

## Risk Factors Comparison 2024-09-20 to 2023-09-27 Form: 10-K

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

Summary Risk Factors Our business faces significant risks and uncertainties of which investors should be aware before making a decision to invest in our common stock. If any of the following risks are realized, our business, financial condition and results of operations could be materially and adversely affected. The following is a summary of the more significant risks relating to the Company. A more detailed description of our risk factors is set forth below under the caption “ Detailed Risk Factors. ”

**Risks Related to Our Financial Position and Need for Additional Capital**

- We have a limited operating history developing vaccines and therapeutics.
- We are evaluating potential options to extend our cash runway that could impact our future operations and financial position.
- Substantial doubt exists related to our ability to operate as a going concern.
- We have incurred and expect to continue to incur significant losses.
- We anticipate that our expenses will increase in the future.
- We need additional funding to fully execute our business plan.
- The actual amount of funds we will need to operate is subject to many ~~risk~~ **risks factors**, **some of which are beyond our control**.
- Raising additional capital may cause dilution to our existing stockholders and / or restrict our operations or rights.
- ~~There can be no assurance that the sale of the Property will be completed in a timely manner or at all.~~
- ~~Failure to complete the sale of the Property is expected to negatively impact our stock price and our future business and financial results.~~
- ~~If the sale of the Property is not complete, we will have incurred substantial expenses without realizing the expected benefits of the sale.~~
- ~~The unaudited pro forma financial information included as an exhibit to our Current Report on Form 8-K filed with the SEC on September 21, 2023 is for illustrative purposes and although we do not expect actual results to differ materially from the preliminary estimates, our actual financial position or result of operations after the anticipated sale may differ from the estimates.~~
- ~~A default under the terms of the Credit Agreement could result in action against our pledged assets.~~
- ~~The Credit Agreement requires that we pay a significant amount of cash to the lender.~~
- ~~Covenant restrictions in the Credit Agreement may limit our ability to operate our business.~~

Potential use of government funding for R & D programs may impose conditions limiting our ability to take certain actions.

**Risks Related to the Development and Commercialization of Our Technologies and Product Candidates**

- We have a limited operating history developing precision antibodies and have no significant source of revenue.
- We are reliant on a limited number of product candidates that involve significant clinical testing before seeking regulatory approval.
- **If our product candidates do not receive regulatory approval our business may be harmed.**
- We may fail to capitalize on particular technology or product candidates that we expend our limited resources on.
- There can be no guarantee that we will be able to successfully develop and commercialize product candidates.
- We may not be successful in our efforts to use iBio technologies to build a pipeline of product candidates.
- Clinical trials are very expensive, time- consuming and difficult to design and implement.
- ~~We or~~, **our clients, collaborators or and potential licensees are dependent upon successful preclinical studies and demonstration of safety and efficacy in clinical studies trials to be able to commercialize product candidates**.
- If we, or our clients and collaborators, are not able to obtain required regulatory approvals, we, or our clients and collaborators, will not be able to commercialize our, or third- party, product candidates.
- Alternative technologies may supersede our technologies or make them noncompetitive, **which may harm our business**.
- Our clinical product candidates may exhibit undesirable side effects.
- ~~Our failure to receive or maintain regulatory approval for product candidates could negatively impact our revenue and profitability.~~
- Product liability lawsuits could cause us to incur substantial liabilities and to limit product commercialization.

**Risks Related to Dependence on Third Parties**

- **Any For any clinical product candidates we may develop, any** manufacturing problems experienced by our ~~only~~ third- party contract ~~manufacturer~~ **manufacturers** could result in a delay or interruption in the supply of our clinical product candidate.

**Risks Related to Dependence on Third Parties**

- If we are unable to establish new collaborations and maintain both new and existing collaborations, or if these collaborations are not successful, our business could be adversely affected.
- If third parties on whom we or our licensees will rely for the conduct of preclinical and clinical studies do not perform as required, we may not be able to obtain regulatory approval for or commercialize our product candidates.
- Our inability to obtain **raw** materials or supplies may adversely impact our business and results of operations.
- Any claims beyond our insurance coverage limits may result in substantial costs.
- We may be subject to various litigation claims and legal proceedings.

**Risks Related to Intellectual Property**

- If we or our licensors are unable to obtain and maintain sufficient patent protection for our technology and products, our ability to successfully commercialize our technology and products may be impaired.
- We may become involved in lawsuits **related** to ~~protect or enforce~~ our patents or other intellectual property, **which could be costly**.
- Patent terms may be inadequate to protect our competitive position for an adequate amount of time.
- If we are unable to protect our trade secrets, our business and competitive position would be harmed.
- We may be subject to claims challenging the inventorship of our patent filings and other intellectual property.
- Intellectual property rights do not necessarily address all potential threats to our competitive advantage.
- We may not be able to protect our intellectual property rights throughout the world.
- If we should fail to comply with various patents laws, our patent protection could be reduced or eliminated.
- Changes in patent law could increase the uncertainties and costs surrounding the prosecution of our patent applications and the enforcement or defense of our issued patents.

**Risks Related to iBio’ s Operations**

- We recently identified and remediated material weaknesses in our internal controls, and we cannot provide assurances that these weaknesses will not occur in the future.
- The loss of one or more of our executive officers or key employees could adversely affect our business.
- A failure to have an appropriately skilled and adequate workforce could adversely impact the ability of our R & D facility to operate **efficiently**.
- A natural disaster ; ~~unfavorable weather conditions~~ or other disruptions at **our** laboratory would adversely affect our business and results of operations.
- We may be unable to manage our future growth effectively, which could make it difficult to execute our business

