2 million per year, effective August 1, 2023. In the event that Mr. Aminov' s employment is terminated by our company without " Cause " or is terminated by Mr. Aminov for " Good Reason ", Mr. Aminov will be entitled to severance compensation in the form of salary continuation for a period of three months (subject to Mr. Aminov executing and delivering a customary general release in favor of the company). " Cause " is defined in the agreement to include dishonesty, misappropriation, willful misconduct, breach of the agreement, and other customary matters. " Good Reason " is defined to include a material adverse change in Mr. Aminov' s compensation or duties and level of responsibility. The employment agreement also contains customary confidentiality and invention- assignment covenants to which Mr. Aminov is subject. On August 17, 2023, Mr. Aminov received a $ 0. 1 million cash bonus net of federal, state, local and income taxes related to the successful completion of the IPO. In March 2024, Mr. Aminov assumed the role of Chairman and on March 25, 2024, the Compensation Committee of the Board of Directors approved an increase to Mr. Aminov' s base salary of $ 0. ~~8~~ **08** million, bringing his total annual base salary to $ 0. 28 million **. On December 2nd, 2024, the Compensation Committee of the Board of Directors approved a milestone payment in the amount of $ 0. 3 million in connection with the Executive Incentive Program for Mr. Aminov tied to the completion of drug development and financing milestones as outlined in the Executive Incentive Program plan** . On April 28, 2023, we entered into an employment agreement with Ms. Yanez pursuant to which Ms. Yanez will serve as our Chief Financial Officer on a full- time basis. Ms. Yanez' s employment agreement provides that her employment will be on an at- will basis and can be terminated by either Ms. Yanez or our company at any time and for any reason. Under the agreement, Ms. Yanez will receive an initial base salary of $ 0. 17 **million** per year. In the event that her employment is terminated by our company without " Cause " or is terminated by Ms. Yanez for " Good Reason ", Ms. Yanez will be entitled to severance compensation in the form of salary continuation for a period of three months (subject to Ms. Yanez executing and delivering a customary general release in favor of the company). " Cause " is defined in the agreement to include dishonesty, misappropriation, willful misconduct, breach of the agreement, and other customary matters. " Good Reason " is defined to include a material adverse change in Ms. Yanez' s compensation or duties and level of responsibility. The employment agreement also contains customary confidentiality and invention- assignment covenants to which Ms. Yanez is subject. On August 17, 2023, Ms. Yanez received a $ 0. 05 million cash bonus net of federal, state, local and income taxes related to the successful completion of the IPO. On March 25, 2024, the Compensation Committee of the Board of Directors approved an increase in Ms. Yanez' s base salary of $ 0. 06 million, bringing her annual base salary to $ 0. 23 million. ~~Chris Chapman~~ On ~~April 28~~ **June 26** , ~~2023~~ **2024** , ~~we~~ **MIRA Pharmaceuticals, Inc. (the " Company ")** entered into an **Amended and Restated** ~~employment~~ **Employment** ~~agreement~~ **Agreement (the "** ~~with Dr. Chapman, as amended~~ **Amended** ~~on August~~ **and Restated Employment Agreement ") that amends and restates the Employment Agreement, dated April** 28, 2023, **by** and ~~October 13~~ **among the Company and Michelle Yanez** , **the Company** ~~2023, pursuant to which Dr. Chapman served as our Executive Chairman. Dr. Chapman~~ ' s **Chief Financial Officer. Pursuant to the Amended and Restated** ~~employment~~ **Employment** ~~agreement~~ **Agreement** , **Ms. Yanez will continue to serve** as **the Company' s Chief Financial Officer** ~~amended, provided that his employment would be on a~~ part- time ~~basis whereby Dr. Chapman would devote time and effort to the business and affairs of the company on an as needed basis, and it further provides that such employment would be on an~~ at ~~- will basis and could be terminated by either Dr. Chapman or our company at any time and for any reason. Under the agreement, Dr. Chapman would receive~~ a **reduced annual** base salary of $ 0. ~~05~~ **14** million per year for a period of 90..... written consulting agreement with Dr. Kaplin . Grants of Plan- Based Awards in ~~2023~~ **2024** Estimated Future Payouts Under Non- Equity Incentive Plan Awards Estimated Future Payouts Under Equity Incentive Plan Awards All Other Stock Awards: Number of Shares of Stocks or All Other Option Awards: Number of Securities Underlying Exercise or Base Price of Option Closing stock price on Award Grant Date Fair Value of Stock and Name Grant Date (1) Threshold ($) Target ($) Maximum ($) Threshold (#) Target (#) Maximum (#) Units (#) Options (#) Awards ($ / Sh) date ($ / Sh) Option Awards Erez Aminov, CEO ~~4~~ **3** / ~~28~~ **25** / ~~2023~~ **2024** ~~-------~~ ~~150~~ **300** , 000 (2) $ **1. 16 $ 1. 16 $ 319, 500** 5 ~~.~~ **/ 28 / 2024 379,** ~~00~~ **000** ~~-~~ (3) $ **0. 85 $ 0. 85 $ 295, 620** ~~112~~ **12** ~~, 200 8~~ / ~~17~~ **6** / ~~2023~~ **2024 2, 000** ~~------- 150~~ , 000 (4) $ **1. 19 $ 1. 19 $ 1, 304, 000 12 /** 6 ~~.~~ **/ 2024** ~~50~~ **500 , 000 (5)** $ **595, 000 CASH $ 300, 000 (** 6 **)** ~~. 50 $ 807, 600~~ Michelle Yanez, CFO ~~4~~ **3** / ~~28~~ **25** / ~~2023~~ **2024** ~~------~~ ~~46~~ **150** , ~~667~~ **000** (~~2~~ **7**) $ ~~5~~ **1** . **16** ~~00- (3)~~ $ ~~174~~ **1. 16 $ 159** , ~~535 8~~ **750 12** / ~~17~~ **6** / ~~2023~~ **2024 150** ~~------ 20~~ , 000 ~~(4)~~ $ ~~6~~ **1** . ~~50~~ **19** $ ~~6~~ **1** . ~~50 $ 107, 680 Adam Kaplin, former President & CSO 4 / 28 / 2023------- 40, 000 (2) $ 5. 00- (3) $ 149~~ - **19 99. 150** , ~~600 Jude Uzonwanne, former CEO---------- $- James McNulty, former CFO---------- $-~~ (1) The " Grant Date " represents the date on which the Compensation Committee of the Board took action to grant the applicable award. (2) The stock awards disclosed in this item consist of options, as issued under our 2022 Omnibus Incentive Plan, which ~~vest ratably in thirds beginning April 2023~~ **50 % on grant date and 50 % on the first anniversary of grant date** . (3) ~~There~~ -- **The** ~~was no closing~~ stock ~~price for our common stock since our IPO did not~~ **awards disclosed in this item consist of options, as issued under** ~~occur~~ -- **our** ~~until August 2023~~ **2022 Omnibus Incentive Plan, which 50 % six months after grant date and 50 % on the first anniversary of grant date** . (4) The stock awards disclosed in this item consist of options, as issued under our 2022 Omnibus Incentive Plan, which **50** ~~vested 100~~ % ~~at~~ **six months after** grant **date and 50 %**

on the first anniversary of grant date. (5) The stock awards disclosed in this item consist of Restricted Stock Units (RSU' s), as issued under our 2022 Omnibus Incentive Plan, which vest 50 % on February 12, 2025 and 50 % on June 6, 2025 (6) Represents a cash award that Compensation Committee awarded based on CEO performance (7) The stock awards disclosed in this item consist of options, as issued under our 2022 Omnibus Incentive Plan, which vest 50 % on grant date, and 50 % six months from grant date . Outstanding equity awards The following table summarizes outstanding unexercised options held by each of our named executive officers, as of December 31, ~~2023~~ **2024** . OPTION AWARDS STOCK AWARDS Name Number of Securities Underlying Unexercised Options (#) Exercisable Number of Securities Underlying Unexercised Options (#) Unexercisable Equity Incentive Plan Awards: Number of Securities Underlying Unexercised Unearned Options (#) Options Exercise Prices ($) Option Expiration Date Number of Shares or Units of Stock That Have Not Vested (#) Market Value of Shares or Units of Stock That Have Not Vested ($) Equity Incentive Plan Awards: Number of Unearned Shares, Units or Other Rights That Have Not Vested (#) Equity Incentive Plan Awards: Market or Payout Value of Unearned Shares, Units or Other Rights That Have Not vested (#) Erez Aminov 150, 000-- $ 6. 50 8 / 16 / 33---- **100, 000** 50 ~~, 000 100~~ , 000- $ 5. 00 4 / 27 / 33---- **150, 000 150, 000- $ 1. 16 3 / 25 / 34---- 379, 000-- $ 0. 84 5 / 28 / 34---- 1, 000, 000 1, 000, 000- $ 1. 19 12 / 6 / 34---- 250, 000 $ 297, 475--** Michelle Yanez 20, 000-- $ 6. 50 8 / 16 / 33---- 15, 556 31, 111- $ 5. 00 4 / 27 / 33---- 6, 667 3, 333- $ 5. 00 6 / 14 / 32---- **75** ~~Adam Kaplin 13~~ , ~~334 26~~ **000 75** , ~~666~~ **000** - $ ~~5~~ **1** . ~~00 4~~ **16 3** / ~~27~~ **25** / ~~33~~ **34** ---- ~~100~~ **- 150** , 000 ~~100, 000~~ - $ ~~5~~ **1** . ~~00~~ **19 12 /** 6 / **34** ~~14 / 32---- Jude Uzonwanne 50, 000-- $ 5. 00 6 / 14 / 32---- James McNulty---~~---- Option Exercises and Stock Vested No stock options were exercised by our executive officers during the year ended December 31, ~~2023~~ **2024** ~~:~~ **.** Omnibus Incentive Plan Our board of directors has adopted, and our stockholders have approved, our 2022 Omnibus Incentive Plan, or the 2022 Omnibus Plan. The 2022 Omnibus Plan authorizes the grant of incentive stock options, within the meaning of Section 422 of the Internal Revenue Code, to our employees and any of our parent and subsidiary corporations' employees, and the grant of nonstatutory stock options, restricted stock, restricted stock units, stock appreciation rights, performance units and performance shares to our employees, directors, and consultants and any of our future subsidiary corporations' employees and consultants. The following is a summary of certain terms and conditions of the 2022 Omnibus Plan. This summary is qualified in its entirety by reference to the 2022 Omnibus Plan attached as an exhibit to this Report ~~. You are encouraged to read the full text of the 2022 Omnibus Plan. As of December 31, 2023, there are options to purchase an aggregate of 1, 210, 001 shares of our common stock outstanding under the 2022 Omnibus Plan~~ . The 2022 Omnibus Plan is administered by our board of directors or our compensation committee, or any other committee or subcommittee or one or more of our officers to whom authority has been delegated (collectively, the " Administrator "). The Administrator has the authority to interpret the 2022 Omnibus Plan and award agreements entered into with respect to the 2022 Omnibus Plan; to make, change and rescind rules and regulations relating to the 2022 Omnibus Plan; to make changes to, or reconcile any inconsistency in, the 2022 Omnibus Plan or any award agreement covering an award; and to take any other actions needed to administer the 2022 Omnibus Plan. Eligibility The Administrator may designate any of the following as a participant under the 2022 Omnibus Plan: any officer or employee, or individuals engaged to become an officer or employee, of our company or our affiliates; and consultants of our company or our affiliates, and our directors, including our non- employee directors. Types of Awards The 2022 Omnibus Plan permits the Administrator to grant stock options, stock appreciation rights (" SARs "), performance shares, performance units, shares of common stock, restricted stock, restricted stock units (" RSUs "), cash incentive awards, dividend equivalent units, or any other type of award permitted under the 2022 Omnibus Plan. The Administrator may grant any type of award to any participant it selects, but only our employees or our subsidiaries' employees may receive grants of incentive stock options within the meaning of Section 422 of the Internal Revenue Code. Awards may be granted alone or in addition to, in tandem with, or (subject to the repricing prohibition described below) in substitution for any other award (or any other award granted under another plan of our company or any affiliate, including the plan of an acquired entity). Shares Reserved Under the 2022 Omnibus Incentive Plan The 2022 Omnibus Plan provides that ~~2~~ **5** , 000, 000 shares of our common stock are reserved for issuance under the 2022 Omnibus Plan, all of which may be issued pursuant to the exercise of incentive stock options. The number of shares available for issuance under our 2022 Omnibus Plan will also include an annual increase on the first day of each fiscal year equal to the lesser of: ● ~~200~~ **500** , 000 shares; ● ~~1~~ **5** . 0 % of the outstanding shares of all class of our common stock as of the last day of the immediately preceding fiscal year; or ● such other amount as our board of directors may determine. The number of shares reserved for issuance under the 2022 Omnibus Plan will be reduced on the date of the grant of any award by the maximum number of shares, if any, with respect to which such award is granted. However, an award that may be settled solely in cash will not deplete the 2022 Omnibus Plan' s share reserve at the time the award is granted. If (a) an award expires, is canceled, or terminates without issuance of shares or is settled in cash, (b) the Administrator determines that the shares granted under an award will not be issuable because the conditions for issuance will not be satisfied, (c) shares are forfeited under an award, (d) shares are issued under any award and we reacquire them pursuant to our reserved rights upon the issuance of the shares, (e) shares are tendered or withheld in payment of the exercise price of an option or as a result of the net settlement of outstanding stock appreciation rights or (f) shares are tendered or withheld to satisfy federal, state or local tax withholding obligations, then those shares are added back to the reserve and may again be used for new awards under the 2022 Omnibus Plan. However, shares added back to the reserve pursuant to clauses (d), (e) or (f) in the preceding sentence may not be issued pursuant to incentive stock options. The Administrator may grant stock options and determine all terms and conditions of each stock option, which include the number of stock options granted, whether a stock option is to be an incentive stock option or non- qualified stock option, and the grant date for the stock option. However, the exercise price per share of common stock may never be less than the fair market value of a share of common stock on the date of grant and the expiration date may not be later than 10 years after the date of grant. Stock options will be exercisable and vest at such times and be subject to such restrictions and conditions as are determined by the Administrator, including with respect to the manner of payment of the exercise price of such stock options. Stock Appreciation Rights The Administrator may grant SARs, which represent the right of

a participant to receive cash in an amount, or common stock with a fair market value, equal to the appreciation of the fair market value of a share of common stock during a specified period of time. The 2022 Omnibus Plan provides that the Administrator will determine all terms and conditions of each SAR, including, among other things: (a) whether the SAR is granted independently of a stock option or relates to a stock option, (b) the grant price, which may never be less than the fair market value of our common stock as determined on the date of grant, (c) a term that must be no later than 10 years after the date of grant, and (d) whether the SAR will settle in cash, common stock or a combination of the two. Performance and Stock Awards The Administrator may grant awards of shares of common stock, restricted stock, RSUs, performance shares or performance units. Restricted stock means shares of common stock that are subject to a risk of forfeiture or restrictions on transfer, which may lapse upon the achievement or partial achievement of performance goals (as described below) or upon the completion of a period of service. An RSU grants the participant the right to receive cash or shares of common stock the value of which is equal to the fair market value of one share of common stock, to the extent performance goals are achieved or upon the completion of a period of service. Performance shares give the participant the right to receive shares of common stock to the extent performance goals are achieved. Performance units give the participant the right to receive cash or shares of common stock valued in relation to a unit that has a designated dollar value or the value of which is equal to the fair market value of one or more shares of common stock, to the extent performance goals are achieved. The Administrator will determine all terms and conditions of the awards including (a) whether performance goals must be achieved for the participant to realize any portion of the benefit provided under the award, (b) the length of the vesting or performance period and, if different, the date that payment of the benefit will be made, (c) with respect to performance units, whether to measure the value of each unit in relation to a designated dollar value or the fair market value of one or more shares of common stock, and (d) with respect to performance shares, performance units, and RSUs, whether the awards will settle in cash, in shares of common stock (including restricted stock), or in a combination of the two. Cash Incentive Awards The Administrator may grant cash incentive awards. An incentive award is the right to receive a cash payment to the extent one or more performance goals are achieved. The Administrator will determine all terms and conditions of a cash incentive award, including, but not limited to, the performance goals (described below), the performance period, the potential amount payable, and the timing of payment. While the 2022 Omnibus Plan permits cash incentive ~~awards to be granted under the 2022 Omnibus Plan, we may also make cash incentive awards outside of the 2022 Omnibus Plan.~~ Performance Goals For purposes of the 2022 Omnibus Plan, the Administrator may establish objective or subjective performance goals which may apply to any performance award. Such performance goals may include, but are not limited to, one or more of the following measures with respect to our company or any one or more of our subsidiaries, affiliates, or other business units: net sales; cost of sales; gross income; gross revenue; revenue; operating income; earnings before taxes; earnings before interest and taxes; earnings before interest, taxes, depreciation and amortization; earnings before interest, taxes, depreciation, amortization and exception items; income from continuing operations; net income; earnings per share; diluted earnings per share; total stockholder return; fair market value of a share of common stock; cash flow; net cash provided by operating activities; net cash provided by operating activities less net cash used in investing activities; ratio of debt to debt plus equity; return on stockholder equity; return on invested capital; return on average total capital employed; return on net capital employed; return on assets; return on net assets employed before interest and taxes; operating working capital; average accounts receivable (calculated by taking the average of accounts receivable at the end of each month); average inventories (calculated by taking the average of inventories at the end of each month); economic value added; succession planning; manufacturing return on assets; manufacturing margin; and customer satisfaction. Performance goals may also relate to a participant' s individual performance. The Administrator reserves the right to adjust any performance goals or modify the manner of measuring or evaluating a performance goal. Dividend Equivalent Units The Administrator may grant dividend equivalent units. A dividend equivalent unit gives the participant the right to receive a payment, in cash or shares of common stock, equal to the cash dividends or other distributions that we pay with respect to a share of common stock. We determine all terms and conditions of a dividend equivalent unit award, except that dividend equivalent units may not be granted in connection with a stock option or SAR, and dividend equivalent unit awards granted in connection with another award cannot provide for payment until the date such award vests or is earned, as applicable. Other Stock- Based Awards The Administrator may grant to any participant shares of unrestricted stock as a replacement for other compensation to which such participant is entitled, such as in payment of director fees, in lieu of cash compensation, in exchange for cancellation of a compensation right or as a bonus. Transferability Awards are not transferable, including to any financial institution, other than by will or the laws of descent and distribution, unless the Administrator allows a participant to (a) designate in writing a beneficiary to exercise the award or receive payment under the award after the participant' s death, (b) transfer an award to a former spouse as required by a domestic relations order incident to a divorce, or (c) transfer an award without receiving any consideration. Adjustments If (a) we are involved in a merger or other transaction in which our shares of common stock are changed or exchanged; (b) we subdivide or combine shares of common stock or declare a dividend payable in shares of common stock, other securities, or other property (other than stock purchase rights issued pursuant to a stockholder rights agreement); (c) we effect a cash dividend that exceeds 10 % of the fair market value of a share of common stock or any other dividend or distribution in the form of cash or a repurchase of shares of common stock that our board of directors determines is special or extraordinary, or that is in connection with a recapitalization or reorganization; or (d) any other event occurs that in the Administrator' s judgment requires an adjustment to prevent dilution or enlargement of the benefits intended to be made available under the 2022 Omnibus Plan, then the Administrator will, in a manner it deems equitable, adjust any or all of (1) the number and type of shares subject to the 2022 Omnibus Plan and which may, after the event, be made the subject of awards; (2) the number and type of shares of common stock subject to outstanding awards; (3) the grant, purchase, or exercise price with respect to any award; and (4) the performance goals of an award. In any such case, the Administrator may also provide for a cash payment to the holder of an outstanding award in exchange for the cancellation of all or a portion of the award, subject to the terms of the 2022 Omnibus Plan. The Administrator may, in