strategy. • If we are unable to protect the confidentiality of our customers' proprietary information, we may be subject to claims. • We may face integration risks and additional costs if we acquire companies, products or technologies. • **Our business and operations would suffer in the event of computer system failures. • We rely extensively on our information technology systems and are vulnerable to damage and interruption, including cybersecurity and data leakage risks. • Any failure to maintain the security of information relating to our patients, customers, employees and suppliers, could expose us to litigation, government enforcement actions and costly response measures**. Risks Related to Our Common Stock • Our stockholders will experience dilution from the issuance of the development milestone payments if paid in equity. • **Our failure to comply with the NYSE American continued listing standards of the NYSE American could result in our delisting from the NYSE American.** • Provisions in our certificate of incorporation, bylaws and under Delaware law could discourage a takeover. • Our bylaws provide that the Delaware Court of Chancery is the exclusive forum for certain disputes. • **The issuance of preferred stock could adversely affect the rights of the holders of shares of our common stock.** • We do not anticipate paying cash dividends for the foreseeable future. • **The issuance of preferred stock could adversely affect the rights of the holders of shares of our common stock.** • Changes in general economic conditions, geopolitical conditions, domestic and foreign trade policies, monetary policies and other factors beyond our control may adversely impact our business and operating results. • **We rely extensively on our information technology systems and are vulnerable to damage and interruptions.** • Holders of our warrants have no rights as common stockholders until they exercise their warrants. • The market price of our common stock has been and may continue to be volatile. • Reports published by securities or industry analysts could adversely affect our common stock price and trading volume. • **We As a smaller reporting company, we are subject to reduced disclosure requirements applicable, which may make our common stock less attractive to investors smaller reporting companies.** 42Detailed Risk FactorsOur business faces many risks. Past experience may not be indicative of future performance, and as noted elsewhere in this Annual Report, we have included forward- looking statements about our business, plans and prospects that are subject to change. Forward- looking statements are particularly located in, but not limited to, the sections "Business" and "Management' s Discussion and Analysis of Financial Condition and Results of Operations." In addition to the other risks or uncertainties contained in this Annual Report, the risks described below may affect our operating results, financial condition and cash flows. If any of these risks occur, either alone or in combination with other factors, our business, financial condition or operating results could be adversely affected, and the trading price of our common stock may decline. Moreover, readers should note this is not an exhaustive list of the risks we face; some risks are unknown or not quantifiable, and other risks that we currently perceive as immaterial may ultimately prove more significant than expected. Statements about plans, predictions or expectations should not be construed to be assurances of performance or promises to take a given course of action. Risks Related to Our Financial Position and Need for Additional CapitalWe have a limited operating history developing vaccines and therapeutics, which may limit the ability of investors to make an informed investment decision. We commenced independent operations in 2008, and our operations to date have included organizing and staffing our company, business planning, raising capital, acquiring and developing our proprietary technologies, identifying potential product candidates and undertaking, **in house and** through third parties, preclinical trials and clinical trials of product candidates derived from our technologies. **During Prior to the past end of calendar year 2022,** we shifted our focus away from generating revenue as a CDMO service provider to the development of vaccines and therapeutics for commercialization. Our current focus is on immune- oncology therapeutics. The current vaccines and therapeutics being developed are all in preclinical development **and we have not completed any clinical trials for any vaccine or therapeutic protein product candidate produced using iBio technology and there is a risk that we will be unsuccessful in developing or commercializing any product candidates**. Certain vaccine candidates using iBio' s technologies have previously been evaluated by other organizations in Phase 1 clinical trials; however, all of our vaccine and therapeutic protein product candidates are still in preclinical development. Neither we nor our collaborators have completed any other clinical trials for any vaccine or therapeutic protein product candidate produced using iBio technology. As a result, we have not yet demonstrated our ability to successfully complete any Phase 2 or pivotal clinical trials, obtain regulatory approvals, manufacture a commercial scale product, or arrange for a third party to do so on our behalf, or conduct sales and marketing activities necessary for successful product commercialization. Consequently, any conclusion you reach about our future success or viability may not be as predictive as it might be if we had a longer operating history. Even if we receive regulatory approval for the sale of any of our product candidates, we do not know when we will begin to generate significant revenue from such product candidates, if at all. Our ability to generate revenue depends on a number of factors, including our ability to: • set an acceptable price for our products and obtain coverage and adequate reimbursement from third- party payors; • establish sales, marketing, manufacturing and distribution systems; add operational, financial and management information systems and personnel, including personnel to support our clinical, manufacturing and planned future clinical development and commercialization efforts and operations as a public company; • manufacture commercial quantities of product candidates at acceptable cost levels; • achieve broad market acceptance of our product candidates in the medical community and with third- party payors and consumers; • attract and retain an experienced management and advisory team; • launch commercial sales of our products, whether alone or in collaboration with others; **and** **and**43 • maintain, expand and protect our intellectual property portfolio. 43Because-- **Because** of the numerous risks and uncertainties associated with development and manufacturing product candidates, we are unable to predict if we will generate significant revenue. If we cannot successfully execute on any of the factors listed above, our business may not succeed, and we may never generate significant revenue. We are reviewing potential options to extend our cash runway. This review could impact our future operations and financial position. We are currently evaluating a number of potential options to expand our cash runway, the implementation of which will impact our liquidity. In an effort to improve liquidity and our runway, we have **placed consummated the sale of our CDMO business and Facility on the market, reduced our work force, signed a collaboration with AstralBio with to discover and develop novel antibodies for sale obesity and recently other**

cardiometabolic diseases, entered into a securities purchase agreement for the sale of a PIPE financing resulting in gross proceeds of the CDMO Facility, reduced our work force and ceased operations of our CDMO, thereby reducing annual spend on expenses by approximately \$ 15.0 million 67% and generating cash savings of approximately 64% from first quarter Fiscal year 2023 compared to the fourth quarter Fiscal year 2023. Potential options being considered to further increase liquidity, focusing product development on a select number of product candidates, the sale or out-licensing of certain product candidates, raising money from the capital markets, grant revenue or collaborations, or a combination thereof. However, we anticipate that our expenses will increase as we continue our research and development activities and conduct clinical trials. Our cash, cash equivalents and restricted cash of \$ 7.14, 6.4 million as of June 30, 2023-2024, is not anticipated to be sufficient to support our operations for at least 12 months from the date of the filing of this Annual Report unless we reduce our burn rate further, sell the CDMO Facility for amounts above its term note payable, or raise additional capital. Regardless of whether we are able to reduce our burn rate or sell or out-licensing certain assets or parts of the business, we will need to raise additional capital in order to fully execute our near and long-term business plans. Our In fact, our current cash, cash equivalents and restricted cash as of June 30, 2023-2024, is not anticipated to be sufficient to support operations through into the second-first quarter of Fiscal fiscal year 2024-2026. There can be no assurance that our collaboration with AstralBio all of the conditions set forth in the Purchase and Sale Agreement will be successful or met and that we will entered into agreements for be able to close on the sale or out-licensing of any of the CDMO Facility or our product candidates that if we are able to do so that we do so on favorable terms or that we will be able to do so before the maturity date of the Term Loan or that the exploration of potential options will result in any agreements or transactions, or that, if completed, any agreements or transactions will be successful or on attractive terms. If we determine to change our business strategy, our future business, prospects, financial position and operating results could be significantly different than those in historical periods or projected by our management. Because of the significant uncertainty regarding our future plans, we are not able to accurately predict the impact of a potential change in our business strategy and future funding requirements. Our historical operating results indicate substantial doubt exists related to our ability to operate as a going concern. We have incurred net losses and used significant cash in operating activities since inception, and we expect to continue to generate operating losses for the foreseeable future. As of June 30, 2023-2024, we have an accumulated deficit of \$ 288-313, 9-8 million. We held cash, cash equivalents and restricted cash of \$ 7-14, 6-4 million as of June 30, 2023-2024. Based on current trends and activities, there is significant doubt that we can continue as a going concern beyond the second-first quarter of Fiscal-fiscal year 2024-2026. We are currently evaluating a number of potential options to expand our cash runway, the implementation of which will impact our liquidity. Potential options being considered to increase liquidity include focusing product development on a select number of product candidates, the sale of the CDMO Facility, the sale or out-licensing of certain product candidates or parts of the business, raising money from capital markets, grant revenue or collaborations, or a combination thereof. Regardless of whether we are able to reduce our burn rate or sell or out-licensing certain assets or parts of the business, we will need to raise additional capital in order to fully execute our longer-term business plan. We believe based on input from expert advisors, that it is likely we will be able to implement one or more options that will extend our cash runway for 12 months or more from the date of the filing of this Annual Report. However, there can be no assurance that we will be successful in implementing any of the options that we are evaluating. Our consolidated audited financial statements as of and for the year ended June 30, 2023-2024 have been prepared under the assumption that we will continue as a going concern for the next 12 months. Our management concluded that our recurring losses from operations and the fact that we have not generated significant revenue or positive cash flows from operations raise substantial doubt about our ability to continue as a going concern for the next 12 months after issuance of our financial 44statements. Our auditors also included an explanatory paragraph in its report on our financial statements as of and for the year ended June 30, 2023-2024 with respect to this uncertainty. If we continue to experience operating losses, and we are not able to generate additional liquidity through a capital raise or other cash infusion, we might need to secure additional sources of funds, which may or may not be available to us. If we are unable to raise additional capital in sufficient amounts or on terms acceptable to us, we may have to further scale back or discontinue the development of our product candidates or other research and development initiatives or initiate steps to cease operations or liquidate our assets. We have incurred significant losses since our inception. We expect to incur losses during our next fiscal year, we do not anticipate generating significant revenue for several years and may never achieve or maintain profitability. Since our 2008 spinoff from Integrated BioPharma, we have incurred operating losses and negative cash flows from operations. Our comprehensive net loss was approximately (\$ 64-24, 8-9) million and (\$ 50-64, 5-8) million for the years ended June 30, 2024 and 2023 and 2022, respectively. As of June 30, 2023-2024, we had an accumulated deficit of approximately (\$ 288-313, 9-8) million. To date, we have financed our operations primarily through the sale of common stock, the Woodforest Credit Agreement, preferred stock and warrants. We devoting-devote substantially all of our efforts to research and development, including the development and validation of our technologies, and the development of a proprietary therapeutic products against oncology. We have not completed development of or commercialized any vaccine or therapeutic product candidates. We expect to continue to incur significant expenses and may incur operating losses for at least the next year. We anticipate that our expenses and losses will increase substantially if we: • initiate clinical trials of our product candidates; • continue the research and development of our product candidates; • seek to discover or license in additional product candidates; and • add operational, financial and management-administrative information systems and personnel, including personnel to support our product development and manufacturing efforts. Our future profitability and cash flow in large part depends on the advancement of our research and development programs, including our AI platform, and our ability to successfully develop, partner or commercialize our product candidates and to a lesser extent, which is not anticipated for several years. Our cash position is expected to limit the number of product candidates that we seek to develop. This will require us, alone or with our licensees and collaborators, to be successful in a range of challenging activities, including completing preclinical testing and clinical trials of our product candidates, obtaining regulatory approval for these product candidates and

manufacturing, marketing and selling those products for which regulatory approval is obtained or establishing collaborations with parties willing and able to provide necessary capital or other value. We may never succeed in these activities. We may never generate revenues that are significant or large enough to achieve profitability. All of our existing product candidates are in various stages of development and will require extensive additional clinical evaluation, regulatory review and approval, significant marketing efforts and substantial investment before they could provide us with any revenue. As a result, even if we successfully develop, achieve regulatory approval and commercialize our products, we may be unable to generate revenue for many years, if at all. We do not anticipate that we will generate revenue from product sales for at least several years, if at all. If we are unable to generate revenue from product sales, we will not become profitable, and we may be unable to continue our operations. Even if we do achieve profitability, we may not be able to sustain or increase profitability on a quarterly or annual basis. Our failure to become and remain profitable would diminish the value of our company and could impair our ability to raise capital, expand our business, diversify our product offerings or continue our operations. A decline in the value of our company could also cause you to lose all or part of your investment. We anticipate that our expenses will increase in the future. Although we have recently reduced expenses, we expect our research and development expenses to increase significantly in light of the acquisition of the assets of Rubrye as our product candidates advance in clinical development, and as we add more employees. As part of the regulatory process, we must conduct clinical trials for each product candidate to demonstrate safety and efficacy to the satisfaction of the FDA and other regulatory authorities. The number and design of the clinical trials that will be required varies depending upon product candidate, the condition being evaluated, and the trial results themselves. Therefore, it is difficult to accurately estimate the cost of the clinical trials. Clinical trials are very expensive and difficult to design and implement, in part because they are subject to rigorous regulatory requirements. The clinical trial process is also time consuming. We estimate that clinical trials of our product candidates will take at least several years to complete. Because of numerous risks and uncertainties involved in our business, the timing or amount of increased development expenses cannot be accurately predicted, and our expenses could increase beyond expectations if we are required by the FDA, or comparable non- U. S. regulatory authorities, to perform studies or clinical trials in addition to those we currently anticipate. We anticipate that further product development is also expected to increase expenses, including but not limited to the expected continued initiation of IND- enabling studies IBIO- 101 , reviewing whether IBIO- 101 can be utilized in certain orphan diseases, and the additional studies that will be required to support development of our immuno- oncology and cardiometabolic programs. Furthermore, failure can occur at any stage of the trials, and we could encounter problems that cause us to abandon or repeat clinical trials. In addition, as we expand our business, we will need to retain additional employees with the necessary skills including employees for our continued expansion of drug discovery capabilities in San Diego, California. Even if any of our product candidates are approved for commercial sale, we anticipate incurring significant costs associated with the commercial launch of and the related commercial- scale manufacturing requirements for our product candidates. As a result, we expect to continue to incur significant and increasing operating losses and negative cash flows for the foreseeable future. Because of the numerous risks and uncertainties associated with biopharmaceutical product development and commercialization, we are unable to accurately predict the timing or amount of future expenses or when, or if, we will be able to achieve or maintain profitability. These losses have had and will continue to have an adverse effect on our financial position and working capital. We need additional funding to fully execute our business plan, which funding may not be available on commercially acceptable terms or at all. If we are unable to raise capital when needed, we may be forced to delay, reduce or eliminate the commercialization of our development and manufacturing services and efforts for our product development programs. We Even if we are able to consummate the sale of the Facility, we will need additional capital to fully implement our near term and long- term business, operating and development plans as we do not anticipate that any of our product candidates will generate revenue in the next few years, if at all. To the extent that we initiate or continue clinical development without securing collaborator or licensee funding, our research and development expenses could increase substantially. When we elect to raise additional funds or additional funds are required, we may raise such funds from time to time through public or private equity offerings, debt financings, corporate collaboration and licensing arrangements or other financing alternatives. Additional equity or debt financing or corporate collaboration and licensing arrangements may not be available on acceptable terms, if at all. We currently have no committed sources of funding. Our purchase of The At Market Issuance Sales Agreement with Chardan Lincoln Park Capital Fund Markets, LLC ("Lincoln Park"), allows us to sell shares of common stock to Lincoln Park only if certain conditions are met and Craig- Hallum Capital Group LLC there can be no guarantee that we will meet such conditions. The Controlled Equity Offering SM Sales Agreement (the "Sales Agreement") that we entered into with Chardan Capital Markets Cantor Fitzgerald & Co. ("Cantor Fitzgerald") in November 25, 2020-2024 , LLC and Craig- Hallum Capital Group LLC on July 3, 2020-2024 , also has certain requirements that we must meet in order to sell securities pursuant to the Sales ATM Agreement. There can be no assurance that we will meet the requirements to be able to sell securities pursuant to the ATM Purchase Agreement or the Sales Agreement, of if we meet the requirements that we will be able to raise sufficient funds on favorable terms. In addition, we will not be eligible to sell securities pursuant our registration statement on Form S-3, including pursuant to the Sales Agreement, from the date of the filing of this Annual Report until March 1, 2024 due to our late filing of our Quarterly Report on Form 10-Q for the quarter ended December 31, 2022. There can be no assurances that we will be able to raise the funds needed, especially in light of the fact that our ability to sell securities registered on our registration statement on Form S-3 after we regain eligibility to use a registration statement on Form S- 3 will be limited until such time the market value of our voting securities held by non-affiliates is \$ 75 million or more. If we are unable to raise capital in sufficient amounts when needed or on attractive terms, we would be forced to delay, reduce or eliminate our research and development programs or commercialization efforts and our ability to generate revenues and achieve or sustain profitability will be substantially harmed. If we are unable to raise funds when required or on favorable terms, this assumption may no longer be operative, and we may