connection with any merger, consolidation, acquisition of property or stock, or reorganization, authorize the issuance or assumption of awards upon terms and conditions we deem appropriate without affecting the number of shares of common stock otherwise reserved or available under the 2022 Omnibus Plan. Change of Control Upon a change of control (as defined in the 2022 Omnibus Plan), the successor or surviving corporation may agree to assume some or all outstanding awards or replace them with the same type of award with similar terms and conditions, without the consent of any participant, subject to the following requirements: ● Each award that is assumed must be appropriately adjusted, immediately after such change of control, to apply to the number and class of securities that would have been issuable to a participant upon the consummation of such change of control had the award been exercised, vested, or earned immediately prior to such change of control, and other appropriate adjustment to the terms and conditions of the award may be made. ● If the securities to which the awards relate after the change of control are not listed and traded on a national securities exchange, then (a) each participant must be provided the option to elect to receive, in lieu of the issuance of such securities, cash in an amount equal to the fair value of the securities that would have otherwise been issued, and (b) no reduction may be taken to reflect a discount for lack of marketability, minority, or any similar consideration, for purposes of determining the fair value of such securities. ● If a participant is terminated from employment without cause, or due to death or disability, or the participant resigns employment for good reason (as defined in any award or other agreement between the participant and our company or an affiliate) within two years following the change of control, then upon such termination, all of the participant' s awards in effect on the date of such termination will vest in full or be deemed earned in full. If the purchaser, successor, or surviving entity does not assume the awards or issue replacement awards, then immediately prior to the change of control date, unless the Administrator otherwise determines: ● Each stock option or SAR then held by a participant will become immediately and fully vested, and all stock options and SARs will be cancelled on the change of control date in exchange for a cash payment equal to the excess of the change of control price of the shares of common stock over the purchase or grant price of such shares under the award. ● Unvested restricted stock and RSUs (that are not performance awards) will vest in full. ● All performance shares, performance units and cash incentive awards for which the performance period has expired will be paid based on actual performance, and all such awards for which the performance period has not expired will be cancelled in exchange for a cash payment equal to the amount that would have been due under such awards, valued assuming achievement of target performance goals at the time of the change of control, prorated based on the number of full months elapsed in the performance period. ● All unvested dividend equivalent units will vest (to the same extent as the award granted in tandem with such units) and be paid. ● All other unvested awards will vest and any amounts payable will be paid in cash. Term of Plan Unless earlier terminated by our board of directors, the 2022 Omnibus Plan will terminate on, and no further awards may be granted, after the tenth (10th) anniversary of its effective date. Termination and Amendment of Plan Our board of directors or the Administrator may amend, alter, suspend, discontinue, or terminate the 2022 Omnibus Plan at any time, subject to the following limitations: ● Our board of directors must approve any amendment to the 2022 Omnibus Plan if we determine such approval is required by prior action of our board of directors, applicable corporate law, or any other applicable law; ● Stockholders must approve any amendment to the 2022 Omnibus Plan, which may include an amendment to materially increase the number of shares reserved under the 2022 Omnibus Plan, if we determine that such approval is required by Section 16 of the Exchange Act, the Code, the listing requirements of any principal securities exchange or market on which the shares are then traded, or any other applicable law; and ● Stockholders must approve any amendment to the 2022 Omnibus Plan that would diminish the protections afforded by the participant award limits or repricing and backdating prohibitions. Amendment, Modification, Cancellation and Disgorgement of Awards Subject to the requirements of the 2022 Omnibus Plan, the Administrator may modify or amend any award or waive any restrictions or conditions applicable to any award or the exercise of the award, or amend, modify, or cancel any terms and conditions applicable to any award, in each case, by mutual agreement of the Administrator and the participant or any other person that may have an interest in the award, so long as any such action does not increase the number of shares of common stock issuable under the 2022 Omnibus Plan. We do not need to obtain participant (or other interested party) consent for any such action (a) that is permitted pursuant to the adjustment provisions of the 2022 Omnibus Plan; (b) to the extent we deem the action necessary to comply with any applicable law or the listing requirements of any principal securities exchange or market on which our common stock is then traded; (c) to the extent we deem the action is necessary to preserve favorable accounting or tax treatment of any award for us; or (d) to the extent we determine that such action does not materially and adversely affect the value of an award or that such action is in the best interest of the affected participant or any other person as may then have an interest in the award. The Administrator can cause a participant to forfeit any award, and require the participant to disgorge any gains attributable to the award, if the participant engages in any action constituting, as determined by the Administrator in its discretion, cause for termination, or a breach of a material company policy, any award agreement or any other agreement between the participant and us or one of our affiliates concerning noncompetition, nonsolicitation, confidentiality, trade secrets, intellectual property, nondisparagement or similar obligations. Any awards granted under the 2022 Omnibus Plan, and any shares of common stock issued or cash paid under an award, will be subject to recoupment our Compensation Recovery Policy (as described below), or any recoupment or similar requirement otherwise made applicable by law, regulation or listing standards to us, or that may be provided for in any cash or equity award granted by us. Compensation of Directors The following table sets forth all compensation paid to our Board members during the year ended December 31, ~~2023~~ **2024** : Name Fees Earned or Paid in Cash ($ ~~) (1~~) Stock Awards ($) Option Awards ($) (~~7~~ **1**) Non- Equity Incentive Plan Compensation ($) Change in Pension Value and Nonqualified Deferred Compensation Earnings ($) All Other Compensation ($) Total ($) ~~Chris~~ **Matthew Whalen-- 16, 525---- Mathew Paul Del Giudice-- 69, 775--- 69, 775 Denil Shekhat-- 117, 400--- 117, 400 Edward MacPherson-- 69, 775--- 69, 775 Dr. Christopher** Chapman **24** , **121** ~~PhD. (2) 128, 629- 493, 600--- 622, 229 Mike Jerman------- Talhia Tuck (3)-- 35, 150--- 35, 150 Brad Kroenig (3)-- 35, 150--- 35, 150 Hugh McColl III (3)-- 35, 150--- 35, 150 Christos Nicholoudis, Esq. (4) 74, 085- 109, 940--- 184, 025 Dave Vorhoff, former director (5)-- 35, 150--- 35, 150 Brian Daly, former director (6)--~~------ (1 ~~) Cash payments made~~

~~to Dr. Chapman and Mr. Nicholoudis are related to their employment agreements, respectively. (2) On March 9, 2024, Dr. Chapman resigned from our Company as Executive Chairman and as an employee. (3) On March 9, 2024, Ms. Tuck, Mr. Kroenig and Mr. McColl resigned from our Company as members of the Board of Directors. (4) On January 15, 2024, Mr. Nicholoudis resigned from our Company as General Counsel and as a member of the Board of Directors. (5) On October 19, 2023, Mr. Vorhoff resigned from our Company as a member of the Board of Directors. (6) On December 15, 2023, Mr. Daly resigned from our Company as a member of the Board of Directors. (7~~) The reported amounts represent the aggregate grant date fair value of the awards computed in accordance with Financial Accounting Standards Board Account Standards Codification Topic 718, Stock Compensation, as modified or supplemented, or FASB ASC Topic 718. The assumptions used in calculating the grant date fair value of the stock options reported in this column are set forth in Note 8 to our Consolidated Financial Statements for the year ended December 31, 2022 included in this Report. ~~further provides that such employment would be on~~ an at- will basis and could be terminated by either Dr.Chapman or ~~our~~ **the** company at any time and for any reason.Under the agreement,Dr.Chapman would receive ~~a~~ **an initial** base salary of $ 0. ~~05~~ **15** million per year ~~for a period of 90 days following the October 13,2023 amendment,and following the 90- day period,Dr.Chapman' s base salary will increase to $ 0.15 million~~ .In the event that Dr.Chapman' s employment is terminated by ~~our~~ **the** company without " Cause " or is terminated by Dr.Chapman for " Good Reason ",Dr.Chapman would be entitled to severance compensation in the form of salary continuation for a period of three months (subject to Dr.Chapman executing and delivering a customary general release in favor of the company). ~~" Cause " is defined in~~ **On August 17,2023,Dr.Chapman received a $ 0.05 million cash bonus net of federal,state,local and income taxes related to** the **successful completion of the IPO.On August 28,2023,the Company amended Dr.Chapman' s employment** agreement to **indicate that he** ~~include dishonesty,misappropriation~~ Compensation Recovery Policy On October 2, 2023, our Board of Directors adopted a policy (commonly known as a " clawback " policy) which provides for the recovery of erroneously awarded incentive compensation to certain of our officers in the event that we are required to prepare an accounting restatement due to material noncompliance by us with any financial reporting requirements under the federal securities laws. This policy is designed to comply with Section 10D of the Securities Exchange Act of 1934, as amended, related rules and the listing standards of Nasdaq Stock Market or any other securities exchange on which our shares are listed in the future. The policy is administered by our Board of Directors or, if so designated by the Board of Directors, the Compensation Committee. Any determinations made by the Board shall be final and binding on all affected individuals. The individuals covered by this policy (the " Covered Officers ") are any current or former employee who is or was identified as our president, principal financial officer, principal accounting officer (or if there is no such accounting officer, the controller), any vice- president in charge of a principal business unit, division, or function (such as sales, administration, or finance), any other officer who performs a significant policy- making function, or any other person (including any executive officer of our subsidiaries or affiliates) who performs similar significant policy- making functions for us. The policy covers our recoupment of " Incentive-Based Compensation " (as defined in the policy) received by a person after beginning service as a Covered Executive and who served as a Covered Officer at any time during the performance period for that Incentive Compensation. In the event we are required to prepare an accounting restatement, the policy requires us to recover, reasonably promptly, any excess incentive compensation (as determined by our Board of Directors or Compensation Committee) received by any Covered Officer during the three completed fiscal years immediately preceding the date on which we are required to prepare such accounting restatement. The foregoing description of our Compensation Recovery Policy does not purport to be complete and is qualified in its entirety by the terms and conditions of such policy, a copy of which is filed as an exhibit to this Report and is incorporated herein by reference. Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters. The following table sets forth, as of the date of this Report, the ownership of our securities by: (i) each of our directors, (ii) all persons who, to our knowledge, are the beneficial owners of more than 5 % of the outstanding shares of common stock, (iii) each of the executive officers, and (iv) all of our directors and executive officers, as a group. Each person named in this table has sole investment power and sole voting power with respect to the shares of common stock set forth opposite such person' s name, except as otherwise indicated. Name and Address of Beneficial Owner Amount and Nature of Beneficial Ownership Percentage of Class as of March 28 **,** ~~2024~~ **2025** Directors and Executive Officers (1) Erez Aminov ~~623~~ **2** , ~~500 4~~ **561, 200 13** . ~~15~~ **78** % Michelle Yanez ~~57~~ **136** , ~~779~~ **111** * **Matthew Whalen-** ~~Michael Jerman 25, 000~~ * Matthew Del Giudice 25, 000 * Denil Nanji Shekhat ~~25~~ **41** , ~~000~~ **666** * Edward MacPherson 25, 000 * All current directors and officers as a group (6 persons) (2) ~~781~~ **2** , ~~279 5~~ **788, 977 14** . ~~21~~ **82** % 5 % Stockholders Brian McNulty (3) 5, ~~110~~ **029** , ~~270 34~~ **317 29** . ~~57~~ **14** % * Represents beneficial ownership of less than 1 % (1) Unless otherwise denoted, the address of each noted person is 1200 Brickell Avenue, Suite 1950 # 1183, Miami, Florida 33131. (2) Includes **both founders shares and** shares subject to options granted under our 2022 Omnibus Plan that are exercisable as of the Beneficial Ownership Date or within 60 days of the Beneficial Ownership Date held as follows: Mr. Aminov, **2, 561, 200 shares and Ms. Yanez, 136, 111 shares,, Dr. Del Guidice,** ~~250~~ **25** , 000 shares ~~and Ms. Yanez, 57, 779 shares, Mr. Jerman, 25, 000 shares~~ , Dr. ~~Del Guidice, 25, 000 shares, Dr.~~ Shekhat, ~~25~~ **41** , ~~000~~ **666** shares, Mr. MacPherson, 25, 000 shares, and all current officers and directors as a group, ~~407~~ **2** , ~~779~~ **256, 777** shares. Excludes shares subject to options granted under our 2022 Omnibus Plan that are not exercisable within 60 days of the Beneficial Ownership Date. (3) Includes (i) 10, 000 shares held directly by Mr. McNulty, (ii) 2, ~~740~~ **540** , 270 shares held by the Bay Shore Trust, (iii) ~~660~~ **779** , ~~000~~ **047** shares held by the Celeste J Williams Lifetime QTIP Trust, (iv) 1, 000, 000 shares issuable pursuant to warrants held by the Bay Shore Trust that are immediately exercisable, and (v) 700, 000 shares issuable pursuant to warrants held by MIRALOGX LLC, that are immediately exercisable. As trustee of the Bay Shore Trust and the Celeste J Williams Lifetime QTIP Trust, Mr. McNulty has sole voting and dispositive power over the shares held by each trust, and, as a result is deemed to have beneficial ownership (as determined under Section 13 (d) of the Exchange Act) of the securities held by the trusts. The address for MIRALOGX LLC and the Bay Shore Trust is 900 West Platt Street, Suite 200, Tampa, Florida, 33606. DELINQUENT SECTION 16 (A) REPORTS Section 16 (a) of the Exchange Act requires directors and

executive officers, and persons who own more than 10 % of the Company' s common stock, to report to the SEC their initial ownership of the Company' s common stock and any subsequent changes in that ownership. Specific due dates for these reports have been established by the SEC and we are required to disclose in this Annual Report on Form 10- K any late filings or failures to file. Based solely on review of the copies of such reports furnished to us and written representations from reporting persons that no other reports were required during the fiscal year ended December 31, ~~2023~~ **2024**, we believe that, during the 2023 fiscal year, all of the Company' s directors and executive officers complied with all Section 16 (a) filing requirements applicable to them ~~, with the exception of one late filing By the Bay Shore Trust, which was required to be filed on November 22, 2023, but was filed on December 27, 2023~~. The following table indicates shares of common stock authorized for issuance under our 2022 Omnibus Plan as of December 31, ~~2023~~ **2024**: Plan category Number of securities to be issued upon exercise of outstanding options and warrants Weighted- average exercise price of outstanding options and warrants Number of securities remaining available for future issuance Equity compensation plans approved by security holders **6, 499, 236 $** 2 ~~, 973, 571 $ 4~~. ~~45 789~~ **39 412**, ~~999~~ **142** Equity compensation plans not approved by security holders--- Total **6, 499, 236 $** 2 ~~, 973, 571 $ 4~~. ~~45 789~~ **39 412**, ~~999~~ **142** Item 13. Certain Relationships and Related Transactions, and Director Independence. The following is a description of transactions within the last two years to which we have been a party, in which the amount involved exceeded or will exceed $ 120, 000, and in which any of our executive officers, directors or holders of more than 5 % of our voting securities, or an immediate family member thereof, had or will have a direct or indirect material interest. We believe the terms obtained or consideration that we paid or received, as applicable, in connection with the transactions described below were comparable to terms available or amounts that would be paid or received, as applicable, in arm' s- length transactions with unrelated third parties. Line of Credit and Promissory Note with the Bay Shore Trust On April 28, 2023, we entered into the Bay Shore Note with the Bay Shore Trust, under which we have the right to borrow up to an aggregate of $ 5, 000, 000 from the Bay Shore Trust at any time up to the second anniversary of the issuance of the Bay Shore Note or, if earlier, upon the completion of our initial public offering. Our right to borrow funds under the Bay Shore Note is subject to the absence of a material adverse change in our assets, operations, or prospects. The Bay Share Note, together with accrued interest, will become due and payable on the second anniversary of the issuance of the note, provided that it may be prepaid at any time without penalty. The Bay Shore Note will accrue interest at a rate equal 7 % per annum, simple interest, during the first year that the note is outstanding and 10 % per annum, simple interest, thereafter. The Bay Shore Note is unsecured. As of June 30, 2023, the Bay Shore Note had an outstanding principal balance of $ 1. 8 million and accrued and unpaid interest of $ 0. 04 million. Under the Bay Shore Trust Conversion Agreement, the Bay Shore Trust agreed to convert, upon the completion of our initial public offering, $ 1, 100, 190 of the outstanding principal balance of the Bay Shore Note into shares of our common stock at a conversion price equal to our initial public offering price, which resulted in the issuance of 157, 170 shares to the Bay Shore Trust upon the completion of our initial public offering. The note was paid off as of December 31, 2023. In consideration of the loan facility provided by the Bay Shore Trust, we issued to the Bay Shore Trust a common stock purchase warrant on April 28, 2023 giving the Bay Shore Trust the right to purchase up to 1, 000, 000 shares of common stock at an exercise price of $ 5. 00 per share, which warrant will expire five years after the date of grant. Pursuant to a registration rights agreement, we have granted to Bay Shore Trust the right to require us, at any time after one year following our initial public offering, to register for resale the shares issuable upon the exercise of the warrant, with such registration rights being in the form of demand and " piggyback " registration rights that are subject to customary limitations and restrictions. Upon issuance, the warrant met the criteria to be classified as equity based on an analysis under Accounting Standards Codification (480) ASC 480, " Distinguishing Liabilities from Equity " and was measured at fair value, resulting in an initial fair value of approximately $ 3. 5 million upon issuance of the warrant using Black- Scholes valuation techniques. Transactions with MIRALOGX LLC Since January 1, 2023, MIRALOGX has advanced funds on behalf of Bay Shore Trust to our company in order to fund operating activities. The total amount advanced and outstanding from MIRALOGX was $ 1. 6 million immediately prior to being consolidated into the Bay Shore Note on June 30, 2023, and such amounts became a part of the outstanding balance of the Bay Shore Note as of June 30, 2023 and ~~are~~ **were** payable under the terms of the Bay Shore Note **as discussed above**. We are also a party to an Agreement for Shared Lease Costs, dated April 1, 2023, with MIRALOGX under which we have agreed to pay our pro rata share of the operating usage costs owing by MIRALOGX under an aircraft lease agreement between MIRALOGX and Supera Aviation I LLC (" Supera Aviation ") based on our usage of the leased aircraft each month. No amounts are payable by us under this agreement unless and to the extent we choose to utilize the leased aircraft. As such, we discontinued the use of the aircraft in March 2023. Prior to entering into this agreement, we were a party to an aircraft lease agreement with Supera Aviation from April 20, 2021, through March 31, 2023. We paid Supera Aviation an aggregate of $ 0. 5 million during the first quarter of 2023 and $ 1. 7 million in 2022. Supera Aviation is a company owned by Starwood Trust. On November 15, 2023, we entered into an exclusive license agreement in with MIRALOGX to develop and commercialize a drug product containing 2- (2- chlorophenyl)- 2- (methylamino) cyclopentan- 1- one (sometimes referred to by the Parties as " M209 " or " KETAMIR- 2 ") as an active agent in North America. The exclusive license in the license agreement includes our right to sublicense the licensed intellectual property. Pursuant to the terms of the license agreement, and subject to the conditions set forth therein, we paid MIRALOGX a one- time, nonrefundable payment of $ 100, 000 upon the signing of the Agreement and will be obligated to pay quarterly royalty payments on sales of the Product in the Territory of 8 % of net sales and 8 % of other revenue (such as milestone or sublicense payments) from licensed products. Also, in consideration of License Agreement, we issued to MIRALOGX a common stock purchase warrant to purchase up to 700, 000 shares of our common stock. The MIRALOGX Warrants are exercisable, in whole or in part, any time prior to November 15, 2028, at a cash exercise price of $ 2. 00 per share. On November 15, 2023, we entered into a promissory note and loan agreement with MIRALOGX. Pursuant to the loan agreement, we may borrow up to $ 3. 0 million from MIRALOGX to fund the development of licensed products under the license agreement. Together with any advance request, we will deliver to the Lender a budget for the requested advance. The budget may only include costs directly associated with

preparing an IND application for KETAMIR- 2, exclusive of personnel costs. Any advances made by the Lender to us pursuant to this note may be repaid by us (together with any and all interest accrued thereon) at any time without penalty or premium in accordance with the terms hereof. Amounts repaid hereunder may not be reborrowed. The loan agreement has a one- year term, and all outstanding principal and accrued but unpaid interest must be repaid in full on November 15, ~~2023~~ **2024** . Interest on the amounts borrowed under the loan agreement accrues at an annual fixed rate of 8 %. We may prepay all or a portion of the outstanding principal and accrued unpaid interest under the loan agreement at any time without a prepayment fee **. The Company did not borrow any funds from the MIRALOGX loan during the year ended December 31, 2024 or December 31, 2023 and the Loan Agreement expired on November 15, 2024** . Consulting and Employment Agreements with Dr. Chris Chapman On April 1, 2022, we entered into a Consulting Agreement with Dr. Chapman pursuant to which he provided regulatory and drug development consulting services to the Company on an as- requested basis. Pursuant to the Consulting Agreement, he was to be paid a one- time fee of $ 100, 000 upon the completion of our initial public offering (of which $ 50, 000 was prepaid in in the first quarter of 2022) plus a monthly fee of $ 20, 000 thereafter. The monthly fee was to begin upon the completion of our initial public offering. He was also reimbursed for reasonable out- of- pocket expenses incurred in connection with his duties under the Consulting Agreement. The agreement had a term of one year with an automatic one- year extension, provided that either party could terminate the agreement without cause upon 30- days prior written notice. In his capacity as a consultant, Dr. Chapman was also granted on June 15, 2022, an option to purchase up to 200, 000 shares of our common stock at an exercise price of $ 5. 00 per share. Upon Dr. Chapman becoming Executive Chairman, received additional compensation in that capacity, and his employment agreement replaced his Consulting Agreement. See " Executive Compensation " above. Dr. Chapman resigned his positions with our company on March 9, 2024. Review and Approval of Related Party Transactions Our board of directors has adopted a written policy regarding the review and approval of related party transactions. Our audit committee charter provides that the audit committee shall review and approve or disapprove any related party transactions, which are transactions between us and related persons in which the aggregate amount involved exceeds or may be expected to exceed the lessor of $ 120, 000 or one percent of the average of our total assets at year end for the last two completed fiscal years and in which a related person has or will have a direct or indirect material interest. Our policy regarding transactions between us and related persons provides that a related person is defined as a director, executive officer, nominee for director or greater than 5 % beneficial owner of our common stock, in each case since the beginning of the most recently completed year, and any of their immediate family members. Certain of the foregoing disclosures are summaries of certain provisions of our related party agreements and are qualified in their entirety by reference to all of the provisions of such agreements. Because these descriptions are only summaries of the applicable agreements, they do not necessarily contain all of the information that you may find useful. Copies of certain of the agreements have been filed as exhibits to this Report and are available electronically on the website of the SEC at www. sec. gov. As a matter of corporate governance policy, we have not and will not make loans to officers or loan guarantees available to " promoters " as that term is commonly understood by the SEC and state securities authorities. All future transactions between us and our officers, directors or five percent stockholders, and respective affiliates will be on terms no less favorable than could be obtained from unaffiliated third parties and will be approved by a majority of our independent directors who do not have an interest in the transactions and who had access, at our expense, to our legal counsel or independent legal counsel. Item 14. Principal Accountant Fees and Services. Audit Fees. The aggregate fees billed by Cherry Bekaert LLP for professional services rendered for the audit of our annual financial statements, review of the financial information included in our Forms 10- Q for the respective periods and other required filings with the SEC for the years ended December 31, ~~2023~~ **2024** and December 31, ~~2022~~ **2023** totaled $ 0. **08 million and $ 0.** 06 million **, respectively. Additionally, the Company appointed a new audit firm, Salberg & Company P. A (" Salberg ") effective December 19, 2024. The aggregate fees billed by Salberg for professional services rendered for the audit of our annual financial statements,** and **other required filings with the SEC for the year ended December 31, 2024 totaled** $ 0. 05 million ~~, respectively.~~ The above amounts include interim procedures and audit fees, as well as attendance at audit committee meetings. Audit- Related Fees. The aggregate fees billed by Cherry Bekaert LLP for audit- related fees for the years ended December 31, **2024 and** 2023 ~~and 2022~~ were $ 0. ~~1~~ **05** million and $ 0. ~~01~~ **03** million, respectively. The fees were provided in consideration of services consisting of review and update procedures associated with registration statements and other SEC filings. Tax Fees. ~~The~~ **There** ~~aggregate~~ **were no** fees billed by **Salberg & Company P. A** ~~Cherry Bekaert LLP for professional services rendered~~ for tax ~~compliance for the years ended December 31, 2023 were $ 0. 02 million. There were no such fees incurred in 2022. The fees were provided in consideration of~~ services ~~consisting of preparation of tax returns and related tax advice~~ . All Other Fees. None The Audit Committee of our board of directors has established its pre- approval policies and procedures, pursuant to which the Audit Committee approved the foregoing audit and non- audit services provided by Cherry Bekaert LLP **and Salberg & Company P. A** in ~~2023~~ **2024** . Consistent with the Audit Committee' s responsibility for engaging our independent auditors, all audit and permitted non- audit services require pre- approval by the Audit Committee. The full Audit Committee approves proposed services and fee estimates for these services. The Audit Committee chairperson has been designated by the Audit Committee to approve any audit- related services arising during the year that were not pre- approved by the Audit Committee. Any non- audit service must be approved by the full Audit Committee. Services approved by the Audit Committee chairperson are communicated to the full Audit Committee at its next regular meeting and the Audit Committee reviews services and fees for the fiscal year at each such meeting. Pursuant to these procedures, the Audit Committee approved the foregoing services provided by Cherry Bekaert LLP **and Salberg & Company P. A** . PART IV Item 15. Exhibits, Financial Statement Schedules. The information called for by this Item is incorporated herein by reference to the Exhibit Index in this Form 10- K. Number Description 3. 1 Third Amended and Restated Articles of Incorporation of MIRA Pharmaceuticals, Inc. (incorporated by reference to Exhibit 3. 1 to Form S- 1 filed July 28, 2023). 3. 2 Amended and Restated Bylaws of MIRA Pharmaceuticals, Inc. (incorporated by reference to Exhibit 3. 3 to Form S- 1 filed July 28, 2023). 4. 1 Common Stock Purchase Warrant, dated April

28, 2023, between MIRA Pharmaceuticals, Inc. and Bay Shore Trust (incorporated by reference to Exhibit 4. 2 to Form S- 1 filed July 28, 2023). 4. 2 Common Stock Purchase Warrant from the Company to MIRALOGX, dated November 15, 2023 (incorporated by reference to Exhibit 10. 2 to the Current Report on Form 8- K filed November 20, 2023). 4. 3 Representative' s Warrant, dated August 7, 2023 (incorporated by reference to Exhibit 4. 1 of the Company' s Current Report on Form 8- K filed August 7, 2023). 4. 4 * Description of Securities of the Registrant 10. 1 Omnibus Incentive Plan, as amended and restated (incorporated by reference to Exhibit 10. 1 to Form S- 1 filed July 28, 2023). 10. 2 Form of Stock Option Award under 2022 Omnibus Incentive Plan (incorporated by reference to Exhibit 10. 2 to Form S- 1 filed July 28, 2023). 10. 3 Form of Indemnification Agreement (incorporated by reference to Exhibit 10. 3 to Form S- 1 filed July 28, 2023). 10. 4 Confirmatory Patent Assignment and Royalty Agreement, dated November 1, 2021, between SRQ Patent Holdings II, LLC and MIRA Pharmaceuticals, Inc. (incorporated by reference to Exhibit 10. 4 to Form S- 1 filed July 28, 2023). 10. 5 Amended and Restated Limited License Agreement, dated June 27, 2022, between MIRA Pharmaceuticals, Inc. and MyMD Pharmaceuticals, Inc. (incorporated by reference to Exhibit 10. 5 to Form S- 1 filed July 28, 2023). 10. 6 Amendment No. 1, dated April 20, 2023, to Amended and Restated Limited License Agreement between MIRA Pharmaceuticals, Inc. and MyMD Pharmaceuticals, Inc. (incorporated by reference to Exhibit 10. 6 to Form S- 1 filed July 28, 2023). 10. 7 Employment Agreement, dated April 28, 2023, between MIRA Pharmaceuticals, Inc. and Erez Aminov (incorporated by reference to Exhibit 10. 7 to Form S- 1 filed July 28, 2023). 10. 8 Amendment to Employment Agreement, August 28, 2023, between MIRA Pharmaceuticals, Inc. and Erez Aminov (incorporated by reference to Exhibit 10. 1 to the Current Report on Form 8- K filed August 31, 2023). 10. 9 Employment Agreement, dated April 28, 2023, between MIRA Pharmaceuticals, Inc. and Michelle Yanez (incorporated by reference to Exhibit 10. 8 to Form S- 1 filed July 28, 2023). 10. 10 ~~Employment Agreement, dated April 28, 2023 between MIRA Pharmaceuticals, Inc. and Chris Chapman (incorporated by reference to Exhibit 10. 9 to Form S- 1 filed July 28, 2023). 10. 11 Amendment to Employment Agreement, dated August 28, 2023, between MIRA Pharmaceuticals and Dr. Chris Chapman (incorporated by reference to Exhibit 10. 2 to the Current Report on Form 8- K filed August 31, 2023). 10. 12 Amendment to Employment Agreement, dated October 13, 2023, between MIRA Pharmaceuticals and Dr. Chris Chapman. 10. 13~~ Promissory Note and Loan Agreement, dated April 28, 2023, between MIRA Pharmaceuticals, Inc. and Bay Shore Trust (incorporated by reference to Exhibit 10. 10 to Form S- 1 filed July 28, 2023). 10. ~~14~~ **11** Registration Rights Agreement, dated April 28, 2023, between MIRA Pharmaceuticals, Inc. and Bay Shore Trust (incorporated by reference to Exhibit 10. 11 to Form S- 1 filed July 28, 2023). 10. ~~15~~ **12** Agreement for Shared Lease Costs, dated April 1, 2023, between MIRA Pharmaceuticals, Inc., Telomir Pharmaceuticals, Inc., and MIRALOGX LLC (incorporated by reference to Exhibit 10. 12 to Form S- 1 filed July 28, 2023). 10. ~~16 Master Collaboration Agreement, dated November 1, 2021, between MIRA Pharmaceuticals, Inc. and The Johns Hopkins University (incorporated by reference to Exhibit 10.~~ 13 ~~to Form S- 1 filed July 28, 2023). 10. 17 Conversion Agreement, dated July 20, 2023, between MIRA Pharmaceuticals, Inc. and the Bay Shore Trust (incorporated by reference to Exhibit 10. 14 to Form S- 1 filed July 28, 2023). 10. 18~~ Exclusive License Agreement, by and between the Company and MIRALOGX, dated as of November 30, 2023 (incorporated by reference to Exhibit 10. 1 to the Current Report on Form 8- K filed November 20, 2023). 10. ~~19~~ **14** Promissory Note and Loan Agreement, by and between the Company and MIRALOGX, dated as of November 15, 2023 (incorporated by reference to Exhibit 10. 3 to the Current Report on Form 8- K filed November 20, 2023 **). 10. 15 Amended and Restated Employment Agreement, dated June 2, 2024, by and between MIRA Pharmaceuticals, Inc. and Michelle Yanez (incorporated by reference to Exhibit 10. 1 to the Current Report on Form 8- K filed June 28, 2024). 10. 16 At The Market Agreement, dated August 12, 2024, by and between MIRA Pharmaceuticals, Inc. and Rodman & Renshaw LLC (incorporated by reference to Exhibit 1. 2 of the Company' s Form S- 3 filed on August 12, 2024). 10. 17 Amendment to Employment Agreement, dated May 28, 2024, between MIRA Pharmaceuticals and Erez Aminov (incorporated by reference to Exhibit 10. 10 of the Company' s Form 10- Q filed on August 13, 2024**). 14. 1 Code of Business Conduct and Ethics (incorporated by reference to Exhibit 14. 1 to Form S- 1 filed July 28, 2023). 19. 1 Insider Trading Policy (incorporated by reference to Exhibit 99. 5 to Form S- 1 filed July 28, 2023). 21. 1 List of Subsidiaries of Registrant (incorporated by reference to Exhibit 21. 1 to Form S- 1 filed July 28, 2023). ~~31~~ **23. 1 Consent of Cherry Bekaert LLP31** . 1 * Certification of the Chief Executive Officer pursuant to Rule 13a- 14 (a) / 15d- 14 (a) under the Securities Exchange Act of 1934, as adopted pursuant to Section 302 of the Sarbanes- Oxley Act of 2002 31. 2 * Certification of the Interim Chief Financial Officer pursuant to Rule 13a- 14 (a) / 15d- 14 (a) under the Securities Exchange Act of 1934, as adopted pursuant to Section 302 of the Sarbanes- Oxley Act of 2002 32. 1 * * # Certification of the Chief Executive Officer pursuant to 18 U. S. C. 1350, as adopted pursuant to Section 906 of the Sarbanes- Oxley Act of 2002 32. 2 * * # Certification of the Interim Chief Financial Officer pursuant to 18 U. S. C. 1350, as adopted pursuant to Section 906 of the Sarbanes- Oxley Act of 2002 ~~97. 1 * Policy Relating to Recovery of Erroneously Awarded Compensation~~ 99. 1 Audit Committee Charter (incorporated by reference to Exhibit 99. 1 to Form S- 1 filed July 28, 2023). 99. 2 Nominating and Corporate Governance Committee Charter (incorporated by reference to Exhibit 99. 2 to Form S- 1 filed July 28, 2023). 99. 3 Compensation Committee Charter (incorporated by reference to Exhibit 99. 3 to Form S- 1 filed July 28, 2023). 99. 4 Corporate Governance Guidelines (incorporated by reference to Exhibit 99. 4 to Form S- 1 filed July 28, 2023). 99. 5 Related Person Transaction Policy and Procedures (incorporated by reference to Exhibit 99. 6 to Form S- 1 filed July 28, 2023). 101. INS Inline XBRL Instance Document 101. SCH Inline XBRL Taxonomy Extension Schema Document 101. CAL Inline XBRL Taxonomy Extension Calculation Linkbase Document 101. DEF Inline XBRL Taxonomy Extension Definition Linkbase Document 101. LAB Inline XBRL Taxonomy Extension Label Linkbase Document 101. PRE Inline XBRL Taxonomy Extension Presentation Linkbase Document Cover Page Interactive Data File (embedded within the Inline XBRL document) Denotes management contract or compensatory plan or arrangement. * Filed herewith * * Furnished herewith # A signed original of this written statement required by Section 906 has been provided to the Company and will be retained by the Company and furnished to the Securities and Exchange Commission or its staff upon request. Item 16. Form 10- K Summary None. MIRA PHARMACEUTICALS,

INC. INDEX TO FINANCIAL STATEMENTSReport of Independent Registered Public Accounting Firm **(PCAOB Firm ID 106)** F- 2 ~~Consolidated~~ **Report of Independent Registered Public Accounting Firm (PCAOB Firm ID 42) F- 3** Balance Sheets as of December 31, **2024 and** 2023 ~~and 2022~~ F- **4** ~~3 Consolidated~~ Statements of Operations for the years ended December 31, **2024 and** 2023 ~~and 2022~~ F- **5** ~~4 Consolidated~~ Statements of **Changes in** Stockholders' Equity for the years ended December 31, **2024 and** 2023 ~~and 2022~~ F- **6** ~~5 Consolidated~~ Statements of Cash Flows for the years ended December 31, **2024 and** 2023 ~~and 2022 F- 6 Supplemental Cash Flow Information for the years ended December 31, 2023 and 2022~~ F- 7 Notes to Consolidated Financial Statements F- ~~8Report~~ **9Report** of Independent Registered Public Accounting Firm To the **Stockholders and the** Board of Directors ~~and Stockholders~~ **of: Mira Pharmaceuticals, Inc.** Opinion on the Financial Statements We have audited the accompanying balance ~~sheets~~ **sheet** of ~~MIRA~~ **Mira** Pharmaceuticals, Inc. (the " Company ") as of December 31, ~~2023~~ **2024** ~~and 2022~~, ~~and~~ the related statements of operations, **changes in** stockholders' equity ~~(deficit)~~ and cash flows for the ~~years~~ **year** then ended, and the related notes (collectively referred to as the " financial statements "). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of December 31, ~~2023~~ **2024** ~~and 2022~~, and the results of its operations and its cash flows for the ~~years~~ **year** then ended, in conformity with accounting principles generally accepted in the United States of America **. The financial statements of the Company as of and for the year ended December 31, 2023, before the retrospective application of the expanded segment disclosure requirements described in Note 9, were audited by other auditors whose report, dated April 1, 2024, expressed an unqualified opinion, with an explanatory paragraph expressing substantial doubt regarding the Company' s ability to continue as a going concern, on those statements. We also audited the expanded segments disclosures described in Note 9, related to 2023 and the retrospective application of the expanded segment disclosure requirements described therein. We were not engaged to audit, review, or apply any procedures to the 2023 financial statements of the Company other than with respect to the expanded segment disclosures referred to above and, accordingly, we do not express an opinion or any other form of assurance on the 2023 financial statements taken as a whole** . Going Concern The accompanying financial statements have been prepared assuming **that** the Company will ~~be able to~~ continue as a going concern. As discussed in Note 2 to the financial statements, the Company has ~~incurred recurring~~ **no revenues, raised approximately $ 3. 6 million, used approximately $ 5. 6 million of cash in operations and had a** net ~~losses~~ -- **loss** ~~and negative operating cash flows since inception~~ **of $ 7. 9 million during the year ended December 31, 2024** . These **matters** ~~factors, among others,~~ raise substantial doubt about the Company' s ability to continue as a going concern. Management' s ~~plans~~ **Plans** in regard to these matters are also described in Note 2. The financial statements do not include any adjustments that might result from the outcome of this uncertainty. Basis for Opinion These financial statements are the responsibility of the Company' s management. Our responsibility is to express an opinion on the Company' s financial statements based on our ~~audits~~ **audit** . 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~~ **audit** in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. The Company is not required to have, nor were we engaged to perform, an audit of ~~its~~ internal control over financial reporting. As part of our ~~audits~~ **audit** , we are required to obtain an understanding of internal control over financial reporting ~~,~~ but not for the purpose of expressing an opinion on the effectiveness of the Company' s internal control over financial reporting. Accordingly, we express no such opinion. Our ~~audits~~ **audit** included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our ~~audits~~ **audit** also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our ~~audits~~ **audit** ~~provide~~ **provides** a reasonable basis for our opinion **. / s / Salberg & Company, P. A. SALBERG & COMPANY, P. A** . We have served as the Company' s auditor since **2024. Boca Raton, Florida 2295 NW Corporate Blvd., Suite 240 ● Boca Raton, FL 33431- 7326 Phone: (561) 995- 8270 ● Toll Free: (866) CPA- 8500 ● Fax: (561) 995- 1920 www. salbergco. com ● info @ salbergco. com Member National Association of Certified Valuation Analysts ● Registered with the PCAOB Member CPAConnect with Affiliated Offices Worldwide ● Member AICPA Center for Audit Quality To the Board of Directors and Stockholders Tampa, Florida Opinion on the Financial Statements We have audited the accompanying balance sheet of MIRA Pharmaceuticals, Inc. (the " Company ") as of December 31, 2023, and the related statements of operations, stockholders' equity (deficit) and cash flows for the year then ended, and the related notes, but for the disclosures related to segment reporting described in Note 9 (collectively referred to as the " financial statements "). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2023, and the results of its operations and its cash flows for the year then ended, in conformity with accounting principles generally accepted in the United States of America. We were not engaged to audit, review, or apply any procedures to the disclosures to retroactively apply the implementation of ASU 2023- 07 described in Note 9 and, accordingly, we do not express an opinion or any other form of assurance with regard to Note 9 and the implementation of ASU 2023- 07. The disclosures related thereto for 2023 were audited by other auditors. Going Concern The accompanying financial statements have been prepared assuming the Company will be able to continue as a going concern. As discussed in Note 2 to the financial statements, the Company has incurred recurring net losses and negative operating cash flows since inception. These factors, among others, raise substantial doubt about the Company' s ability to continue as a going concern. Management' s plans in regard to these matters are also described in Note 2. The financial statements do not include any adjustments that might result from the outcome of this uncertainty. Basis for Opinion These financial statements are the responsibility of the**