have to: a) significantly delay, scale back, or discontinue the product application and / or commercialization of our proprietary technologies; b) seek collaborators for our technology and product candidates on terms that are less favorable than 46 than might otherwise be available; c) relinquish or otherwise dispose of rights to technologies, product candidates, or products that we would otherwise seek to develop or commercialize; or d) possibly liquidate assets or cease operations. The actual amount of funds we will need to operate is subject to many risk factors, some of which are beyond our control. The actual amount of funds we will need to operate is subject to many factors, some of which are beyond our control therefore we are unable to determine this amount with certainty. These factors include the following: • the progress of our research activities; • the number and scope of our research programs; • the progress of our preclinical and clinical development activities; • the progress of the development efforts of parties with whom we have entered into research and development agreements and amount of funding received from partners and collaborators; • our ability to maintain current research and development licensing arrangements and to establish new research and development and licensing arrangements; • our ability to achieve our milestones under licensing arrangements; • the costs associated with manufacturing related services to produce materials for use in our clinical trials; • the costs involved in prosecuting and enforcing patent claims and other intellectual property rights; • the costs incurred to screen and enroll patients; and • the costs and timing of regulatory approvals. We have based our estimate on assumptions that may prove to be wrong. We may need to obtain additional funds sooner or in greater amounts than we currently anticipate. Potential sources of financing include strategic relationships, public or private sales of our shares or debt and other sources. Additionally, we may seek to access the public or private equity markets when conditions are favorable due to our long- term capital requirements. We do not have any committed sources of financing at this time, and it is uncertain whether additional funding will be available when we need it on terms that will be acceptable to us, or at all. Raising additional capital may cause dilution to our existing stockholders, restrict our operations or require us to relinquish rights to our technologies or product candidates. Until such time as we can generate substantial development, manufacturing, license or product revenues, we expect to finance our cash needs through a combination of equity offerings, collaborations, strategic alliances, service contracts, manufacturing contracts, facility build- out and technology transfer contracts, licensing and other arrangements. Sources of funds may not be available or, if available, may not be available on terms satisfactory to us. If we raise additional funds by issuing equity securities, our stockholders will experience dilution. Debt financing, if available, would result in increased fixed payment obligations and may involve agreements that include covenants limiting or restricting our ability to take specific actions, such as incurring additional debt, making capital expenditures or declaring dividends. Any debt financing or additional equity that we raise may contain terms, such as liquidation and other preferences, which are not favorable to us or our stockholders. If we raise additional funds through collaboration and licensing arrangements with third parties, it may be necessary to relinquish valuable rights to our technologies, future 47 revenue -- revenue streams, research programs or product candidates or to grant licenses on terms that may not be favorable to us. Should the financing we require to sustain our working capital needs be unavailable or prohibitively expensive when we require it, our business, operating results, financial condition and prospects could be materially and adversely affected, and we may be unable to continue our operations. To 47 To the extent that we raise additional capital through a public or private offering and sale of equity securities, your ownership interest will be diluted, and the terms of these securities may include liquidation or other preferences that adversely affect your rights as a stockholder. Sales of our common stock offered through current or future equity offerings may result in substantial dilution to our stockholders. The sale of a substantial number of shares of our common stock to investors, or anticipation of such sales, could make it more difficult for us to sell equity or equity- related securities in the future at a time and at a price that we might otherwise wish to effect sales. There can be no assurance that the sale of the Property will be completed in a timely manner or at all. If the sale is not completed by December 31, 2023, it is unlikely iBio CDMO would have sufficient funding to pay the Term Loan with Woodforest for which we are a guarantor. Although we have entered into a Purchase and Sale Agreement for the sale of the Property, there can be no assurance that the sale of the Property will be completed in a timely manner or at all. The closing of the sale is subject to many conditions including: (i) Majestic Realty's delivery to iBio CDMO and the Escrow Agent of written notice of its approval of the condition of the Property (the "Property Approval Notice") on or before 5: 00 p. m. Central time on October 16, 2023; (ii) Majestic Realty obtaining the approval of The Board of Regents of the Texas A & M University System of Majestic Realty's purchase from it of the fee interest in the Land on or before 5: 00 p. m. Central time on November 13, 2023; and (iii) the delivery at closing by the title company of a title policy to Majestic Realty in the amount of the purchase price. None of the mentioned closing conditions are within our control. We cannot guarantee that these conditions will be satisfied. The conditions to the closing of the sale of the Property may not be fulfilled in a timely manner or at all, and, accordingly, the sale may not be completed. If the closing is not consummated prior to the December 31, 2023 maturity date of the Term Loan it is unlikely that we will have sufficient funds to repay the Term Loan on its maturity date, the outstanding balance of which is \$ 12, 688, 817 as of September 15, 2023. Our failure to make such payments when due could result in our loss of the Facility. Any action to proceed against our assets would likely have a serious disruptive effect on our business operations, especially if the Facility or our other assets were foreclosed upon or our guarantee were enforced. Failure to complete the sale of the Property could negatively impact our stock price and our future business and financial results. Majestic Realty's obligation to complete the sale of the Property is subject to the satisfaction or waiver of a number of conditions set forth in the Purchase and Sale Agreement. There can be no assurance that the conditions to complete the sale will be satisfied or waived or that the sale will be completed. If the sale is not completed for any reason, our ongoing business may be materially and adversely affected and, without realizing any of the benefits of having completed the sale, we would be subject to a number of risks, including the following: • we may experience negative reactions from the financial markets, including negative impacts on the trading price of our common stock, which could affect its ability to secure sufficient financing in the future on attractive terms (or at all); • we will be required to pay our transaction- related expenses incurred in connection with the Purchase and Sale Agreement whether or not the sale is completed; and • matters related to the sale of the Property may require substantial commitments of time and resources by our

management, which could otherwise have been devoted to other opportunities that may have been beneficial to us. In addition, we could be subject to litigation related to any failure to complete the sale. If the sale of the Property is not completed, we cannot assure our stockholders that the risks described above will not materialize and will not materially and adversely affect our business, financial condition, financial results and common stock prices. 48If the sale of the Property is not completed, we will have incurred substantial expenses without realizing the expected benefits of the sale. We have incurred substantial expenses in connection with the negotiation and completion of the transactions contemplated by the Purchase and Sale Agreement. If the sale of the Property is not completed, we would have to recognize these expenses without realizing the expected benefits of the sale. The unaudited pro forma financial information included as an exhibit to this Current Report on Form 8-K is for illustrative purposes. Our actual financial position or results of operations after the anticipated sale may differ materially. The unaudited pro forma financial information included as an exhibit to our Current Report on Form 8-K filed with the SEC on September 21, 2023 and incorporated by reference herein is presented for illustrative purposes only and is not necessarily indicative of what our actual financial position or results of operations would have been had the sale been completed on the dates indicated. The unaudited pro forma financial information reflects adjustments, which are based upon estimates. The information upon which these adjustments and assumptions have been made is preliminary, and these kinds of adjustments and assumptions are difficult to make with complete accuracy. Moreover, the pro forma financial information does not reflect all costs that are expected to be incurred by us. Accordingly, the final accounting adjustments may differ materially from such pro forma information. The failure to comply with the terms of the Credit Agreement, as amended, could result in a default under the terms of the Credit Agreement, as amended, and, if uncured, it could potentially result in action against our pledged assets. There is no assurance that we will generate sufficient revenue or raise sufficient capital to be able to make the required principal payment under the Term Loan that iBio CDMO entered into with Woodforest. The Term Loan with Woodforest is secured by (a) a leasehold deed of trust on our Facility, and (b) a first lien on all assets of iBio CDMO including the Facility. We have also guaranteed the payment of all iBio CDMO's obligations under the Credit Agreement. The Term Loan matures the earlier of December 31, 2023, or the acceleration of maturity of the Term Loan pursuant to the Credit Agreement. If we or iBio CDMO fail to comply with the terms of the Term Loan and / or the related agreements, including the affirmative and negative covenants contained therein, Woodforest National Bank could declare a default and if the default were to remain uncured, Woodforest National Bank would have the right to proceed against any or all of the collateral securing their Term Loan. Our failure to make such payments when due could result in our loss of the Facility. Any action to proceed against our assets would likely have a serious disruptive effect on our business operations, especially if the Facility or our other assets were foreclosed upon. The Credit Agreement, as amended, requires that we pay a significant amount of cash to the lender. Our ability to generate sufficient cash to make all required payments under the Credit Agreement, as amended, depends on many factors beyond our control. Our ability to make payments on and to refinance the Term Loan, to fund planned capital expenditures and to maintain sufficient working capital depends on our ability to raise capital and generate cash in the future. This, to a certain extent, is subject to general economic, financial, competitive, legislative, regulatory and other factors that are beyond our control. We cannot assure you that our business will generate sufficient cash flow from operations or from other sources in an amount sufficient to enable us to service our debt or to fund our other liquidity needs. To date, we have generated minimal revenue and have financed a significant portion our capital needs from sales of our equity and most recently the Term Loan. There can be no assurance that financing options will be available to us when needed to make payments under the Term Loan or if available, that they will be on favorable terms. If our cash flow and capital resources are insufficient to allow us to make payments due under the Term Loan, we may need to seek additional capital or restructure or refinance all or a portion of the Term Loan on or before the maturity thereof, any of which could have a material adverse effect on our business, financial condition or results of operations. Although we plan to explore potential longer-term financing options for our Facility, including, but not limited to, the sale of the Facility, we cannot assure you that we will be able to enter consummate the sale prior to the maturity date of the Term Loan or refinance the Term Loan on commercially reasonable terms or at all. If we are unable to generate sufficient cash flow to repay or refinance our debt on favorable terms, it could significantly adversely affect our financial condition. Our ability to restructure or refinance the Term Loan will depend on the condition of the capital markets and our financial condition. Any refinancing of the Term Loan could 49be at higher interest rates and may require us to comply with more onerous covenants, which could further restrict our business operations. There can be no assurance that we will be able to obtain any financing when needed. Covenant restrictions in the Credit Agreement, as amended, may limit our ability to operate our business. The Credit Agreement contains, and our future indebtedness agreements may contain covenants that restrict our ability to finance future operations or capital needs or to engage in other business activities. The Credit Agreement, as amended, currently requires maintaining \$ 1,000,000 of unrestricted cash and cash equivalents and restricts our ability to: • incur, assume or guarantee additional Debt (as defined in the Credit Agreement); • repurchase capital stock; • make other restricted payments including, without limitation, paying dividends and making investments; • sell or otherwise dispose of assets. As of the date of this filing, iBio is in compliance with this covenant in the Credit Agreement, as amended. In order to develop certain of our product candidates we will rely upon government funding. Any government funding for our R & D programs may impose requirements that limit our ability to take certain actions, and subject us to potential financial penalties, which could materially and adversely affect our business, financial condition and results of operations. We have applied for government grants to support some of our research and development activities for our product candidates. If we do not obtain the grants we applied for or other grants, we currently do not anticipate developing certain of our product candidates. Even if we obtain grant funding, the terms of the grant funding may be restrictive. Often government grants include provisions that reflect the government's substantial rights and remedies, many of which are not typically found in commercial contracts, including powers of the government to potentially require repayment of all or a portion of the grant award proceeds, in certain cases with interest, in the event we violate certain covenants pertaining to various matters. Risks Related to the Development and Commercialization of Our Technologies and Product Candidates We currently

have a limited operating history developing precision antibodies, no products approved for commercial sale, have no significant source of revenue and may never generate significant revenue. We are a pre-clinical-stage biopharmaceutical company that recently began to focus on leveraging the power of Artificial Intelligence (AI) for the development of precision antibodies. Prior to August 23, 2021, when we entered into a series of agreements with RubrYc, we were focused on our CDMO business. We have never generated any product revenue from the development of precision antibodies, do not expect to generate revenue in the near future and do not have any products approved for sale. Our operations to date have been primarily focused on developing our product candidates. We have not yet successfully conducted any clinical trials of any antibodies we have developed. Consequently, predictions about our ~~50~~future-- **future** success or viability may not be as accurate as they could be if we had a longer operating history or a history of successfully developing and commercializing product candidates. All of our existing product candidates are in very early stages of development and will require extensive additional clinical evaluation, regulatory review and approval, significant marketing efforts and substantial investment before they could provide us with any revenue. We currently have a limited number of product candidates in early stages of pre-clinical development and are dependent on the success of these product candidates, which requires significant clinical testing before seeking regulatory approval. If our product candidates do not receive regulatory approval or are not successfully commercialized, our business may be harmed. We are currently in preclinical development of multiple product candidates as potential treatments across multiple therapeutic areas; however, we announced we are evaluating potential options to extend our cash runway and may change the focus of our resources. It is possible that we may never be able to develop a marketable product candidate. We expect that a substantial portion of our efforts and expenditures over the next few years will be devoted to our product candidates in the immune-oncology field. Accordingly, our business currently depends heavily on the successful development, regulatory approval and commercialization of these product candidates, which may not receive regulatory approval or be successfully commercialized even if regulatory approval is received. The research, testing, manufacturing, labeling, approval, sale, marketing and distribution of product candidates are and will remain subject to extensive regulation by the FDA and other regulatory authorities in the United States and other countries that each have differing ~~regulations~~ **48regulations**. We are not permitted to market any product in the United States unless and until we receive approval from the FDA, or in any foreign countries unless and until we receive the requisite approval from regulatory authorities in such countries. We have never submitted an NDA or BLA to the FDA or comparable applications to other regulatory authorities and do not expect to be in a position to do so for the foreseeable future. Obtaining approval of an NDA or BLA is an extensive, lengthy, expensive, and inherently uncertain process, and the FDA may delay, limit or deny approval of its product for many reasons. Because we have limited financial and managerial resources, our focus is limited to the development of multiple product candidates. As a result, we may forego or delay pursuit of opportunities with other technologies or product candidates that later prove to have greater commercial potential. Our resource allocation decisions may cause us to fail to capitalize on viable commercial products or profitable market opportunities. Our spending and the spending of our clients and collaborators may not yield any commercially viable products. We have based our research and development efforts largely on our technologies and product candidates derived from such technologies. Notwithstanding our large investment to date and anticipated future expenditures in these technologies, we have not yet developed, and may never successfully develop, any marketed products using these technologies. As a result, we may fail to address or develop product candidates based on other scientific approaches that may offer greater commercial potential or for which there is a greater likelihood of success. We also may not be successful in our efforts to identify or discover additional product candidates using our technologies. Research programs to identify new product candidates require substantial technical, financial, and human resources. These research programs may initially show promise in identifying potential product candidates yet fail to yield product candidates for clinical development. We may expend our limited resources to pursue a particular technology or product candidate and fail to capitalize on technologies or product candidates that may be more profitable or for which there is a greater likelihood of success. Because we have limited financial and managerial resources, we focus on specific product candidates derived from or enhanced by our technologies or that have been identified and partially developed by our clients or collaborators. As a result, we may forego or delay pursuit of opportunities with other technologies or product candidates that later prove to have greater commercial potential. Our resource allocation decisions may cause us to fail to capitalize on viable ~~51~~commercial-- **commercial** products or profitable market opportunities. Our spending and the spending of our clients and collaborators may not yield any commercially viable products. We have based our research and development efforts largely on our technologies and product candidates derived from such technologies. Notwithstanding our large investment to date and anticipated future expenditures in these technologies, we have not yet developed, and may never successfully develop, any marketed products using these technologies. As a result, we may fail to address or develop product candidates based on other scientific approaches that may offer greater commercial potential or for which there is a greater likelihood of success. We also may not be successful in our efforts to identify or discover additional product candidates using our technologies. Research programs to identify new product candidates require substantial technical, financial, and human resources. These research programs may initially show promise in identifying potential product candidates yet fail to yield product candidates for clinical development. If we do not accurately evaluate the commercial potential or target market for a particular product candidate, we may relinquish valuable rights to that product candidate through collaboration, licensing or other royalty arrangements on terms less favorable to us than possible. ~~We~~ **49We**, our clients and collaborators, are very early in our development efforts. If we or our clients and collaborators are unable to successfully develop and commercialize product candidates or experience significant delays in doing so, our business will be materially harmed. All of our ~~vaccine and~~ therapeutic protein product candidates are still in preclinical development. Our ability to generate product sales revenues for our own products, which we do not expect will occur for many years, will depend heavily on the successful development and eventual commercialization of our product candidates. The success of our product candidates will depend on several factors, including the following: • completion of preclinical studies and clinical trials with positive results; • receipt of marketing