Company' s management. Our responsibility is to express an opinion on the Company' s financial statements based on our audit. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (" PCAOB ") and are required to be independent with respect to the Company in accordance with the U. S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB. We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audit, we are required to obtain an understanding of internal control over financial reporting, but not for the purpose of expressing an opinion on the effectiveness of the Company' s internal control over financial reporting. Accordingly, we express no such opinion. Our audit included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audit also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audit provides a reasonable basis for our opinion. We served as the Company' s auditor from 2022 **to 2024** . / s / Cherry Bekaert LLP April 1, 2024 BALANCE SHEETS **2024** 2023 ~~2022~~ December 31, **2024** 2023 ~~2022~~ ASSETS Current assets: Cash $ **2, 832, 931 $** 4, 602, 566 ~~$ 350, 978 Deferred offering costs- 143, 427~~ Other receivables **-** 11, 862 ~~–~~ Prepaid expenses **54, 729** 243, 802 ~~–~~ Total current assets **2, 887, 660** 4, 858, 230 ~~494, 405~~ Operating lease, right of use assets **-** 5, 061 ~~164, 910~~ Related party ~~operating lease, right of use assets- 198, 759 Operating lease, right of use assets- 198, 759 Related party accounts~~ receivable **35, 439** 69, 152 ~~–~~ Total assets $ **2, 923, 099 $** 4, 932, 443 ~~$ 858, 074~~ LIABILITIES AND STOCKHOLDERS' EQUITY ~~(DEFICIT)~~ Current liabilities: Trade accounts payable and accrued liabilities $ **723, 349 $** 538, 564 ~~$ 811, 738 Related party accounts payable- 116, 350 Related party line of credit- 133, 062~~ Related party accrued interest **-** 14, 472 ~~34, 987~~ Current portion of operating lease liabilities **-** 5, 061 ~~75, 143 Related party current portion of operating lease liabilities- 198, 759 Current portion of operating lease liabilities- 198, 759~~ Total current liabilities **723, 349** 558, 097 ~~1, 370, 039 Non- current operating lease liabilities- 84, 267~~ Total liabilities **723, 349** 558, 097 ~~1, 454, 306~~ Stockholders' ~~Deficit~~ **Equity** Preferred Stock, $ 0. 0001 par value, 10, 000, 000 shares authorized and none issued or outstanding.-- Common Stock, $ 0. 0001 par value; 100, 000, 000 shares authorized, **16, 560, 852 and** 14, 780, 885 ~~and 13, 313, 000~~ shares issued and outstanding at December 31, ~~2023~~ **2024** and December 31, ~~2022~~ **2023** , respectively. 1, **656 1,** 478 ~~6, 657~~ Additional paid- in capital **31, 335, 815** 25, 657, 930 ~~8, 699, 830~~ Accumulated deficit (**29, 137,** ~~21~~ **721** ~~, 285, 062~~) (~~9~~ **21** , ~~302~~ **285** , ~~719~~ **062**) Total stockholders' equity ~~(deficit)~~ **2, 199, 750** 4, 374, 346 ~~(596, 232)~~ Total liabilities and stockholders' equity ~~(deficit)~~ **$ 2, 923, 099** $ 4, 932, 443 ~~$ 858, 074~~ See notes to consolidated financial statements STATEMENTS OF OPERATIONS **2024** 2023 ~~2022~~ Year Ended December 31, **2024** 2023 ~~2022~~ Revenues $- $- Operating costs: General and administrative expenses **4, 712, 753** 6, 499, 537 ~~2, 992, 125~~ Related party travel costs **-** 453, 550 ~~1, 704, 350~~ Research and development expenses **3, 305, 575** 1, 572, 962 ~~2, 351, 465~~ Total operating costs 8, **018, 328 8,** 526, 049 ~~7, 047, 940~~ Interest **income (** expense **)** , net **165, 669** (3, 456, 294 ~~) (10, 250~~) Net loss attributable to common stockholders $ (~~11~~ **7** , ~~982~~ **852** , ~~343~~ **659**) $ (~~7~~ **11** , ~~058~~ **982** , ~~190~~ **343**) Basic and diluted loss per share $ (0. ~~64~~ **51**) $ (0. ~~40~~ **85**) **Basic** ~~Weighted~~ **weighted** average common stock shares outstanding ~~18, 566, 158~~ **15** ~~17~~ , ~~566~~ **444** , ~~533~~ **149 13, 924, 619** STATEMENTS OF **CHANGES IN** STOCKHOLDERS' EQUITY **(DEFICIT)** Shares Amount Capital ~~Receivable~~ Deficit ~~Equity~~ **(Deficit)** Common Stock Additional Paid- In ~~Stock Subscription~~ Accumulated Total Stockholders' **Equity** Shares Amount Capital ~~Receivable~~ Deficit ~~Equity~~ **(Deficit)** Balances, January 1, ~~2022~~ **2023** ~~12, 673, 800 $ 6, 337 $ 4, 499, 550 $- $ (2, 244, 529) $ 2, 261, 358 Sale of common stock 639, 200 320 2, 903, 680-- 2, 904, 000 Stock- based compensation-- 1, 296, 600-- 1, 296, 600 Net loss---- (7, 058, 190) (7, 058, 190) Balances, December 31, 2022~~ 13, 313, 000 $ ~~6~~ **1** , ~~657~~ **331** $ 8, ~~699~~ **705** , **156** ~~830 $-~~ $ (9, 302, 719) $ (596, 232) ~~Common Stock Additional Paid- In Stock Subscription Accumulated Total Stockholders' Shares Amount Capital Receivable Deficit Deficit Balances, January 1, 2023 13, 313, 000 $ 6, 657 $ 8, 699, 830 $- $ (9, 302, 719) $ (596, 232)~~ Stock- based compensation- **-** ~~(5, 326)~~ 2, ~~556~~ **550** , **946** ~~272--~~ 2, 550, 946 Issuance of common stock at IPO, net 1, 275, 000 128 7, 704, 152- ~~–~~ 7, 704, 279 Issuance of common stock conversion of debt 157, 170 16 1, 100, 080- ~~–~~ 1, 100, 096 Issuance of common stock 35, 715 4 249, 996- ~~–~~ 250, 000 Issuance of ~~Warrants~~ **warrants** -- 5, 347, 600 ~~–~~ 5, 347, 600 Net loss ~~–~~ --- (11, 982, 343) (11, 982, 343) Balances, December 31, 2023 14, 780, 885 **1, 478 25, 657, 930 (21, 285, 062) 4, 374, 346 Balance 14, 780, 885 1, 478 25, 657, 930 (21, 285, 062) 4, 374, 346 Issuance of common stock- ATM, net of offering costs 1, 779, 967 178 3, 608, 377- 3, 608, 555 Payment of short swing disgorgement by Bay Shore Trust-- 148, 703- 148, 703 Stock- based compensation-- 1, 920, 805- 1, 920, 805 Net loss--- (7, 852, 659) (7, 852, 659) Balances, December 31, 2024 $ 16, 560, 852** $ 1, ~~478~~ **656** $ ~~25~~ **31** , ~~657~~ **335** , **815** ~~930 $-~~ $ (**29, 137,** ~~21~~ **721** ~~, 285, 062~~) $ ~~4~~ **2** , ~~374~~ **199** , ~~346~~ **750 Balance $ 16, 560, 852 $ 1, 656 $ 31, 335, 815 $ (29, 137, 721) $ 2, 199, 750** STATEMENTS OF CASH FLOWS **2024** 2023 ~~2022~~ Year Ended December 31, **2024** 2023 ~~2022~~ Cash flows from ~~Operating~~ **operating** activities Net loss $ (~~11~~ **7** , ~~982~~ **852** , ~~343~~ **659**) $ (~~7~~ **11** , ~~058~~ **982** , ~~190~~ **343**) Adjustments to reconcile net loss to net cash from operations **Non- cash** ~~Interest~~ **interest** expense **-** 3, 456, 294 ~~10, 250 Amortization of debt issuance costs 732, 292--~~ Stock- based compensation expense **1, 920, 805** 2, 550, 946 **Non- cash warrant expense-** 1, ~~296~~ **832** , ~~600~~ **388** Non- cash investor relations fees **-** 250, 000 ~~–~~ Change in operating assets and liabilities: Right of use lease, net **-** 5, 500 **Prepaid expenses 189, 073 (243, 802) Other receivables 11, 862 (11, 862) Trade accounts payable and accrued expenses 184, 785 (389, 524) Related party accrued interest (14, 472)- Net cash used in operating activities $** (5, ~~500~~ **560, 606**) **$** ~~Accounts payable and accrued expenses (389, 524) 152, 081 Prepaid expenses (243, 802)- Accounts receivable (11, 862)- Related party line of credit 1, 100, 096- Net cash flows used in operating activities~~ (4, 532, 403 ~~) (5, 604, 759~~) Financing activities: **Deferred offering costs- 143, 427 Repayments under related party line of credit- (1, 142, 483)** Advances **from** (to) ~~from~~ affiliates **33, 713** (69, 152) ~~445, 612~~ Advances received from related party line of credit **-** 2, 147,

920 **Bayshore Trust short** - **swing disgorgement 148** ~~Deferred offering costs 143~~ , **703-** ~~427 (43, 427) Repayments under related party line of credit (1, 142, 483) (160, 000)~~ Proceeds from sale of common stock, less offering costs **3, 608, 555** 7, 704, 279 ~~2, 904, 000~~ Net cash ~~flows~~ provided by financing activities **$ 3, 790, 971 $** 8, 783, 991 ~~3, 146, 185~~ Net ~~change~~ **increase (decrease)** in cash **(1, 769, 635)** 4, 251, 588 ~~(~~ **Cash, beginning of year 4, 602, 566 350, 978 Cash, end of year $** 2, ~~458~~ **832** , **931** ~~574) Cash, beginning of year 350, 978 2, 809, 552 Cash, end of period~~ $ 4, 602, 566 ~~$ 350, 978~~ **Supplemental disclosure of cash flow information** Cash paid for interest **$** - **$** - **Cash paid for income taxes $- $- Supplemental schedule of non- cash financing activities: Deferred offering costs charged to additional paid- in capital $ 32, 500 $ 426, 345** SUPPLEMENTAL CASH FLOW INFORMATION Non- cash ~~Financing~~ **financing** and ~~Investing~~ **investing** ~~Activities~~ **activities** : **The Company recorded deferred offering costs of $ 32, 500 during the year ended December 31, 2024 in association with the At the Market Agreement and charged these costs to additional paid in capital.** The Company recorded the fair value of a total of 1, 000, 000 shares of common stock issued to Bay Shore Trust during the year ended December 31, 2023 which totaled approximately $ 3. 5 million to deferred finance costs. The Company had amortized approximately $ 0. 7 million of deferred offering costs as non- cash amortization of debt issuances costs in accordance with Generally Accepted Accounting Principles **(" GAAP ")** . As of December 31, 2023, this agreement was paid in full. This resulted in a write- off of unamortized deferred financing costs, in the amount of $ 2. 8 million which was recorded as interest expense. **The Company recorded the fair value of a total of 157, 170 shares of common stock issued to Bay Shore Trust during the year ended December 31, 2023 totaling approximately $ 1. 1 million to record Bay Shore Trust conversions of a line of credit and interest to shares of common stock. The Company recorded the fair value of a total of 35, 715 shares of common stock issued to the MZ Group during the year ended December 31, 2023 totaling $ 0. 25 million in lieu of fees for investor relation services.** On November 15, 2023, the Company entered a warrant agreement and recorded the fair value of a total of 700, 000 shares of common stock issued to MIRALOGX, LLC which totaled $ 1, 832, 600 to ~~interest~~ expense. **F- 8** ~~The Company recorded the fair value of a total of 157, 170 shares of common stock issued to Bay Shore Trust during the year ended December 31, 2023 totaling approximately $ 1. 1 million to record Bay Shore Trust conversions of a line of credit and interest to shares of common stock. The Company recorded the fair value of a total of 35, 715 shares of common stock issued to the MZ Group during the year ended December 31, 2023 totaling $ 0. 25 million in lieu of fees for investor relation services. The Company recorded a right of use asset and a corresponding liability in the amount of $ 0. 2 million in exchange for an operating lease liability as a result of the adoption of Accounting Standards Codification, (" ASC "), Topic 842, Leases, on January 1, 2022.~~ NOTES TO THE FINANCIAL STATEMENTS **DECEMBER 31, 2024 AND 2023** Note 1. Description of business and summary of significant accounting policies: ~~MIRA Pharmaceuticals, Inc. (" MIRA " or the " Company " and formerly known as MIRA1a Therapeuties, Inc.) is a pre- clinical- stage pharmaceutical development company with two neuroscience programs targeting a broad range of neurologic and neuropsychiatric disorders. The Company has an exclusive licensing agreement for Ketamir- 2, a unique, patent pending novel oral ketamine analog under investigation to potentially deliver ultra- rapid antidepressant effects, providing hope for individuals battling treatment- resistant depression (TRD) and major depressive disorder with suicidal ideation (MDSI). The Company' s novel oral pharmaceutical marijuana, MIRA- 55, is currently under investigation for treating adult patients suffering from anxiety and cognitive decline, often associated with early- stage dementia. MIRA- 55, if approved by the FDA, could mark a significant advancement in addressing various neuropsychiatric, inflammatory, and neurologic diseases and disorders. The U. S. Drug Enforcement Administration (DEA)' s scientific review of Ketamir- 2 concluded that it would not be considered a controlled substance or listed chemical under the Controlled Substances Act (CSA) and its governing regulations. Additionally, we have submitted the required paperwork for MIRA- 55 to be evaluated by the DEA. The Company was organized as a Florida corporation in September 2020 and commenced substantive operations in late 2020, at which time the Company commenced its pharmaceutical development program. The accounting and reporting policies of the Company conform to accounting principles generally accepted in the United States of America (" GAAP ").~~ As used herein, the Company' s Common Stock, par value $ 0. 0001 per share, is referred to as the " Common Stock " and the Company' s preferred stock, par value $ 0. 0001 per share, is referred to as the " Preferred Stock " ~~. Operating updates Additional testing is required to confirm our preliminary beliefs. However, based on our discoveries to date, the Company has decided to advance MIRA- 55 as our lead compound for our oral pharmaceutical marijuana drug candidate while still retaining our rights to MIRA1a. As such, we do not intend to move MIRA1a forward as of the date of this Report~~ . Initial public offering On August 7, 2023, the Company closed its initial public offering consisting of 1, 275, 000 shares at a price of $ 7. 00 per share for approximately $ 8. 9 million in gross proceeds. After deducting the underwriting commission and other deferred offering expenses totaling $ 1. 2 million, the net proceeds to the Company were $ 7. 7 million (the " IPO "). The shares were offered and sold pursuant to the Company' s Registration Statement on Form S- 1, as amended (File No. 333- 273024), originally filed with the Securities and Exchange Commission (the " SEC ") on June 29, 2023 (the " Registration Statement ") and the final quarterly report filed with the Commission pursuant to Rule 424 (b) (4) of the Securities Act of 1933, as amended. The Registration Statement was declared effective by the Commission on August 2, 2023. The common stock began trading on The Nasdaq Capital Market on August 3, 2023 under the symbol " MIRA ". The closing of the IPO occurred on August 7, 2023. **(See Note 8 " Common Stock ").** As of the completion of the IPO, among other things, certain of the Company' s then- outstanding convertible debt was converted into shares of common stock. See Note ~~5~~ **4** for more information. **Basis of Presentation Certain amounts in the prior year financial statements have been reclassified to conform to the current year presentation. There is no impact to total cash flows from operations as a result of this reclassification. Specifically, the Company reclassed certain non- cash expenses related to related party line of credit included in " Change in operating assets and liabilities " to " Adjustments to reconcile net loss to net cash from operations "** Revenue recognition The Company currently has no source of revenue. Miscellaneous income, including interest, is recognized when earned by the Company. **Income taxes** The Company ~~is~~ **accounts for income** ~~taxed~~ **taxes** ~~as a C corporation.~~ **pursuant to the provision of Accounting Standards Codification (" ASC ") 740-**