approvals from applicable regulatory authorities; ● obtaining and maintaining patent and trade secret protection and regulatory exclusivity, which may exceed patent exclusivity, for our product candidates; ● making arrangements with third- party manufacturers for commercial manufacturing capabilities; ● launching commercial sales of our products, if and when approved, whether alone or in collaboration with others; ● successfully maintaining existing collaborations and entering into new ones throughout the development process as appropriate, from preclinical studies through to commercialization; ● acceptance of the products, if and when approved, by patients, the medical community and third- party payors; ● effectively competing with other products; ● obtaining and maintaining coverage and adequate reimbursement by third- party payors, including government payors, for any products we successfully develop; ● protecting our rights in our intellectual property portfolio; and ● maintaining a continued acceptable safety profile of the products following approval. ~~52~~If we or our collaborators do not achieve one or more of these factors in a timely manner or at all, we could experience significant delays or an inability to successfully develop and commercialize our product candidates, which would materially harm our business. We may not be successful in our efforts to use iBio technologies to build a pipeline of product candidates and develop marketable products. While we believe that data we and our collaborators have obtained from preclinical studies of iBio technology- derived and iBio technology- enhanced product candidates has validated these technologies, our technologies have not yet, and may never lead to, approvable or marketable products. Even if we are successful in further validating our technologies and continuing to build our pipeline, the potential product candidates that we identify may not be suitable for clinical development for many possible reasons, including harmful side effects, limited efficacy or other characteristics that indicate that such product candidates are unlikely to be products that will receive marketing approval and achieve market acceptance. If we and our collaborators do not successfully develop and commercialize product candidates based upon our technologies, we will not obtain product or collaboration revenues in future periods, which likely would result in significant harm to our financial position and adversely affect our stock price. Clinical trials are very expensive, time- consuming, and difficult to design and implement. **Human** ~~50~~**Human** clinical trials are very expensive and difficult to design and implement, in part because they are subject to rigorous regulatory requirements. The clinical trial process is also time- consuming. We estimate that clinical trials for our product candidates would take at least several years to complete. Furthermore, failure can occur at any stage of the trials, and we could encounter problems that cause us to abandon or repeat clinical trials. Commencement and completion of clinical trials may be delayed by several factors, including: ● obtaining an IND application with the FDA or foreign equivalent to commence clinical trials; ● identification of, and acceptable arrangements with, one or more clinical sites; ● obtaining IRB or **Ethics Committee (“EC”)** approval to commence clinical trials ; ● ~~obtaining IBC approval for use of a genetically modified organism~~; ● unforeseen safety issues; ● determination of dosing; ● lack of effectiveness during clinical trials; ● slower than expected rates of patient recruitment; ● inability to monitor patients adequately during or after treatment; ● lower than expected rates of patient completion of clinical trials; ● inability to obtain supply of our drug candidate in a timely manner; ● inability or unwillingness of medical investigators to follow our clinical protocols; and ● unwillingness of the FDA or foreign equivalent, **or** IRBs / ECs , ~~or IBCs~~ to permit the clinical trials to be initiated. In addition, we, IRBs / ECs or the FDA or foreign equivalent may suspend our clinical trials at any time if it appears that we are exposing participants to unacceptable health risks or if IRBs / ECs or the FDA or foreign equivalent finds deficiencies in our submissions or conduct of our trials. ~~53~~**Neither** -- **Neither** we nor our clients, collaborators or potential licensees will be able to commercialize product candidates based on our technologies and services if preclinical studies do not produce successful results or clinical trials do not demonstrate safety and efficacy in humans. Preclinical and clinical testing is expensive, difficult to design and implement, can take many years to complete and has an uncertain outcome. Success in preclinical testing and early clinical trials does not ensure that later clinical trials will be successful, and interim results of a clinical trial do not necessarily predict final results. We and our licensees may experience numerous unforeseen events during, or as a result of, preclinical testing and the clinical trial process that could delay or prevent the commercialization of product candidates based on our iBio technologies, including the following: ● Preclinical or clinical trials may produce negative or inconclusive results, which may require additional preclinical testing, additional clinical trials or the abandonment of projects that we expect to be promising. For example, promising animal data may be obtained about the anticipated efficacy of a therapeutic protein product candidate and then human tests may not result in such an effect. In addition, unexpected safety concerns may be encountered that would require further testing even if the therapeutic protein product candidate produced an otherwise favorable response in human subjects. ● Initial clinical results may not be supported by further or more extensive clinical trials. For example, a licensee may obtain data that suggest a desirable immune response from a product candidate in a small human study, but when tests are conducted on larger numbers of people, the same extent of immune response may not occur. If the **immune** ~~51~~**immune** response generated by a product candidate is too low or occurs in too few treated individuals, then the product candidate will have no commercial value. ● Enrollment in any clinical trials that we or our licensee’ s conduct may be slower than projected, resulting in significant delays. The cost of conducting a clinical trial increases as the time required to enroll adequate numbers of human subjects to obtain meaningful results increases. Enrollment in a clinical trial can be a slower- than- anticipated process because of competition from other clinical trials, because the study is not of interest to qualified subjects, or because the stringency of requirements for enrollment limits the number of people who are eligible to participate in the clinical trial. ● We or our potential licensees might have to suspend or terminate clinical trials if the participating subjects are being exposed to unacceptable health risks. Animal tests do not always adequately predict potential safety risks to human subjects. The risk of any candidate product is unknown until it is tested in human subjects, and if subjects experience adverse events during the clinical trial, the trial may have to be suspended and modified or terminated entirely. ● Regulators or institutional review boards may suspend or terminate clinical research for various reasons, including safety concerns or noncompliance with regulatory requirements. ● Any regulatory approval ultimately obtained may be limited or subject to restrictions or post- approval commitments that render the product not commercially viable. ● The effects of iBio technology- derived or iBio technology- enhanced product candidates may not be the desired effects or may include undesirable

side effects. Significant clinical trial delays could allow our competitors to bring products to market before we or our licensees do and impair our ability to commercialize our technologies and product candidates based on our technologies. Poor clinical trial results or delays may make it impossible to license a product candidate, or reduce its attractiveness to prospective licensees, so that we will be unable to successfully develop and commercialize such a product candidate. Clinical trials are risky, lengthy, and expensive. We will incur substantial expense for, and devote significant time and resources to, preclinical testing and clinical trials, yet we cannot be certain that these tests and trials will demonstrate that a product candidate is effective and well-tolerated or will ever support its approval and commercial sale. For example, ~~54clinical~~ **clinical** trials require adequate supplies of clinical trial material and sufficient patient enrollment to power the trial. Delays in patient enrollment can result in increased costs and longer development times. Even if we, or a licensee or collaborator, if applicable, successfully complete clinical trials for our clinical product candidate, we or they might not file the required regulatory submissions in a timely manner and may not receive marketing approval for the clinical product candidate. We cannot assure you that our clinical product candidate will successfully progress further through the drug development process or will ultimately result in an approved and commercially viable product. If we, or our clients and collaborators, are not able to obtain, or if there are delays in obtaining, required regulatory approvals, we, or our clients and collaborators, will not be able to develop or commercialize our, or third-party, product candidates or will not be able to do so as soon as anticipated, and our ability to generate revenue will be materially impaired. Our product candidates and the activities associated with their development and commercialization, including their design, testing, manufacture, safety, efficacy, recordkeeping, labeling, storage, approval, advertising, promotion, sale and distribution, are subject to comprehensive regulation by the FDA and by similar regulatory authorities outside the United States. Failure to obtain marketing approval for a product candidate will prevent us from commercializing the product candidate. We have not received approval to engage in any clinical trials for any of our product candidates and there is no assurance that we will conduct successful clinical trials or obtain approval to market any of our product candidates from regulatory authorities in any jurisdiction. We have only limited experience in filing and supporting the applications necessary to gain marketing approvals and expect to rely on third parties to assist us in this process. Securing marketing approval ~~52approval~~ **approval** requires the submission of extensive preclinical and clinical data and supporting information to regulatory authorities for each therapeutic indication to establish the product candidate's safety and efficacy. Securing marketing approval also requires the submission of information about the product manufacturing process to, and inspection of manufacturing facilities by, the regulatory authorities. Our product candidates may not be effective, may be only moderately effective or may prove to have undesirable or unintended side effects, toxicities or other characteristics that may preclude our obtaining marketing approval or prevent or limit commercial use. If any of our product candidates receives marketing approval, the accompanying label may limit the approved use in such a restrictive manner that it is not possible to obtain commercial viability for such product. The process of obtaining marketing approvals, both in the United States and abroad, is expensive and may take many years. If additional clinical trials are required for certain jurisdictions, these trials can vary substantially based upon a variety of factors, including the type, complexity and novelty of the product candidates involved, and may ultimately be unsuccessful. Changes in marketing approval policies during the development period, changes in or the enactment of additional statutes or regulations, or changes in regulatory review process for each submitted product application, may cause delays in the review and approval of an application. Regulatory authorities have substantial discretion in the approval process and may refuse to accept a marketing application as deficient or may decide that our data is insufficient for approval and require additional preclinical, clinical or other studies. In addition, varying interpretations of the data obtained from preclinical and clinical testing could delay, limit or prevent marketing approval of a product candidate. Any marketing approval we ultimately obtain may be limited or subject to restrictions or post-approval commitments that render the approved product not commercially viable. Although the FDA and other regulatory authorities have approved plant-based therapeutics in the past, consistent with the oversight of all products, the FDA is monitoring whether these plant-based therapeutics pose any health and human safety risks. While they have not issued any regulation to date that is averse to plant-based vaccines or therapeutics, it is possible that the FDA and other regulatory authorities could issue regulations in the future that could adversely affect our product candidates. If we experience delays in obtaining approval or if we fail to obtain approval of our product candidates, the commercial prospects for our product candidates may be harmed and our ability to generate revenues will be materially impaired. Any product candidate for which we obtain marketing approval, along with the manufacturing processes, post-approval clinical data, labeling, packaging, distribution, adverse event reporting, storage, recordkeeping, export, import, advertising and promotional activities for such product candidate, among other things, will be subject to extensive and ongoing requirements of and review by the FDA and other regulatory authorities. These requirements include submissions of safety, ~~55efficacy~~ **efficacy** and other post-marketing information and reports, establishment registration and drug listing requirements, continued compliance with ~~current Good Manufacturing Practice, or cGMP~~ **current Good Manufacturing Practice, or cGMP**, requirements relating to manufacturing, quality control, quality assurance and corresponding maintenance of records and documents, requirements regarding the distribution of samples to physicians and recordkeeping and current GCP requirements for any clinical trials that we conduct post-approval. Even if marketing approval of a product candidate is granted, the approval may be subject to limitations on the indicated uses for which the product candidate may be marketed or to the conditions of approval. If our clinical product candidate receives marketing approval, the accompanying label may limit the approved use of our product, which could limit sales. Alternative technologies may supersede our technologies or make them noncompetitive, which would harm our ability to generate future revenue. The manufacture of precision antibodies and use of artificial intelligence to do so is intensely competitive. There are currently extensive research efforts in this field, which result in rapid technological progress that can render existing technologies obsolete or economically noncompetitive. If our competitors succeed in developing more effective technologies or render our technologies obsolete or noncompetitive, our business will suffer. Many universities, public agencies and established pharmaceutical, biotechnology, and other life sciences companies with substantially greater resources than we have are developing and using technologies and are actively engaging in