10, " Accounting for Income Taxes " (" ASC 740- 10 "), which requires, among other things, an asset and liability approach to calculating ~~Deferred~~ **deferred income taxes. The asset and liability approach requires the recognition of deferred** tax assets and liabilities ~~are recognized~~ for the **expected** future tax consequences ~~attributable to~~ **of temporary** differences between the ~~financial statement~~ carrying ~~amount~~ **amounts** ~~of existing assets~~ and ~~liabilities and their~~ -- **the** ~~respective~~ tax bases **of** ~~. Deferred tax~~ assets ~~are recognized for temporary differences that will result in deductible amounts in future years~~ and **liabilities** ~~for loss carryovers~~. A valuation allowance is ~~recognized regarding~~ **provided to offset any net** deferred tax assets **for which management believes** ~~, if any, if~~ it is more likely than not that ~~some portion of~~ the **net** deferred ~~tax~~ asset will not be realized. **MIRA PHARMACEUTICALS, INC. The Company follows the provision of ASC 740- 10 related to Accounting for Uncertain Income Tax Positions. When tax returns are filed, there may be uncertainty about the merits of positions taken or the amount of the position that would be ultimately sustained. In accordance with the guidance of ASC 740- 10, the benefit of a tax position is recognized in the consolidated financial statements in the period during which, based on all available evidence, management believes it is more likely than not that the position will be sustained upon examination, including the resolution of appeals or litigation processes, if any. Tax positions taken are not offset or aggregated with other positions. Tax positions that meet the more likely than not recognition threshold are measured at the largest amount of tax benefit that is more than 50 percent likely of being realized upon settlement with the applicable taxing authority. The portion of the benefit associated with tax positions taken that exceed the amount measured as described above should be reflected as a liability for uncertain tax benefits in the accompanying balance sheet along with any associated interest and penalties that would be payable to the taxing authorities upon examination. The Company believes its tax positions are all more likely than not to be upheld upon examination. As such, the Company has not recorded a liability for uncertain tax benefits.** Research and development costs are expensed in the period in which they are incurred and include the expenses paid to third parties, such as contract research organizations and consultants, who conduct research and development activities on behalf of the Company. Patent- related costs, including registration costs, documentation costs and other legal fees associated with the application, are expensed in the period in which they are incurred. ~~F- 9~~ General and administrative expenses are primarily comprised of personnel costs, marketing expenses, amortization, insurance expenses, professional services fees, travel and office expenses, and stock- based compensation ~~. Advertising expenses~~ The Company ~~expenses advertising costs when incurred. Advertising expense for the years ended December 31, 2023 and 2022 is as~~ **has** ~~follows: Schedule of Advertising Expenses December 31, 2023 December 31, 2022 Advertising expenses $ 102, 000 $- The Company accounts~~ **accounted** for leases under the provisions of FASB ASC Topic 842, " Leases ", which requires the Company to recognize right- to- use (ROU) assets and lease liabilities for operating leases on the balance sheet. **Use of estimates** The preparation of financial statements in accordance with **GAAP** ~~generally accepted accounting principles in the United States of America~~ requires the Company' s management to make estimates and assumptions that affect the reported amounts of assets and liabilities, and the disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of expenses during the reporting period. Actual results may differ from such estimates and such differences could be material. **Significant estimates during the reporting periods include stock- based compensation and the deferred tax asset valuation allowance. The Company considers all highly liquid debt instruments and other short- term investments with maturities of three months or less, when purchased, to be cash equivalents.** The Company maintains cash **and cash equivalent** balances ~~with~~ **at two** financial institutions that ~~management believes~~ are ~~of high credit quality~~ **insured by the Federal Deposit Insurance Corporation (" FDIC ")** . The Company' s ~~cash~~ account at **these institutions are** ~~times may exceed federally~~ insured **by the FDIC up to $ 250, 000. On December 31, 2024, the Company had cash in excess of FDIC** limits **of approximately $ 2** . ~~The~~ **3 million. To reduce its risk associated with the failure of such financial institution, the** Company ~~has not experienced any losses~~ **evaluates at least annually the rating of the financial institution** in **which** ~~such accounts. The Company believes~~ it **holds deposits** ~~is not exposed to any significant credit risk from its cash account~~ . The Company accounts for stock- based compensation under the provisions of FASB ASC 718, " Compensation- Stock Compensation ", which requires the measurement and recognition of compensation expense for all stock- based awards made to employees, directors and consultants based on estimated fair values on the grant date. The Company estimates the fair value of stock- based awards on the date of grant using the Black- Scholes model. The value of the portion of the award that is ultimately expected to vest is recognized as expense over the requisite service periods using the straight- line method. The Company has elected to account for forfeiture of stock- based awards as they occur. **F- 10 Operating** ~~Segment~~ **Segments Operating segments are identified as components of an enterprise for which separate discrete financial** information ~~ASC Topic 280, " Disclosures about Segments of an Enterprise and Related Information, " established standards for the way that public business enterprises report information about operating segments in annual financial statements and requires those enterprises to report selected information about operating segments in interim financial reports issued to stockholders. Management has determined that the Company operates in one business segment, which~~ is ~~the research and development of neuroscience drug candidates. F- 10 Recent accounting pronouncements not yet adopted In December 2023, the FASB issued Accounting Standards Update No. 2023- 09, " Income Taxes (Topic 740): Improvements to Income Tax Disclosures " (" ASU 2023- 09 "), which modifies the rules on income tax disclosures to require entities to disclose (1) specific categories in the rate reconciliation, (2) the income or loss from continuing operations before income tax expense or benefit (separated between domestic and foreign) and (3) income tax expense or benefit from continuing operations (separated by federal, state and foreign). ASU 2023- 09 also requires entities to disclose their income tax payments to international, federal, state and local jurisdictions, among other changes. The guidance is effective for annual periods beginning after December 15, 2024. Early adoption is permitted for annual financial statements that have not yet been issued or made~~ available for ~~issuance. ASU 2023- 09 should be applied on a prospective basis, but retrospective application is permitted. The Company is currently evaluating~~ - **evaluation by** ~~the potential impact of adopting this new guidance on its financial statements and related disclosures.~~

~~Management has considered all other recent accounting pronouncements that are issued, but not effective, and it does not believe that they will have a significant impact on~~ the Company' s **chief** ~~results of operations~~ **operating decision maker** ~~or financial position. Change in accounting principle In February 2016, the FASB issued ASU 2016- 02, Leases~~ (~~Topic 842~~ **" CODM "**) ~~,~~ ~~which supersedes existing guidance for accounting for leases under Topic 840, Leases. The FASB also subsequently issued additional ASUs which amend~~ -- **and relied upon when making decisions regarding resource allocation** and **assessing performance** ~~clarify Topic 842~~ . **When evaluating** ~~The most significant change in the new leasing guidance is the requirement to recognize right- to- use (ROU) assets and lease liabilities for operating leases on the balance sheet. The Company adopted these ASUs effective January 1, 2022 using the modified retrospective approach. As a result of adopting these ASUs, the Company recorded ROU assets and lease liabilities of approximately $ 0. 2 million and $ 0. 2 million, respectively. Adoption of the new standard did not materially impact~~ the Company' s ~~net income~~ **financial performance, the CODM reviews total revenues, total expenses,** and ~~had no impact~~ **expenses by functional classification; using this information to make decisions** on ~~cash flows~~ **a company- wide basis** . Fair value of financial instruments The Company measures the fair value of financial instruments in accordance with GAAP which defines fair value, establishes a framework for measuring fair value, and expands disclosures about fair value measurements. GAAP defines fair value as the exchange price that would be received for an asset or paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date. GAAP also establishes a fair value hierarchy, which requires an entity to maximize the use of observable inputs and minimize the use of unobservable inputs when measuring fair value. The Company considers the carrying amount of deferred offering costs to approximate fair value due to short- term nature of this instrument. GAAP describes three levels of inputs that may be used to measure fair value: Level 1 ~~—-~~ quoted prices in active markets for identical assets or liabilities. Level 2 ~~—-~~ quoted prices for similar assets and liabilities in active markets or inputs that are observable. Level 3 ~~—-~~ inputs that are unobservable (for example cash flow modeling inputs based on assumptions). ~~ContingenciesIn~~ -- **Contingencies In** the normal course of business, the Company may be subject to loss contingencies, such as legal proceedings, amounts arising from contractual arrangements and claims arising out of the Company' s business that cover a wide range of matters, including, among others, government investigations, shareholder lawsuits, and tax matters. In accordance with ASC Topic 450, Accounting for Contingencies, (ASC 450), the Company records accruals for such loss contingencies when it is probable that a liability will be incurred, and the amount of loss can be reasonably estimated. The Company, in accordance with this guidance, does not recognize gain contingencies until realized or realizable. ~~F- 11 Note 2. Liquidity and capital resources: In~~ **Earnings per Share Earnings (loss) per share is computed in** accordance with **ASC Topic 260** ~~Accounting Standards Codification 205- 40~~ , **" Earnings per** ~~Going Concern, the Company has evaluated whether there are~~ **Share " Basic weighted- average number** ~~conditions and events, considered in the aggregate, that raise substantial doubt about the Company' s ability to continue as a going concern within one year after the date the financial statements are issued. As~~ of **shares** ~~December 31, 2023, the Company had cash~~ of **common stock outstanding for** ~~approximately $ 4. 6 million. The Company used approximately $ 4. 5 million of cash in operations during~~ the year ended December 31, **2024 and December 31,** 2023 **include the shares of the Company issued and outstanding during such period, on a weighted average basis. The basic weighted average number of shares of common stock outstanding excludes common stock equivalents such as stock options and warrants, while diluted weighted average number of shares outstanding includes such stock options and warrants. As of December 31, 2024 there were 1, 763, 750 stock warrants and 4, 235, 666 stock options that were not included in the computation of diluted earnings per share, because to do so would have an antidilutive effect. As of December 31, 2023 there was 1, 763, 750 stock warrants and 1, 215, 001 stock options that were not included in the computation of diluted earnings per share, because to do so would have an antidilutive effect. Recent Accounting Pronouncements In November 2023, the Financial Accounting Standards Board (" FASB ") issued Accounting Standards Update (" ASU ") No. 2023- 07, " Improvements to Reportable Segment Disclosures (Topic 280) " which is intended to improve reportable segment disclosure requirements, primarily through incremental disclosures of segment information on an annual and interim basis for all public entities. The ASU expands public entities' segment disclosures by requiring disclosure of significant segment expenses that are regularly provided to the chief operating decision maker and included within each reported measure of segment profit or loss, an amount and description of its composition for other segment items and interim disclosures of a reportable segment' s profit or loss and assets. The ASU is to be applied retrospectively to all prior periods presented in the financial statements and is effective for our Annual Report on Form 10- K for the fiscal year ended December 31, 2024, and interim periods thereafter. The Company adopted this guidance with no material impact on its consolidated financial statements. See Note 9. Recent Accounting Pronouncements Not Yet Adopted In November 2024, the FASB issued ASU 2024- 03, Income Statement — Reporting Comprehensive Income — Expense Disaggregation Disclosures (Subtopic 220- 40), which requires entities to provide more detailed disaggregation of expenses in the income statement, focusing on the nature of the expenses rather than their function. The new disclosures will require entities to separately present expenses for significant line items, including but not limited to, depreciation, amortization, and employee compensation. Entities will also be required to provide a qualitative description of the amounts remaining in relevant expense captions that are not separately disaggregated quantitatively, disclose the total amount of selling expenses and, in annual reporting periods, provide a definition of what constitutes selling expenses. This pronouncement is effective for fiscal years beginning after December 15, 2026, and interim periods within fiscal years beginning after December 15, 2027, with early adoption permitted. The Company does not expect the adoption of this new guidance to have a material impact on the consolidated financial statements. In December 2023, the FASB issued ASU 2023- 09, Income Taxes (Topic 740): Improvements to Income Tax Disclosures. This new standard requires a company to expand its existing income tax disclosures, specifically related to the rate reconciliation and income taxes paid. The standard will be effective beginning in fiscal year 2025, with early adoption permitted. The new**

standard is expected to be applied prospectively, but retrospective application is permitted. We are currently evaluating the impact of ASU 2023- 09 on the consolidated financial statements and related disclosures. The Company does not expect the adoption of this new guidance to have a material impact on the consolidated financial statements. Management has considered all other recent accounting pronouncements that are issued, but not effective, and it does not believe that they will have a significant impact on the Company' s results of operations or financial position. F- 11 Note 2. Going Concern The accompanying financial statements have been prepared assuming the Company will continue as a going concern which contemplates the realization of assets and settlement of liabilities and commitments in the normal course of business. As of December 31, 2024, the Company had cash of approximately $ 2. 8 million, and historically the Company has had no revenues. The Company raised capital of approximately $ 3. 8 million in 2024 and used approximately $ 5. 6 million of cash in operations during the year ended December 31, 2024, had a net loss of $ 7. 9 million in 2024 and had stockholders' equity of approximately $ ~~4~~ **2** . **2** ~~4 million, versus stockholders' deficit of approximately $ 0. 6~~ million at December 31, ~~2022~~ **2024 , versus stockholders' equity of approximately $ 4. 4 million at December 31, 2023.** Historically, the Company has been primarily engaged in developing **Ketamir- 2 and** MIRA- 55. During these activities, the Company sustained substantial losses. The Company' s ability to fund ongoing operations and future clinical trials required for FDA approval is dependent on the Company' s ability to obtain significant additional external funding in the near term. Since inception, the Company **has** financed its operations through ~~the sale of Common Stock, the IPO and~~ related party financings **- see Note 4, and initial public offering – see Note 1** . **The** ~~Additional sources of financing may be sought by the~~ Company **maintains an effective shelf registration statement with the SEC for the issuance of shares of common stock under various types of equity offerings, including the shares of common stock under our ATM equity program (Note 8)** . The Company expects to be able to fund operations through the ~~fourth~~ **third** quarter of ~~2024~~ **2025** , with ~~available borrowings~~ **the cash** on **hand** ~~the loan agreement (Note 4)~~ . ~~Additional financing~~ **However, the Company has the ability to issue common stock under its shelf registration statement to assist in liquidity needs. As of the date of filing this Report, the Company** will ~~be needed by the Company to fund its operations after such date to complete clinical developments and to commercially develop its product candidate. However, there can be no assurance that any fundraising will be achieved on commercially reasonable terms, if at all. The Company expects to~~ continue to generate losses ~~in the foreseeable future. The Company' s liquidity needs will be determined largely by the budgeted operational expenditures incurred in regard to the progression of its product candidates. Management believes that the Company has sufficient resources available to support its development activities~~ and ~~business operations and timely satisfy its obligations as they become due into the fourth quarter of 2024. The Company does not~~ have ~~sufficient~~ **insufficient** cash and cash equivalents ~~as of the date of filing this Annual Report~~ on **hand** ~~Form 10- K~~ to support its operations for at least the 12 months following the date the financial statements are issued. These ~~conditions~~ **factors** raise substantial doubt about the Company' s ability to continue as a going concern **for a period of twelve months from the issuance date of this report. Management cannot provide assurance that the Company will ultimately achieve profitable operations or become cash flow positive or raise additional debt and / or equity capital. The Company is seeking to raise capital** through ~~12 months after~~ **additional debt and / or equity financings to fund our operations in** the ~~date~~ **future. If** the **Company is unable to raise additional capital or secure additional lending in the near future, management expects that the Company will need to curtail its operations. These** financial statements ~~are issued. To alleviate the conditions that raise substantial doubt about the Company' s ability to continue as a going concern, the Company plans to secure additional capital, potentially through a combination of public or private equity offerings and strategic transactions, including potential alliances and drug product collaborations; however, none of these alternatives are committed at this time. There can be no assurance that the Company will be successful in obtaining sufficient funding on terms acceptable to it to fund continuing operations, if at all, identify and enter into any strategic transactions that will provide the capital that it will require or achieve the other strategies to alleviate the conditions that raise substantial doubt about the Company' s ability to continue as a going concern. If none of these alternatives are available, or if available, are not available on satisfactory terms, the Company will not have sufficient cash resources and liquidity to fund its business operations for at least the 12 months following the date the financial statements are issued. The failure to obtain sufficient capital on acceptable terms when needed may require the Company to delay, limit, or eliminate the development of business opportunities and its ability to achieve its business objectives and its competitiveness, and its business, financial condition, and results of operations will be materially adversely affected. In addition, the perception that the Company may not be able to continue as a going concern may cause others to choose not to deal with it due to concerns about its ability to meet its contractual obligations. The accompanying financial statements have been prepared on a going concern basis, which contemplates the realization of assets and satisfaction of liabilities in the normal course of business, and~~ do not include any adjustments ~~relating~~ **related** to **the** recoverability and classification of ~~recorded asset~~ **assets** ~~amounts~~ or the amounts and classification of liabilities that might be necessary should the Company be unable to continue as a going concern. ~~F- 12~~ Note 3 ~~Accounts payable and accrued liabilities: The following table represents the components of accounts payable and accrued liabilities as of: Schedule of Accounts Payable and Accrued Liabilities December 31, 2023 December 31, 2022 Trade accounts payable $ 538, 564 $ 789, 204 Accrued other- 22, 534 Accounts payable and accrued liabilities $ 538, 564 $ 811, 738 Note 4~~ . License agreement, related party: On November 15, 2023, the Company and MIRALOGX, LLC, a Florida limited liability company (" MIRALOGX "), entered into an exclusive license agreement (the " License Agreement ") to develop and commercialize a drug product containing 2- (2- chlorophenyl)- 2- (methylamino) cyclopentan- 1- one (sometimes referred to by the Parties as " M209 " or " KETAMIR- 2 ") (" the Product ") as an active agent in North America. (the " Territory "). The exclusive license in the License Agreement includes the right of the Company to sublicense the licensed intellectual property. **The Company and MIRALOGX have the same founder, who is also our largest shareholder and thus MIRALOGX is considered a related party.** Pursuant to the terms of the License Agreement, and subject to the conditions set forth therein, the Company paid MIRALOGX a one- time, nonrefundable payment

of $ 0. 1 million upon the signing of the Agreement and will be obligated to pay quarterly royalty payments on sales of the Product in the Territory of 8 % of net sales and 8 % of other revenue (such as milestone or sublicense payments) from licensed products. Also, in consideration of License Agreement, the Company issued to MIRALOGX a Common ~~Stock~~ **stock** ~~Purchase~~ **purchase** ~~Warrant~~ **warrant** to purchase up to 700, 000 shares of the Company' s common stock (the " MIRALOGX Warrants "). The MIRALOGX Warrants are exercisable, in whole or in part, any time prior to November 15, 2028 at a cash exercise price of $ 2. 00 per share. The Company and MIRALOGX have made customary representations and warranties in the License Agreement and have agreed to certain other customary covenants, including confidentiality, cooperation, and indemnity provisions. Either party may terminate the License Agreement for cause if the other party materially breaches or defaults in the performance of its obligations, and, if curable, such material breach remains uncured for 120 days. Unless earlier terminated, the License Agreement will continue in effect until the last to expire of the ~~Patent~~ **patent** ~~Rights~~ **rights** (the " Term "), unless earlier terminated. ~~The Company and MIRALOGX have the same founder.~~ F- ~~13~~ **12** Note ~~5~~ **4** . Debt, related party: On November 15, 2023, the Company entered into a Promissory Note and Loan Agreement (the " Loan Agreement ") with MIRALOGX. Pursuant to the Loan Agreement, the Company ~~may~~ **could** borrow up to $ 3. 0 million from MIRALOGX to fund the development of licensed products under the License Agreement (the " Loan "). ~~Together with any Advance Request, the Company shall deliver to the Lender a budget for the requested Advance (the " Budget "). The Budget may only include costs directly associated with preparing an Investigational New Drug (" IND ") application for KETAMIR- 2, exclusive of personnel costs. Any Advances made by the Lender to the Company pursuant to this Note may be repaid by the Company (together with any and all interest accrued thereon) at any time without penalty or premium in accordance with the terms hereof. Amounts repaid hereunder may not be reborrowed.~~ The Loan Agreement ~~has~~ **had** a one- year term, and all outstanding principal and accrued but unpaid interest ~~must~~ **had to** be repaid in full on November 15, 2024. ~~Interest on~~ **However,** the ~~amounts borrowed under the Loan Agreement accrues at an annual fixed rate of 8 %. The Company may prepay all or a portion of the outstanding principal and accrued unpaid interest under the Loan Agreement at any time without a prepayment fee. The~~ Company did not borrow any funds from the MIRALOGX loan ~~as of~~ **during the year ended** December 31, **2024 or December 31,** 2023 **and the Loan Agreement expired on November 15, 2024** . In May 2021, the Company entered into a revolving credit facility which allowed for borrowings of up to $ 5 million from Starwood Trust, a shareholder of the Company. The facility had an initial term of 24 months (extended to 36 months in March 2023), with a new maturity date of May 10, 2024, at which time all outstanding borrowings and accrued interest, if any, were due in full. Borrowings accrued interest at a rate of 5 % per annum. In April 2023, the Company entered into a Promissory Note and Loan Agreement with the Bay Shore Trust, a trust established by ~~a~~ **the largest** shareholder of the Company. Under this Promissory Note and Loan Agreement (the " Bay Shore Note "), the Company ~~has~~ **had** the right to borrow up to an aggregate of $ 5 million from the Bay Shore Trust at any time up to the second anniversary of the issuance of the Bay Shore Note or, if earlier, upon the completion of the Company' s IPO. The ~~Company' s right to borrow funds under the Bay Shore Note is subject to the absence of a material adverse change in the Company' s assets, operations, or prospects. The Bay Share Note, together with accrued interest, will become due and payable on the second anniversary of the issuance of the note, provided that it may be prepaid at any time without penalty. The Bay Shore Note will accrue interest at a rate equal 7 % per annum, simple interest, during the first year that the note is outstanding and 10 % per annum, simple interest, thereafter. The Bay Shore Note is unsecured. The~~ Bay Shore Note replaced the revolving credit facility that the Company entered into with Starwood Trust, ~~a separate trust established by a shareholder of the Company, in May 2021~~ and pursuant to which the Company had an outstanding principal balance of $ 0. 2 million as of the date of the Bay Shore Note (which outstanding balance was retired with an advance under the Bay Shore Note). In consideration of the loan facility provided by the Bay Shore Trust, in April 2023, the Company issued to the Bay Shore Trust a common stock purchase warrant giving the Bay Shore Trust the right to purchase up to 1, 000, 000 shares of common stock at an exercise price of $ 5. 00 per share, which warrant will expire five years after the date of grant. Pursuant to a registration rights agreement, the Company ~~has granted to Bay Shore Trust the right to require the Company, at any time after one year following the Company' s IPO, to register~~ **registered** for resale the shares issuable upon the exercise of the warrant ~~, with such registration rights being~~ in **December 2023** ~~the form of demand and " piggyback " registration rights that are subject to customary limitations and restrictions~~ . See Note 8 for additional details related to these warrants. ~~F- 14~~ On July 20, 2023, the Company entered into a conversion agreement with the Bay Shore Trust under which the Bay Shore Trust had agreed to convert, upon the completion of the IPO, $ 1. 1 million of the outstanding principal balance of the Bay Shore Note into shares of the Company' s common stock at a conversion price equal to the Company' s IPO price, which resulted in the issuance of 157, 170 shares to the Bay Shore Trust. On August 14, 2023, the Company paid $ 1. 0 million in full to Bay Shore Trust, which was the amount due. The ~~company~~ **Company** also paid accrued interest of $ 0. 03 million. Both amounts are recorded in the accompanying statement of operations for the year ended December 31, 2023 as interest expense. ~~There~~ -- **The** ~~is a~~ remaining amount of $ 0. 01 **million** in accrued interest due to Bay Shore Trust **was paid** as of December 31, ~~2023~~ **2024** ~~.~~ **, as reflected in the accompanying financial statements, and the** Note ~~6~~ **is no longer active. F- 13 Note 5** . Related party transactions: Due from Related Party ~~—~~ **-** As of the year ended December 31, 2023, the Company paid $ 0. 07 million **to vendors** ~~in accounts payable~~ on behalf of a related party. ~~There was no such amount during~~ **During** the ~~corresponding period in~~ **year ended December 31,** ~~2022~~ **2024 ,** ~~. Due to Related Party — Amounts due to~~ related parties **made payments on behalf of the Company in the amount of $ 0. 03 million for wages of personnel working with the Company which is classified** as **advances from affiliates in the statement of cash flows and offset against the related party receivable on the balance sheet. As** of December 31, ~~2023~~ **2024** ~~and December 31~~ , ~~2022, are recorded~~ **$ 0. 04 million remains outstanding** as **a** related party **receivable** ~~accounts payable, in the accompanying balance sheets. As of December 31, 2022, amounts due to related parties totaled $ 0. 1 million. The balance was paid in 2023 which resulted in a $ 0. 0 balance as of December 31, 2023~~ . Travel expenses ~~—~~ **-** In April 2021, the Company entered into an airplane lease with an entity under common control that the Company ~~incurs~~ **incurred** approximately $ 0. 05 million of lease charges per month. The

~~lease was renewable, at the Company' s discretion, for an additional one to three years, however, the~~ Company terminated the lease ~~at~~ March 31, 2023, without any penalties. The Company may continue to incur related party travel- related expenses as they occur, which will be recorded in Related Party Travel Costs, in the ~~condensed~~ statement of operations. During the year ended December 31, 2023, the Company incurred $ 0. 5 million, for travel- related expenses to the related party for monthly rental charges and airplane- related expenses. There **were no such travel-** ~~was $ 1. 7 million of~~ related ~~party travel~~ expenses **in** ~~during the year ended December 31, 2022~~ **2024** . License agreement **- See Note 3. Line of credit** - See Note 4. ~~Line of credit~~ **Stock settlement agreement** - See Note **8** ~~5.~~ Note ~~7~~ **6** . Leases: The Company' s **former** corporate headquarters ~~was~~ **were located** in Baltimore, Maryland, which ~~includes~~ **included** a lease for office space. This lease began in November 2021 and ~~was amended~~ -- **ended** ~~in April 2023. This space is approximately 550 square feet and has a remaining base rent of $ 0. 01 million payable through~~ April 2024. **The lease was not renewed after April 2024** ~~Rent is payable in monthly installments and is subject to yearly price increases~~ . **In April 2024, the Company moved to a virtual office model and does not have a physical office space as of December 31, 2024** The Company had leased an office in Tampa, Florida, for its finance and general operations, which began in March 2022 for 37 months. On December 1, 2023, the Company formally terminated the lease with the landlord. There ~~is~~ **was** a remaining deposit due from the landlord to the Company of $ 0. 005 million, which is recorded in accounts receivable in the accompanying balance sheet as of December 31, 2023 **. As of December 31, 2024, the amount was collected** . The Company also leased a jet (Note 5) from a related party, which terminated on March 31 **,** 2023. Variable lease costs Variable lease costs primarily include utilities, property taxes, and other operating costs that are passed on from the lessor. Variable lease costs **in 2023** related to the aircraft include usage expenses, which includes pilot expenses, jet fuel and general flight expenses. ~~F- 15~~ The components of lease expense were as follows: Schedule of Lease Expense ~~2023~~ **2024** ~~2022~~ **2024** Year Ended December 31, **2024 2024** Lease ~~Costs~~ **costs** ~~2023 2022~~ Operating ~~Lease~~ **lease** ~~Cost Operating Lease~~ **costs $ 5, 092** $ 200, 283 **Variable lease costs- 311, 126 Total lease cost** $ ~~333~~ **5** , **092** ~~046 Variable Lease Costs 311, 126 637, 420 Total Lease Cost~~ $ 511, 409 **F- 14** ~~$ 970, 466~~ Supplemental cash flow information related to leases were as follows: Schedule of Cash Flow Information Related to Leases **2024** ~~Other Lease Information~~ 2023 ~~2022~~ Year Ended December 31, **2024 2023** Other ~~Lease~~ **lease** ~~Information~~ **information** ~~2023 2022~~ Cash paid for amounts included in the measurement of lease liabilities Operating cash flows from operating leases $ **5, 092 $** 511, 409 ~~$ 970, 466 Schedule of Remaining Weighted- average Lease Term and Weighted- average Discount Rate Year Ended December 31, 2023 2022 Lease Term and Discount Weighted Average remaining lease term. 33 years 3 years Weighted Average discount rate 5. 0 % 5. 0 % Maturity of Lease Liabilities Future minimum lease payments under non- cancellable leases as of December 31, 2023 were as follows: Schedule of Maturity of Lease Liabilities December 31, 2023 2024 $ 5, 092 2025- Total Lease payments 5, 092 Less: Interest (32) Present Value of Lease Liabilities $ 5, 061 F- 16 On April 1, 2023 the Company entered into an Agreement For Shared Lease Costs with MIRALOGX, LLC, (the " Shared Agreement ") who is a related party for the jet usage. Under the Shared Agreement, the Company agrees to make monthly contributions or payments in accordance with its monthly use of shared aircraft toward rent payments. However, the Company has not used the aircraft after the termination of the lease and there are no minimum payments due without usage.~~ Note ~~8~~ **7** . Income taxes: The significant components of the Company' s net deferred tax assets are as follows as of December 31: Schedule of Deferred Tax Assets and Liabilities **2024** 2023 ~~2022~~ December 31, **2024** 2023 ~~2022~~ Deferred tax assets Net operating loss carry- forward $ **4, 555, 400 $** 2, 430, 529 ~~$ 1, 061, 300~~ Section 174 Qualified Research Expenditures **1, 232, 033** 533, 159 ~~388, 230~~ Stock compensation **1, 099, 090** 650, 018 ~~330, 633~~ ROU liability **-** 1, 291 ~~91~~ **R & D Credit 38** , ~~333~~ **640-** Other **-** 204 ~~6, 120~~ Deferred tax assets, Gross **6, 925, 163** 3, 615, 201 ~~1, 877, 616~~ Less: valuation allowance (~~3~~ **6** , ~~613~~ **925** , ~~901~~ **163**) (~~1~~ **3** , ~~784~~ **613** , ~~880~~ **901**) Deferred tax assets, Net **-** 1, 291 ~~92, 736~~ Deferred tax liabilities ROU asset **-** (1, 291 ~~) (92, 736~~) Total net deferred tax asset $- ~~$~~ -- Beginning in 2022, in accordance with Internal Revenue Code Section 174, Qualified Research Expenditures are capitalized for tax purposes and amortized over a period of five years. Accordingly, for income tax purposes, **and as of December 31, 2024 and December 31, 2023,** the Company has recorded a deferred tax asset totaling approximately $ **1. 2 million and $** 0. 5 million **, respectively,** related to the timing difference between GAAP and Tax recognition of these expenditures. The components of the provision for income taxes consist of the following: Schedule of Components of Income Tax Provision **2024** 2023 **December 31,** ~~2022~~ **2024 2023** Deferred tax: Deferred (~~1~~ **3** , ~~829~~ **311** , ~~030~~ **252**) (1, ~~784~~ **829** , ~~880~~ **030**) Change in valuation allowance **3, 311, 252** 1, 829, 030 ~~1, 784, 880~~ Total deferred-- Total provision for income taxes $- $- ASC Topic 740 requires that a deferred tax amount be reduced by a valuation allowance if, based on the weight of available evidence it is more likely than not (a likelihood of more than 50 %) that some portion or all of the deferred tax assets will not be realized. The valuation allowance should be sufficient to reduce the deferred tax asset to the amount that is more likely than not to be realized. The Company has recorded a full valuation allowance against its deferred tax assets generated by net operating loss carryforwards as it has determined that such amounts may not be recognizable, given the historical losses of the Company to date. As of December 31, ~~2023~~ **2024** , the Company has a cumulative federal net operating loss carryforward of approximately $ ~~9~~ **18** . ~~5~~ **0** million. The net operating loss carryforwards have no expiration date. F- **15 A reconciliation of the statutory U. S. federal income tax rate to the Company' s effective income tax rate is as follows: Schedule of Reconciliation of Effective Income Tax Rate Year Ended December 31, 2024 Amount Rate Book Loss $ 7, 852, 659 Tax Benefit at U. S. Federal Statutory Rate (1, 649, 058) 21. 00 % State Taxes, Net of Federal Benefit (341, 591) 4. 35 % Change in Valuation Allowance 3, 311, 262 (42.** 17 **) % Permanent Items (1, 320, 612) 16. 82 % Net actual effective rate $-- %** Note ~~9~~ **8** . Stockholders' equity: Capital stock The Company has the authority to issue 110, 000, 000 shares of capital stock, consisting of 100, 000, 000 shares of Common Stock and 10, 000, 000 shares of undesignated preferred stock (as amended and restated on June 28, 2023), whose rights and privileges will be defined by the Board of Directors when a series of preferred stock is designated. Reverse stock- split Effective June 28, 2023, the Company completed a 1- for- 5 reverse stock split of its outstanding common stock upon the filing of the Company' s Third Amended and Restated Articles of Incorporation with the Florida Secretary of State. No fractional shares were issued in connection with the reverse stock split, and all such

fractional shares resulting from the reverse stock split were rounded up to the nearest whole number. The shares issuable upon the exercise of our outstanding options and warrants, and the exercise prices of such options and warrants, have been adjusted to reflect the reverse stock split. **All share and per share information in the accompanying financial statements have been retrospectively adjusted to reflects the reverse stock split. Common** Stock ~~issuances~~ At IPO in August 2023, 1, 275, 000 shares of the Company' s common stock were issued at a price of $ 7. 00 per share which resulted in gross proceeds of $ 8. 9 million and net proceeds of $ 7. 7 million to the Company after the underwriter discount but before other IPO related expenses. Additionally, the Company issued its **former** investor relations firm $ 0. 25 million worth of restricted common stock upon closing of the IPO, which resulted in issuance of 35, 715 shares of stock. ~~During~~ **On August 12, 2024,** the ~~year ended~~ **Company filed a shelf registration statement with the SEC to facilitate the issuance of our common stock and entered into an At The Market Offering Agreement (the " ATM Agreement ") with Rodman & Renshaw LLC (the " Manager "), under which the Company may offer and sell shares of its Common Stock, with an aggregate offering amount sold of up to $ 19, 268, 571. On September 24, 2024, the Company filed a prospectus supplement to amend the shelf registration statement to update the maximum amount eligible to be sold under the ATM Agreement to $ 75 million. As of** December 31, ~~2022~~ **2024 , under the ATM Agreement** , the Company **has** sold ~~3. 2 million~~ **1, 779, 967** shares of Common Stock **in 2024** at **an average price per share of** $ 1. **65 and received** ~~00 per share,~~ net **proceeds** of ~~offering costs~~ **approximately $ 3. 6 million, after deducting commissions and other fees** of $ 0. ~~3~~ **13** million **. F- 16 On April 24** , ~~resulting~~ **2024 the Company settled a claim submitted by certain shareholders under Section 16 of the Securities Exchange Act involving the Company that claimed illegal profits were earned on stock transactions involving insiders of the Company. After investigation, the Company informed the insider, Bay Shore Trust, of the claim and came to agreement with the shareholders, whereby requiring the disgorgement of profits by the insider back to the Company** in ~~net proceeds~~ **the amount** of $ ~~2. 9 million~~ **148, 703, which was recorded in additional paid in capital in the accompanying financial statements** . In June 2022, the Company' s Board of Directors adopted, and its stockholders approved, the Company' s 2022 Omnibus Incentive Plan, as amended and restated in August 2023, (" 2022 Omnibus Plan "). The 2022 Omnibus Plan authorizes the grant of incentive stock options, within the meaning of Section 422 of the Internal Revenue Code, to the Company' s employees and any of its parent and subsidiary corporations' employees, and for the grant of **non-** ~~nonstatutory~~ --- **statutory** stock options, restricted stock, restricted stock units, stock appreciation rights, performance units and performance shares to the Company' s employees, directors, and consultants and any of its future subsidiary corporations' employees and consultants. **On September 12, 2024, the Company held its 2024 Annual Meeting of Stockholders (the " Annual Meeting ") in which it was voted upon to increase the shares provided under the plan from 2, 000, 000 shares to 5, 000, 000 shares as summarized below.** The 2022 Omnibus Plan provides that ~~2~~ **5** , 000, 000 shares of the Company' s Common Stock are reserved for issuance under the 2022 Omnibus Plan, all of which may be issued pursuant to the exercise of incentive stock options. The fair value of each option award is estimated on the grant date using the Black- Scholes valuation model that uses assumptions for expected volatility, expected dividends, expected term, and the risk- free interest rate. Expected price volatility is based on the historical volatilities of a peer group as the Company does not have a trading history for its shares prior to its IPO. Industry peers consist of several public companies in the biotech industry similar to the Company in size, stage of life cycle and product indications. The Company intends to continue to consistently apply this process using the same or similar public companies until a sufficient amount of historical information regarding the volatility of the Company' s own stock price becomes available, or unless circumstances change such that the identified companies are no longer similar to the Company, in which case, more suitable companies whose share prices are publicly available would be utilized in the calculation. Expected term of options granted is derived using the " simplified method " which computes expected term as the average of the sum of the vesting term plus contract term. The risk- free rate is based on the 5- year U. S. Treasury yield curve in effect at the time of grant. The Company recognizes forfeitures as they occur. ~~F- 18~~ During the year ended December 31, ~~2023~~ **2024** , a total of ~~635~~ **3** , ~~001~~ **599, 000** options to purchase Common Stock, with an aggregate fair market value of approximately $ 2. ~~75~~ **79** million were granted to the Company' s executive officers ~~and~~ **,** management, and consultants of the Company. Options have a term of 10 years from the grant date. These ~~option vest as follows: (i) executive officer options vested 100 % on date of grant and (ii) employee and consultant~~ options vest ~~33. 33 % at 6 month~~ **in various terms ranging from immediate vesting upon grant to the second** anniversary of **the grant** date ~~of grant, 33. 33 % at 1 year anniversary at date of grant and the remaining vest at two- year anniversary of date of grant~~ . As of December 31, ~~2023~~ **2024 options exercisable totaled 2** , **348, 720. The Company recognized approximately $ 1. 9 million in stock- based compensation in 2024.** ~~there~~ **There** was approximately $ 1. ~~3~~ **5** million of unrecognized compensation cost related to unvested share- based compensation awards granted. These costs will be expensed ~~over~~ **through** the ~~next two years~~ **second quarter of 2026** . **F- 17** The following is option activity during the year ended December 31, **2024 and** 2023: Schedule of Stock Option Activity Number of Shares Weighted Average Exercise Price Per Share ~~Aggregate Intrinsic Value Outstanding as January 1, 2022- $- $- Options granted 750, 000 $ 5. 00 Outstanding as December 31, 2022 750, 000 $ 5. 00 $- Options granted 635, 001 $ 5. 55 Forfeitures (170, 000) $ 5. 00 Outstanding as December 31, 2023 1, 215, 001 $ 5. 29 $- Range of Exercise Prices Number Outstanding~~ Weighted Average Remaining Contractual Life (Years) ~~Weighted Average Exercise Price Number Exercisable~~ Aggregate Intrinsic ~~Price~~ **Value Outstanding as January 1, 2023 750, 000 $ 5 9. 4 $-- Options granted 635, 001 $ 5. 55- $- Forfeitures (170, 000) $ 5- $- Outstanding as December 31, 2023 1, 215, 001 $ 5. 29 8. 7 $- Options granted 3, 599, 000** $ 1. ~~00~~ **15** - ~~5. 00 980~~ **$- Expired (268** , **886)** ~~001 8. 9~~ $ 5. **05-** ~~00 382, 500~~ $- **Forfeitures (309, 449)** $ ~~5~~ **4** . ~~01~~ **68** - ~~10. 00~~ **$- Outstanding as December 31, 2024 4,** 235, ~~000~~ **666 $ 1. 83** 9 **. 2 $ 135, 200 Exercisable, December 31, 2024 2, 348, 720 $ 2. 23 8** . 6 $ **120** ~~6. 50 230~~ , **886** ~~000- 1, 215, 001 612, 500 $-~~ Key assumptions used to value stock options during the year ended December 31, ~~2023~~ **2024** are as follows: Schedule of Key Assumptions Used to Value Stock OptionsExpected ~~price~~ volatility ~~88~~ **58** . ~~01~~ **46** - ~~116~~ **152** . ~~64~~ **45** % Risk- free interest rate 3. ~~51~~ **49** - 4. ~~42~~ **56** % ~~Weighted average fair values~~ **Exercise Price $ 0. 71- $ 1. 57 Expected term** (**years** ~~grants post- split~~) ~~$ 3.~~

515- $ 5 - . 384 Weighted average expected life in years 5 - 6 . 5 years Dividend yield- On March 25 During the year ended December 31 , 2024, a total of 100 500 , 000 restricted options to purchase Common Stock stock units (“ RSU ”) , with an aggregate fair market value of approximately $ 0. 1 6 million were granted to the Company’ s Independent Board of Directors Chief Executive Officer under the 2022 Omnibus Incentive Plan . These option RSU’ s vest as follows: (i) 50 % on date of grant and February 12, 2025 (ii) 50 % at 6- month anniversary of date of grant. The awards were fair valued using the closing price of the stock of $ 1 year anniversary at date of grant . On March 26 19 on December 6th , 2024 . As , a total of 450 December 31 , 2024, 000 options to purchase Common Stock were granted to the there Company was approximately $ 0. 5 million unrecognized compensation cost related to unvested RSU ’ s executive officers awards granted . These option vest costs will be expensed in 2025. F- 18 MIRA PHARMACEUTICALS, INC. NOTES TO THE FINANCIAL STATEMENTS DECEMBER 31, 2024 AND 2023 The following is RSU activity during the year ended December 31, 2024: Schedule of Restricted Stock Unit Activity Number of Restricted Shares Outstanding as follows December 31, 2023- RSU’ s granted 500, 000 Expired- Forfeitures- Outstanding as December 31, 2024 500, 000 In connection with various transactions and the IPO summarized below, the Company issue stock warrants. Warrant activity for the year ended December 31, 2024 is summarized below : SCHEDULE OF WARRANT ACTIVITY Weighted Weighted Average Number of Average Exercise Remaining Contractual Aggregate Warrants Price Term (i Years) Intrinsic Value Balance Outstanding as January 50 % six months from the date of grant and (ii) 50 % at 1 year anniversary at date of grant , 2023- $--- Granted 1, 763, 570 $ 3 . 88 5 Both aforementioned option grants have a term of 10 years from the grant date . 0- Balance Outstanding as December 31, 2023 1, 763, 570 $ 3. 88 4. 6- Granted- $--- Exercised- $--- Balance Outstanding as December 31, 2024 1, 763, 570 $ 3. 88 3. 6- Exercisable, December 31, 2024 1, 763, 570 $ 3. 88 3. 6- MIRALOGX warrants The Company issued to MIRALOGX a common stock purchase warrant on November 15, 2023 giving MIRALOGX the right to purchase up to 700, 000 shares of common stock at an exercise price of $ 2. 00 per share. This warrant will expire five years after the date of grant. F- 19 The fair value of the warrants were estimated on the grant date using the Black- Scholes valuation model and level 3 inputs based on assumptions for expected volatility, expected dividends, expected term, and the risk- free interest rate, which resulted in $ 1. 8 million of warrant expense value . This cost was recorded as interest expense in General and Administrative expenses on the accompanying statement of operations and additional paid in capital on the accompanying balance sheet as of December 31, 2023 Key assumptions used to value warrants in November 2023 are as follows Schedule of Key Assumptions Used to Value Underwriter WarrantsExpected price volatility 127 . 11 % Risk- free interest rate 4. 52 % Fair Market Value of underlying Common Stock $ 2. 95 Expected Term in years 5 years Dividend yield- F- 19 Bay Shore Trust warrants In consideration of the line of credit provided by the Bay Shore Trust, the Company issued to the Bay Shore Trust a common stock purchase warrant on April 28, 2023 giving the Bay Shore Trust the right to purchase up to 1, 000, 000 shares of common stock at an exercise price of $ 5. 00 per share. This warrant will expire five years after the date of grant. There are 1, 000, 000 warrants outstanding at December 31, 2023. The fair value of the warrants were estimated on the grant date using the Black- Scholes valuation model and level 3 inputs based on assumptions for expected volatility, expected dividends, expected term, and the risk- free interest rate, which resulted in $ 3. 5 million of deferred financing costs. This cost was recorded as deferred financing costs and additional paid in capital on the accompanying balance sheet and is amortized straight- line over the term of the line of credit (which is 24 months). Associated amortization of deferred finance costs is recorded to interest expense on the 2023 condensed income statement of operations. Subsequent to the IPO, the Bay Shore Trust line of credit was paid in full early, of resulting in $ 2. 8 million remaining in deferred financing costs . These costs were recorded as interest expense on the accompanying statement of operations with the offsetting entry clearing the balance of amortization in deferred finance costs. Key assumptions used to value warrants in April 2023 are as followsExpected price volatility 88. 01 % Risk- free interest rate 3. 51 % Fair Market Value of underlying Common Stock $ 1. 00 Expected Term in years 5 years Dividend yield- Underwriter warrants In connection with the IPO, the Company issued 63, 750 warrants to purchase common stock to the IPO underwriter (or its designees) at an exercise price of $ 7. 00 which will expire in the four- and- a- half- year period commencing six months after the commencement of sales in the IPO. The warrants will be exercisable at any time and from time to time, in whole or in part, during the four- and- a- half- year period commencing six months after the commencement of sales in the IPO. The warrants provide for registration rights (including a one- time demand registration right and piggyback registration rights that expire 5 years from the commencement of sales of the offering) and customary anti- dilution provisions as permitted under FINRA Rule 5110 (g) (8). Key assumptions used to value underwriter warrants in August 2023 are were as follows: Expected Schedule of Key Assumptions Used to Value WarrantsExpected price volatility 98. 53 % Risk- free interest rate 4. 16 % Weighted average fair Fair values Market Value of underlying Common Stock $ 5. 297 Weighted average expected Expected life Term in years 5 years Dividend yield- Earnings Per Share During the year ended December 31, 2023 and 2022, outstanding stock options and warrants of 2, 915, 001 and 750, 000, respectively, were not included in the computation of diluted earnings per share, because to do so would have had an antidilutive effect. F- 20 Note 10 9 . Segment Information The Employment Agreements: On April 28, 2023, the Company entered into operates in one reportable segment related to the development an and employment agreement with Mr commercialization of pharmaceuticals targeting neurologic and neuropsychiatric disorders . The CODM for Erez Aminov pursuant to which Mr. Aminov serves as the Company is the Chief Executive Officer (the “ CEO ”). The Company’ s CEO reviews operating results Chief Executive Officer on a full- time basis. Mr. Aminov’ s employment agreement provides that his employment will be on an aggregate at- will basis and manages can be terminated by either Mr. Aminov or the Company at any time and for any reason. Under the agreement, Mr. Aminov will receive an initial base salary of $ 0. 11 million per year. In the event that Mr. Aminov’ s employment is terminated by the company without “ Cause ” or is terminated by Mr. Aminov for “ Good Reason ”, Mr. Aminov will be entitled to severance compensation in the form of salary continuation for a period of three months (subject to Mr. Aminov executing and delivering a customary general release in favor of the company). On August 17, 2023, Mr.

Aminov received a $ 0. 12 million cash bonus net of federal, state, local and income taxes related to the successful completion of the IPO. On August 28, 2023, the Company amended Mr. Aminov' s employment agreement to increase his yearly compensation from its current amount of $ 0. 11 million to $ 0. 2 million per year, effective August 1, 2023. In March 2024, Mr. Aminov assumed the role of Chairman and on March 25, 2024, the Compensation Committee of the Board of Directors approved increasing Mr. Aminov' s annual base salary to $ 0. 28 million. On April 28, 2023, the Company entered into an employment agreement with Ms. Michelle Yanez pursuant to which Ms. Yanez serves as the Company' s Chief **operations as a whole for the purpose of evaluating** Financial **financial** Officer on **performance and allocating resources. Accordingly, the Company has determined that it has** a full- time **single reportable and operating segment structure. The CEO uses aggregate net loss to allocate resources in the annual budgeting and forecasting process and also uses that measure as a** basis **for evaluating financial performance regularly** . Ms. Yanez' s employment agreement provides that her employment will be on an at- will basis and can be terminated by either Ms. Yanez or the company **comparing actual results** at any time and for any reason. Under the agreement, Ms. Yanez will receive an initial base salary of $ 0. 17 million per year. In the event that her employment is terminated by the company without " Cause " or is terminated by Ms. Yanez for " Good Reason ", Ms. Yanez will be entitled to severance compensation in the form of salary continuation for a period of three months (subject to Ms. Yanez executing and delivering a customary general release in favor of the company). On August 17, 2023, Ms. Yanez received a $ 0. 05 million cash bonus net of federal, state, local and income taxes related to the successful completion of the IPO. On March 25, 2024, the Compensation Committee of the Board of Directors approved increasing Ms. Yanez' annual base salary to $ 0. 23 million. On April 28, 2023, the Company entered into an employment agreement with Dr **established budgets and forecasts** . **The accounting policies of** Chris Chapman pursuant to which Dr. Chapman served as the Company' s Executive Chairman **single segment are the same as those described in the summary of significant accounting policies within Note 1** . Dr. Chapman' s employment agreement provided **The CEO assesses performance for the Company and decides how to allocate resources based on the aggregate net loss** that his **is also reported** employment will be on **the income statement as net loss** a part- time basis whereby Dr . **The measure** Chapman would devote 50 % of **segment assets** his **is reported** full business time and effort to the business and affairs of the company, and it further provided that such employment would be on an at- will basis and could..... s employment agreement to indicate that he **the balance sheets** works part- time on an as **total assets** needed basis for the Corporation, rather than fifty percent (50 %) of the time, effective August 1st, 2023 . **The table below provides information about** On October 13, 2023, the Company amended Dr. Chapman' s employment agreement to reflect a temporary reduction in his compensation from $ 0. 15 million per year to $ 0. 05 million per year, to extend for a period of 90 days. After the 90- day period, Dr. Chapman' s compensation shall be reinstated to the amount in his employment agreement of $ 0. 15 million per year. On March 13, 2024, Dr. Chapman resigned as both an employee and as the Chairman of the Board of Directors. F- 21 Christos Nicholoudis On April 28, 2023, the Company entered into an employment agreement with Christos Nicholoudis pursuant to which Mr. Nicholoudis served as the Company' s **revenue, significant segment expenses and other segment expenses. Schedule of Segment Expenses and Other Segment Expenses 2024 2023 Years Ended December 31, 2024 2023 Revenues $ — $ — Less segment expenses: Research and development 3, 305, 575 1, 572, 962** General Counsel **and administrative 4, 712, 753 6, 499, 537 Loss from operations $ 8, 018, 328 8, 526, 049 Plus: Interest income (expense) 165, 669 (3, 456, 294) Segment Net loss $ 7, 852, 659 $ 11, 982, 343 Note 10. Subsequent Events Acquisition Letter of Intent On March 19, 2025, MIRA Pharmaceuticals, Inc. (the " Company ") entered into a binding letter of intent (the " LOI ") with SKNY Pharmaceuticals, Inc. (" SKNY "), a privately held Delaware corporation, to acquire SKNY through a stock exchange transaction (the " Acquisition "). The acquisition will bring SKNY- 1, a novel oral drug candidate targeting weight loss and smoking cessation — two of the leading causes of preventable death — into MIRA' s development pipeline. As part of the agreement, SKNY will provide a $ 5 million capital infusion in cash or cash equivalents, further strengthening MIRA' s financial position and supporting future growth initiatives. SKNY holds exclusive rights to its compounds in the United States, Canada, and Mexico which is license from Miralogx, a related party of the Company** . Under the **terms of the LOI, SKNY will merge into the Company through a stock exchange, with each outstanding share of SKNY' s common stock being exchanged for shares of MIRA' s common stock. The exact exchange ratio will be determined by an independent third- party valuation firm (the " Independent Valuator ") based on the relative values of both companies. The completion of the Acquisition is contingent upon the Independent Valuator determining that SKNY' s valuation is at least equal to or greater than that of the Company. Both parties have agreed to a 90- day mutual due diligence period, during which they will work in good faith to negotiate and execute a definitive stock purchase** agreement , Mr **and any related transaction documents** . Nicholoudis receive **Upon completion of the Acquisition, all of SKNY' s assets, including its drug candidates, will become wholly owned by MIRA, further expanding the Company' s development pipeline ATM Offering From January 1, 2025 through March 28, 2025, under the ATM Agreement, the Company sold and issued 2, 802 shares of Common Stock at** an initial base salary **average price per share** of **$ 1. 33, and received net proceeds of approximately** $ 0. 075 **003** million per year. On August 17 , 2023, Mr. Nicholoudis received a **after deducting commissions and other fees of** $ 0. 025 **0003** million cash bonus net of federal, state, local and income taxes related to the successful completion of the IPO . **F** Mr. Nicholoudis resigned on January 15, 2024, and there are no further payments due to him. Note 11. Subsequent Events: Section 16 (b) disgorgement In January 2024, the Company recorded a related party receivable of $ 148, 703 related to the recovery of short - **21** swing profits due from The Bay Shore Trust, under Section 16 (b) of the Securities Exchange Act of 1934, as amended. Once the receivable is paid in full, the Company will recognize these proceeds as a capital contribution from a stockholder with an increase to additional paid- in- capital in its balance sheet and as cash provided by financing activities in its statement of cash flows. SIGNATURES In accordance with Section 13 or 15 (d) of the Exchange Act, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized. MIRA PHARMACEUTICALS, INC. Date: April 1 **March 28** , 2024 **2025** By: / S /

Erez Aminov Name: Erez Aminov Title: Chief Executive Officer (Principal Executive Officer) By: / S / Michelle Yanez Name: Michelle Yanez Title: Chief Financial Officer (Principal Financial Officer) In accordance with the Exchange Act, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated. Person Capacity Date / s / Erez Aminov Chief Executive Officer and Chairman ~~April 1~~ **March 28** , ~~2024~~ **2025** Erez Aminov / s / Michelle Yanez Chief Financial Officer ~~April 1~~ **March 28** , ~~2024~~ **2025** Michelle Yanez / s / ~~Michael Jerman~~ **Matthew Whalen** Director ~~April 1~~ **March 28** , ~~2024~~ **2025** ~~Michael Jerman~~ **Matthew Whalen** / s / Matthew Del Giudice Director ~~April 1~~ **March 28** , ~~2024~~ **2025** Matthew Del Giudice / s / Denil Shekhat Director ~~April 1~~ **March 28** , ~~2024~~ **2025** Denil Shekhat / s / Edward MacPherson Director ~~April 1~~ **March 28** , ~~2024~~ **2025** Edward MacPherson Exhibit 4. 4 **Exhibit 23** ~~DESCRIPTION OF CAPITAL STOCK The following is a summary of information concerning capital stock of MIRA Pharmaceuticals, Inc~~ . **1 Consent** ~~(" us, " " our, " " we " or the " Company ") and certain provisions~~ of ~~our certificate of~~ **Independent Accountants We hereby consent to the** incorporation ~~, as amended and restated, and amended and restated bylaws currently in effect. This summary does not purport to be complete and is qualified in its entirety by the provisions of our third amended and restated articles of incorporation, as amended (the " Charter ") and amended and restated bylaws (the " Bylaws "), each previously filed with the Securities and Exchange Commission (" SEC ") and incorporated~~ by reference **in** ~~as an exhibit to~~ the ~~Annual Report~~ **Registration Statements** on Form ~~10~~ **S** - **8** ~~K, as well as to the applicable provisions of the Florida Business Corporation Act~~ (~~the " FBCA "~~ **No. 333- 282381**) ~~. We encourage you to read our Charter, Bylaws and the applicable portions of the FBCA carefully. Our authorized capital stock consists of: ● 100, 000, 000 shares of common stock, par value $ 0. 0001 per share; and ● 10, 000, 000 shares of preferred stock, par value $ 0. 0001 per share. We are a corporation organized under the laws of the state of Florida and are governed by the Florida Business Corporation Act, which we sometimes refer to as the FBCA, our amended and restated articles of incorporation and our amended and restated bylaws. Common Stock Holders of shares of our common stock are entitled to one vote for each share held on all matters submitted to a vote of shareholders. Accordingly, holders of a majority of the shares of our common stock entitled to vote in any election of directors may elect all of the directors standing for election. Holders of shares of our common stock are entitled to receive proportionately any dividends if and when such dividends are declared by our board of directors, subject to any preferential dividend rights of outstanding preferred stock. Upon the liquidation, dissolution or winding up of the company, the holders of our common stock are entitled to receive ratably net assets available after the payment of all debts and other liabilities and subject to the prior rights of holders of any outstanding preferred stock. The rights, preferences, and privileges of holders of our common stock are subject to, and may be adversely affected by, the rights of the holders of shares of any series of preferred stock that we may designate and issue in the future. Preferred Stock Under the terms of our amended and restated articles of incorporation, which we sometimes refer to as the articles, the board of directors is authorized to designate and issue up to 10, 000, 000 shares of preferred stock in one or more series without shareholder approval. Our board of directors will have discretion to determine the rights, preferences, privileges and restrictions, including voting rights, dividend rights, conversion rights, redemption privileges and liquidation preferences, of each series of preferred stock. It is not possible to state the actual effect of the issuance of any shares of preferred stock upon the rights of holders of our common stock until the board of directors determines the specific rights of the holders of the preferred stock. However, these effects might include: ● restricting dividends on the common stock; ● diluting the voting power of the common stock; ● impairing the liquidation rights of the common stock; and ● delaying or preventing a change in control of the company. There are no shares of preferred stock outstanding and, at present, we have no plans to issue any shares of preferred stock. Dividends and Other Distributions The holders of our common stock will be entitled to receive proportionately any cash or stock dividends if and when such dividends are declared by the board of directors, subject to any preferential dividend rights of outstanding preferred stock. In the event of the dissolution or liquidation of the company, after the full preferential rights, if any, on any outstanding preferred stock has been paid to or set aside for the holders of such preferred stock, the holders of our common stock will be entitled to receive proportionately all of our remaining assets. The declaration and payment of any dividend will be subject to the discretion of our board of directors, subject to applicable laws. The time and amount of any dividend will depend on a number of factors, including our financial condition, results of operations, capital requirements, contractual restrictions, general business conditions, and any other factors that our board of directors may deem relevant. We currently intend to retain all available funds and any future earnings for general corporate purposes, including working capital, operating expenses, and capital expenditures, and do not anticipate declaring or paying any cash dividends on our common stock in the foreseeable future. See " Dividend Policy. " Number and Election of Directors Our Board consists of seven members. The holders of common stock and any other class of stock of our company, to the extent they shall have the right to vote, shall retain the right to elect and remove all members of the board of directors. Quorum / Voting At all meetings of our board of directors, a majority of the total number of directors constitutes a quorum. If there is a quorum, a vote of the majority of the directors present at the meeting is considered an~~ **and** ~~act of our board of directors~~ **Form S- 3 (No** . ~~Removal~~ **333- 281467)** of ~~Directors Our amended and restated articles provide that any director may be removed from office, but only for cause by the affirmative vote of not less than a majority of our shareholders entitled to vote in the election of directors. " Cause " is construed to exist only if the director whose removal is proposed has been convicted of a felony or~~ **our report dated April 1** ~~has been adjudged to be liable for willful misconduct in the performance of his or her duties to us in a matter which has a material adverse effect on our business. Vacancies on the Board of Directors A vacancy on our board of directors may be filled by a vote of a majority of the remaining members of the board of directors~~ , **2024** ~~even if less than a quorum, at any meeting of the board of directors. A person so elected by the board of directors to fill a vacancy shall hold office for the remainder of the full term of the director for which the vacancy was created or occurred and until such director' s successor shall have been duly elected and qualified. Voting by Shareholders Each holder of our common stock is entitled to one vote per share for the election of directors and for all other corporate purposes. Amendment of Articles The FBCA allows us to amend our amended and restated articles at any time to add or change a provision that is required or permitted to be~~ included in ~~the articles of incorporation or to delete a~~

provision that is not required to be included in the articles of incorporation. Our board of directors can propose one or more amendments for submission to shareholders and may condition its submission of the proposed amendment on any basis if it provides certain notice and includes certain information regarding the proposed amendment in that notice. The provisions in our articles that require a greater voting requirement than provided in the FBCA may only be amended by the same vote required to take action under that voting requirement. Amendment of Bylaws Our bylaws may be amended or repealed, and new bylaws may be adopted by our shareholders at any annual or special meetings at which a quorum is present. The bylaws may also be amended or repealed, and new bylaws may be adopted by our board of directors by affirmative vote of a majority of the number of directors present at any meeting at which a quorum is in attendance. Notwithstanding the foregoing, pursuant to our articles, the provisions of our bylaws that require a greater voting requirement than provided in the FBCA may only be amended by the same vote required to take action under that voting requirement. Anti- Takeover Effects of Various Provisions of Florida Law, Our Amended and Restated Articles of Incorporation and Our Bylaws Provisions of Florida law have certain anti- takeover effects. Our amended and restated articles of incorporation and bylaws also contain provisions that may have similar effects. Florida Anti- Takeover Statutes ● Prior to the time that such shareholder became an interested shareholder, our board of directors approved either the affiliated transaction or the transaction which resulted in the shareholder becoming an interested shareholder; or ● Upon consummation of the transaction that resulted in the shareholder becoming an interested shareholder, the interested shareholder owned at least 85 % of our voting shares outstanding at the time the transaction commenced; or ● At or subsequent to the time that such shareholder became an interested shareholder, the affiliated transaction is approved by our board of directors and authorized at an annual or special meeting of shareholders, and not by written consent, by the affirmative vote of at least two- thirds of the outstanding voting shares which are not owned by the interested shareholder. No Cumulative Voting The FBCA provides that shareholders do not have the right to cumulate votes in the election of directors unless the articles of incorporation provide otherwise. Our articles do not provide for cumulative voting. Advance Notice Requirements for Shareholder Proposals and Director Nominations; Calling a Special Meeting Our amended and restated bylaws provide that shareholders seeking to bring business before an annual meeting must provide timely notice of their proposal in writing to the corporate secretary. To be timely, a shareholder' s notice must have been received on or before December 31 of the year immediately preceding the annual meeting; provided, however, that in the event that the date of the annual meeting is on or after May 1 in any year, notice by the shareholder to be timely must be received not later than the close of business on the day which is determined by adding to December 31 of the year immediately preceding such annual meeting the number of days starting with May 1 and ending on the date of the annual meeting in such year. The amended and restated bylaws also specify requirements as to the form and content of a shareholder' s notice. These provisions may impede shareholders' ability to bring matters before an annual meeting of shareholders or make nominations for directors at an annual meeting of shareholders. Our amended and restated bylaws also provide that a special meeting of shareholders can only be called by our chairman of the board of directors, our chief executive officer, our president (in the absence of a chief executive officer), a majority of our board of directors or the holders of 10 % or more of all of our votes entitled to be cast on any issue proposed to be considered at the special meeting of shareholders. Authorized But Unissued Shares Our authorized but unissued shares of common stock and preferred stock will be available for future issuance without shareholder approval. We could use these additional shares for a variety of corporate purposes, including future public offerings to raise additional capital, acquisitions of other businesses or entities and issuances under employee benefit plans. Additionally, we could issue a series of preferred stock that could, depending on its terms, impede the completion of a merger, tender offer or other takeover attempt. Our board of directors will make any determination to issue such shares based on its judgment as to the best interests of us and our shareholders. The board of directors, in so acting, could issue preferred stock having terms that could discourage an acquisition attempt through which an acquiror may be able to change the composition of the board of directors, including a tender offer or other transaction that some, or a majority, of our shareholders might believe to be in their best interests or in which shareholders might receive a premium over the then- current market price of the common stock. Exclusive Jurisdiction Our amended and restated bylaws provide that, unless we consent in writing to the selection of an alternative forum, the sole and exclusive forum for (i) any derivative action or proceeding brought on our behalf, (ii) any action asserting a claim of breach of a fiduciary duty owed by any of our current or former directors, officers or other employees to us or our shareholders, (iii) any action arising pursuant to any provision of the FBCA, our amended and restated articles of incorporation or our amended and restated bylaws, or (iv) any other action asserting a claim that is governed by the internal affairs doctrine shall be a state court located within the state of Florida (or, if a state court located within the state of Florida does not have jurisdiction, the federal district court for the Middle District of Florida); provided that, the exclusive forum provision will not apply to suits brought to enforce any liability or duty created by the Exchange Act, or to any claim for which the federal courts have exclusive jurisdiction. Our bylaws also provide that, unless we consent in writing to the selection of an alternative forum, the U. S. federal district courts shall be the exclusive forum for the resolution of any claims arising under the Securities Act. Any person or entity purchasing or otherwise acquiring any interest in our securities shall be deemed to have notice of and consented to these provisions. Although we believe these provisions benefit us by providing increased consistency in the application of law for the specified types of actions and proceedings, the provisions may have the effect of discouraging lawsuits against us or our directors and officers. We note that investors cannot waive compliance with the federal securities laws and the rules and regulations thereunder. Please also see the section titled " Risk Factors- Risks Related to Ownership of our Common Stock- Our amended and restated bylaws designates the state courts located within the state of Florida as the exclusive forum for substantially all disputes between us and our shareholders and the federal district courts as the exclusive forum for Securities Act claims, which could limit our shareholders' ability to obtain a favorable judicial forum for disputes with us. " Preemptive Rights No holder of our common stock has any preemptive or subscription rights to acquire shares of our capital stock. Liability and Indemnification of Officers and Directors Our amended and restated articles of incorporation and bylaws provide that we shall indemnify any and all persons whom we

shall have power to indemnify under the FBCA to the fullest extent permitted by law. Section 607. 0831 of the FBCA, provides that a director is not personally liable for monetary damages to the corporation or any other person for any statement, vote, decision to take or not to take action, or any failure to take any action, as a director, unless (1) the director breached or failed to perform his or her duties as a director and (2) the director' s breach of, or failure to perform, those duties constitutes (a) a violation of the criminal law, unless the director had reasonable cause to believe his or her conduct was lawful or had no reasonable cause to believe his or her conduct was unlawful, (b) a transaction from which the director derived an improper personal benefit, either directly or indirectly, (c) a circumstance under which the liability provisions of Section 607. 0834 of the FBCA are applicable, (d) in a proceeding by or in the right of the corporation to procure a judgment in its favor or by or in the right of a shareholder, conscious disregard for the best interest of the corporation, or willful or intentional misconduct, or (e) in a proceeding by or in the right of someone other than the corporation or a shareholder, recklessness or an act or omission which was committed in bad faith or with malicious purpose or in a manner exhibiting wanton and willful disregard of human rights, safety, or property. A judgment or other final adjudication against a director in any criminal proceeding for a violation of the criminal law estops that director from contesting the fact that his or her breach, or failure to perform, constitutes a violation of the criminal law; but does not estop the director from establishing that he or she had reasonable cause to believe that his or her conduct was lawful or had no reasonable cause to believe that his or her conduct was unlawful. Under Section 607. 0851 of the FBCA, a corporation has power to indemnify any person who is a party to any proceeding (other than an action by, or in the right of the corporation), because he or she is or was a director or officer of the corporation against liability incurred in connection with such proceeding, including any appeal thereof, if he or she acted in good faith and in a manner he or she reasonably believed to be in, or not opposed to, the best interests of the corporation and, with respect to any criminal action or proceeding, had no reasonable cause to believe his or her conduct was unlawful. The termination of any proceeding by judgment, order, settlement or conviction or upon a plea of nolo contendere or its equivalent shall not, of itself, create a presumption that the person did not act in good faith and in a manner which he or she reasonably believed to be in, or not opposed to, the best interests of the corporation or, with respect to any criminal action or proceeding, has reasonable cause to believe that his or her conduct was unlawful. For purposes of the indemnification provisions of the FBCA, " director " or " officer " means an individual who is or was a director or officer, respectively, of a corporation or who, while a director or officer of the corporation, is or was serving at the corporation' s request as a director or officer, manager, partner, trustee, employee, or agent of another domestic or foreign corporation, limited liability company, partnership, joint venture, trust, employee benefit plan, or another enterprise or entity and the terms include, unless the context otherwise requires, the estate, heirs, executors, administrators, and personal representatives of a director or officer. In addition, under Section 607. 0851 of the FBCA, a corporation has the power to indemnify any person, who was or is a party to any proceeding by or in the right of the corporation to procure a judgment in its favor by reason of the fact that the person is or was a director or officer, against expenses and amounts paid in settlement not exceeding, in the judgment of the board of directors, the estimated expense of litigating the proceeding to conclusion, actually and reasonably incurred in connection with the defense or settlement of such proceeding, including any appeal thereof. Such indemnification shall be authorized if such person acted in good faith and in a manner he or she reasonably believed to be in, or not opposed to, the best interests of the corporation, except that no indemnification shall be made under this subsection in respect of any claim, issue, or matter as to which such person shall have been adjudged to be liable unless, and only to the extent that, the court in which such proceeding was brought, or any other court of competent jurisdiction, shall determine upon application that, despite the adjudication of liability but in view of all circumstances of the case, such person is fairly and reasonably entitled to indemnity for such expenses which such court shall deem proper. Section 607. 0852 of the FBCA provides that a corporation must indemnify an individual who is or was a director or officer who was wholly successful, on the merits or otherwise, in the defense of any proceeding to which the individual was a party because he or she is or was a director or officer of the corporation against expenses incurred by the individual in connection with the proceeding. Section 607. 0853 of the FBCA provides that a corporation may, before final disposition of a proceeding, advance funds to pay for or reimburse expenses incurred in connection with the proceeding by an individual who is a party to the proceeding because that individual is or was a director or an officer if the director or officer delivers to the corporation a signed written undertaking of the director or officer to repay any funds advanced if (a) the director or officer is not entitled to mandatory indemnification under Section 607. 0852; and (b) it is ultimately determined under Section 607. 0854 or Section 607. 0855 (as described below) that the director or officer has not met the relevant standard of conduct described in Section 607. 0851 or the director or officer is not entitled to indemnification under Section 607. 0859 (as described below). Section 607. 0854 of the FBCA provides that, unless the corporation' s articles of incorporation provide otherwise, notwithstanding the failure of a corporation to provide indemnification, and despite any contrary determination of the board of directors or of the shareholders in the specific case, a director or officer of the corporation who is a party to a proceeding because he or she is or was a director or officer may apply for indemnification or an advance for expenses, or both, to a court having jurisdiction over the corporation which is conducting the proceeding, or to a circuit court of competent jurisdiction. Our amended and restated articles of incorporation do not provide any such exclusion. After receipt of an application and after giving any notice it considers necessary, the court may order indemnification or advancement of expenses upon certain determinations of the court. Section 607. 0855 of the FBCA provides that, unless ordered by a court under Section 607. 0854, a corporation may not indemnify a director or officer under Section 607. 0851 unless authorized for a specific proceeding after a determination has been made that indemnification is permissible because the director or officer has met the relevant standard of conduct set forth in Section 607. 0851. Section 607. 0857 of the FBCA also provides that a corporation shall have the power to purchase and maintain insurance on behalf of and for the benefit of any person who is or was a director or officer of the corporation against any liability asserted against the person and incurred by him or her in any such capacity or arising out of his or her status as such, whether or not the corporation would have the power to indemnify or advance expenses to the individual

~~against such liability under the provisions of Section 607. 0857. Section 607. 0858 of the FBCA provides that the indemnification provided pursuant to Section 607. 0851 and Section 607. 0852, and the advancement of expenses provided pursuant to Section 607. 0853, are not exclusive. A corporation may, by a provision in its articles of incorporation, bylaws, or any agreement, or by vote of shareholders or disinterested directors, or otherwise, obligate itself in advance of the act or omission giving rise to a proceeding to provide any other or further indemnification or advancement of expenses to any of its directors or officers. Section 607. 0859 of the FBCA provides that, unless ordered by a court under the provisions of Section 607. 0854 of the FBCA, a corporation may not indemnify a director or officer under Section 607. 0851 or Section 607. 0858, or advance expenses to a director or officer under Section 607. 0853 or Section 607. 0858, if a judgment or other final adjudication establishes that his or her actions, or omissions to act, were material to the cause of action so adjudicated and constitute: (a) willful or intentional misconduct or a conscious disregard for the best interests of the corporation in a proceeding by or in the right of the corporation to procure a judgment in its favor or in a proceeding by or in the right of a shareholder; (b) a transaction in which a director or officer derived an improper personal benefit; (c) a violation of the criminal law, unless the director or officer had reasonable cause to believe his or her conduct was lawful or had no reasonable cause to believe his or her conduct was unlawful; or (d) in the case of a director, a circumstance under which the liability provisions of Section 607. 0834 are applicable (relating to unlawful distributions). These provisions may have the practical effect in certain cases of eliminating the ability of shareholders to collect monetary damages from our directors and officers. We believe that these provisions are necessary to attract and retain qualified persons to serve as our directors and officers. There is currently no pending material litigation or proceeding involving any of our directors, officers or employees for which indemnification is sought. Transfer Agent and Registrar American Stock Transfer (also known as Equiniti) will be the transfer agent and registrar for our common stock. The transfer agent' s address is 6201 15th Avenue, Brooklyn, NY 11219. Exhibit 31. 1 Certification Pursuant to Rule 13a- 14 (a) I, Erez Aminov, hereby certify that: 1. I have reviewed~~ this Annual Report on Form 10- K of MIRA Pharmaceuticals, Inc. **(the " Company "), relating to the consolidated balance sheets of the Company as of December 31, 2023 and 2022, and the related statements of operations and comprehensive loss, stockholders' equity, and cash flows, and the related notes for each of the years in the two- year period ended December 31, 2023. Our report includes an explanatory paragraph about the existence of substantial doubt concerning the Company' s ability to continue as a going concern. March 28, 2025 Exhibit 31. 1 CERTIFICATION I, Erez Aminov, Chief Executive Officer and Chairman of MIRA Pharmaceuticals, Inc., certify that: 1. I have reviewed this annual report on Form 10- K of MIRA Pharmaceuticals, 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- ~~15I~~ **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 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; and5. 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~~ : 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 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. Date: ~~April 1~~ **March 28** , ~~2024~~ **2025** / s / Erez Aminov Erez Aminov Chief Executive Officer and ~~ChairmanExhibit~~ **Chairman (Principal Executive Officer) Exhibit** 31. 2 I, Michelle Yanez, **MBA, Chief Financial Officer** ~~hereby certify that1. I have reviewed this Annual Report on Form 10- K~~ of MIRA Pharmaceuticals, 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 --- **certify that: a** 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 d ~~.~~ **)** Disclosed in this report any change in the registrant' s internal control over financial reporting that occurred during the registrant' s **fourth** ~~most recent~~ fiscal quarter **in** that has materially affected, or is reasonably likely to materially affect, the registrant' s internal control over financial reporting; **andDate** ~~and5. 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 directorsDate~~ : ~~April 1~~ **March 28** , ~~2024~~ **2025** / s / Michelle Yanez Michelle Yanez **, MBA** Chief Financial Officer ~~, Treasurer~~ **(Principal Financial Officer** and ~~SecretaryExhibit~~ **Principal Accounting Officer) Exhibit** 32. 1 CERTIFICATION **PURSUANT TO** ~~Pursuant to Section 906 of the Sarbanes- Oxley Act of 2002 (~~ 18 U. S. C. **SECTION** 1350 ~~) Pursuant to Section~~ **, AS ADOPTED PURSUANT TO SECTION** 906 ~~of the Sarbanes~~ **OF THE SARBANES** - **OXLEY ACT OF 2002 In connection with** ~~Oxley Act of (18 U. S. C. 1350),~~ the ~~undersigned officer~~ **annual report** of MIRA Pharmaceuticals, Inc. ~~, a Florida corporation~~ (the " Company ") ~~, does hereby certify, to the best of such officer' s knowledge and belief, that: (1) The Annual Report~~ on Form 10- K for the year ended December 31, ~~2023~~ **2024 , as filed with the Securities and Exchange Commission on the date hereof** (the " **Report** ~~Form 10- K~~ ") **, I, Erez Aminov, Chief Executive Officer** of the Company **, certify, pursuant to 18 U. S. C. § 1350, as adopted pursuant to § 906 of the Sarbanes- Oxley Act of 2002, that: 1. The Report** fully complies with the requirements of Section 13 (a) or 15 (d) of the Securities Exchange Act of 1934; and ~~(~~ 2 ~~)~~ **.** The information contained in the **Report** ~~Form 10- K~~ fairly presents, in all ~~materials~~ - **material** respects, the financial condition and ~~results~~ - **result** of operations of the Company ~~. Date: April 1, 2024 / s / Erez Aminov Erez Aminov, Chief Executive Officer and ChairmanThis certification shall not be deemed " filed " for purposes of Section 18 of the Securities Exchange Act, or otherwise subject to the liability of that section. Such certification will not be deemed to be incorporated by reference into any filing under the Securities Act or the Securities Exchange Act~~ . Exhibit 32. 2 **In connection with** ~~Pursuant to Section 906 of~~ the **annual report** ~~Sarbanes- Oxley Act of 2002 (18 U. S. C. 1350), the undersigned officer~~ of MIRA Pharmaceuticals, Inc. ~~, a Florida corporation~~ (the " Company ") **on Form 10- K for the year ended December 31** , ~~does hereby~~ **2024, as filed with the Securities and Exchange Commission on the date hereof (the " Report "), I, Michelle Yanez, MBA, Chief Financial Officer of the Company,** certify, **pursuant** to ~~the best~~ **18 U. S. C. § 1350, as adopted pursuant to § 906** of ~~such officer' s knowledge and belief~~ **the Sarbanes- Oxley Act of 2002** , that: Date: ~~April 1~~ **March 28** , ~~2024~~ **2025** / s / Michelle Yanez **, MBA** Michelle Yanez, **MBA** Chief Financial Officer ~~, Treasurer~~ **(Principal Financial Officer** and ~~SecretaryExhibit 97. 1~~ **Principal Accounting Officer)**