the development of products similar to or competitive with our technologies and products. To remain competitive, we must continue to invest in new technologies and improve existing technologies. To make such renewing investment we will need to obtain additional financing and / or collaborations. If we are unable to secure such financing, we will not have sufficient resources to continue ~~such~~ **53** investment. In addition, they also have significantly greater experience in the discovery and development of products, as well as in obtaining regulatory approvals of those products in the United States and in foreign countries. Our current and potential future competitors also have significantly more experience commercializing drugs that have been approved for marketing. Mergers and acquisitions in the pharmaceutical and biotechnology industries could result in even more resources being concentrated among a small number of our competitors. Our competitors may devise methods and processes for protein expression that are faster, more efficient or less costly than that which can be achieved using iBio technologies. There has been and continues to be substantial academic and commercial research effort devoted to the development of such methods and processes. If successful competitive methods are developed, it may undermine the commercial basis for iBio products and our technologies and related services. For our cancer product candidates, not only will we compete with companies engaged in various cancer treatments including radiotherapy and chemotherapy, but we will also compete with various companies that have developed or are trying to develop immunology vaccines for the treatment of cancer. Certain of our competitors have substantially greater capital resources, large customer bases, broader product lines, sales forces, greater marketing and management resources, larger research and development staffs with extensive facilities and equipment than we do and have more established reputations as well as global distribution channels. Our most significant competitors, among others, are fully integrated pharmaceutical companies such as Eli Lilly and Company, Bristol-Myers Squibb Company, Merck & Co., Inc., Novartis AG, MedImmune, LLC (a wholly owned subsidiary of AstraZeneca plc), Johnson & Johnson, Pfizer Inc., Merck KGaA and Sanofi SA, and more established biotechnology companies such as Genentech, Inc. (a member of the Roche Group), Amgen Inc., Gilead Sciences, Inc. and its subsidiary Kite Pharma, Inc., **more advanced obesity and cardiometabolic companies such as Keros Therapeutics, Inc., Scholar Rock, Inc., and Biohaven, Ltd.**, and competing cancer immunotherapy companies such as, Bluebird Bio, Inc., Transgene SA, Bausch Health Companies, Lumos Pharma, Agenus Inc., Aduro Biotech, Inc., Advaxis, Inc., ImmunoCellular Therapeutics, Ltd., IMV Inc., Oxford BioMedica plc, Bavarian Nordic A / S, Celldex Therapeutics, Inc., as well as tech enabled drug discovery companies such as Recursion, Abcellera Biologics, Inc., Cellarity, and BenevolentAI. Our product candidates may exhibit undesirable side effects when used alone or in combination with other approved pharmaceutical products, which may delay or preclude its development or regulatory approval or limit its use if ever approved. Throughout the drug development process, we must continually demonstrate the activity, safety, and tolerability of our product candidates in order to obtain regulatory approval to further advance our clinical development, or to eventually market it. Even if any of our product candidates demonstrate adequate biologic activity and clear clinical benefit, any ~~56 unacceptable~~ **unacceptable** side effects or adverse events, when administered alone or in the presence of other pharmaceutical products, may outweigh these potential benefits. We may observe adverse or serious adverse events or drug- drug interactions in preclinical studies or clinical trials of our clinical product candidate, which could result in the delay or termination of its development, prevent regulatory approval, or limit its market acceptance if it is ultimately approved. Adverse events caused by any of our product candidates or generally by plant- based therapeutics could cause reviewing entities, clinical trial sites or regulatory authorities to interrupt, delay or halt clinical trials and could result in the denial of regulatory approval. If an unacceptable frequency or severity of adverse events are reported in any clinical trials we may conduct for our product candidates, our ability to obtain regulatory approval for such clinical product candidate may be negatively impacted. In addition, adverse events caused by any product candidate administered in combination with our product candidates could cause similar interruptions and delays, even though not caused by our product candidates. Furthermore, if any of our products are approved and then cause serious or unexpected side effects, a number of potentially significant negative consequences could result, including: ● regulatory authorities may withdraw their approval of the clinical product candidate or impose restrictions on its distribution or other risk management measures; ● regulatory authorities may require the addition of labeling statements, such as warnings or contraindications; **54** ● we may be required to conduct additional clinical trials; ● we could be sued and held liable for injuries sustained by patients; ● we could elect to discontinue the sale of the clinical product candidate; and ● our reputation may suffer. Any of these events could prevent us from achieving or maintaining market acceptance of the affected clinical product candidate and could substantially increase the costs of commercialization. Product liability lawsuits against us could cause us to incur substantial liabilities and to limit commercialization of any products that we may develop. We face the risk of product liability exposure in connection with the testing of our product candidates in human clinical trials and will face an even greater risk if we commercially sell any products that we may develop. If we cannot successfully defend ourselves against claims that our product candidates or products caused injuries, we will incur substantial liabilities. Regardless of merit or eventual outcome, liability claims may result in: ● decreased demand for any product candidates or products that we may develop; ● injury to our reputation and significant negative media attention; ● withdrawal of clinical trial participants; ● significant costs to defend the related litigation; ● substantial monetary awards to trial participants or patients; ● loss of revenue; ● reduced resources of our management to pursue our business strategy; ~~and~~ **57** ~~and~~ ● the inability to commercialize any products that we may develop. Prior to commencing human clinical trials, we will seek to obtain product liability insurance coverage. Such insurance coverage is expensive and may not be available in coverage amounts we seek or at all. If we obtain such coverage, we may in the future be unable to maintain such coverage at a reasonable cost or in an amount adequate to satisfy any liability that may arise. Risks Related to Dependence on Third Parties For ~~our any~~ clinical product candidates, ~~we currently~~ **may develop we will** rely on ~~one~~ third- party contract ~~manufacturer~~ **manufacturers**. Any manufacturing problems experienced by us could result in a delay or interruption in the supply of our clinical product candidate until the problem is cured or until we locate and qualify an alternative source of manufacturing and supply. We currently do not **intend to** manufacture any ~~of our~~ clinical product candidates **we may develop**

and currently **intend to** rely upon **one a** third- party manufacturer to manufacture such product candidates. If we were to experience any prolonged disruption for our manufacturing, we could be forced to seek additional third- party manufacturing contracts, thereby increasing our development costs and negatively impacting our timelines and any commercialization costs. Although we believe there are other manufacturers that could manufacture **any of** our product candidates **we develop**, they may not do so on favorable term. In addition, if we change manufacturers at any point once we commence clinical trials or after **approval** ~~55~~**approval** of a product candidate, we will be required to demonstrate comparability between the product manufactured by the old manufacturer and the product manufactured by the new manufacturer. If we are unable to do so we may need to conduct additional clinical trials with product manufactured by the new manufacturer. If we or any outsourced manufacturer of our products are not able to manufacture sufficient quantities of our clinical product candidate, our development activities would be impaired. In addition, any manufacturing facility where any of our clinical product candidates are manufactured will be subject to ongoing, periodic inspection by the FDA or other comparable regulatory agencies to ensure compliance with ~~current Good Manufacturing Practice, or~~ cGMP. Any failure to follow and document the manufacturer' s adherence to such cGMP regulations or other regulatory requirements may lead to significant delays in the availability of clinical bulk drug substance and finished product for clinical trials, which may result in the termination of or a hold on a clinical trial, or may delay or prevent filing or approval of marketing applications for our clinical product candidate. We also may encounter problems with the following: ● achieving adequate or clinical- grade materials that meet FDA or other comparable regulatory agency standards or specifications with consistent and acceptable production yield and costs; ● failing to develop an acceptable formulation to support late- stage clinical trials for, or the commercialization of, our clinical product candidate; ● being unable to increase the scale of or the capacity for, or reformulate the form of our clinical product candidate, which may cause us to experience a shortage in supply or cause the cost to manufacture our clinical product candidate to increase; ● we cannot assure you that we will be able to manufacture our clinical product candidate at a suitable commercial scale, or that we will be able to find alternative manufacturers acceptable to us that can do so; ● our facility closing as a result of regulatory sanctions, pandemic or a natural disaster; ● shortages of qualified personnel, raw materials or key contractors; ● failing to obtain FDA approval for commercial scale manufacturing; ~~and~~ ~~58~~ **and** ● ongoing compliance with cGMP regulations and other requirements of the FDA or other comparable regulatory agencies. If we encounter any of these problems or are otherwise delayed, or if the cost of manufacturing is not economically feasible or we cannot find another third- party manufacturer, we may not be able to produce our clinical product candidate in a sufficient quantity to meet future demand. These risks are likely to be exacerbated by our limited experience with our current products and manufacturing processes. If demand for our products materializes, we may have to invest additional resources to purchase materials, hire and train employees, and enhance our manufacturing processes or those of third- party manufacturers. It may not be possible for us to manufacture our clinical product candidate at a cost or in quantities sufficient to make its clinical product candidate commercially viable. Any of these factors may affect our ability to manufacture our products and could reduce gross margins and profitability. Reliance on third- party manufacturers and suppliers entails risks to which we would not be subject if we manufacture our clinical product candidate ourselves, including: ● reliance on the third parties for regulatory compliance and quality assurance; **56** ● the possible breach of the manufacturing agreements by the third parties because of factors beyond our control or the insolvency of any of these third parties or other financial difficulties, labor unrest, natural disasters or other factors adversely affecting their ability to conduct their business; and ● possibility of termination or non- renewal of the agreements by the third parties, at a time that is costly or inconvenient for us, because of our breach of the manufacturing agreement or based on their own business priorities. If we rely on a third- party contract manufacturer or its suppliers fail to deliver the required commercial quantities of our clinical product candidate required for our clinical trials and, if approved, for commercial sale, on a timely basis and at commercially reasonable prices, and we are unable to find one or more replacement manufacturers or suppliers capable of production at a substantially equivalent cost, in substantially equivalent volumes and quality, and on a timely basis, we would likely be unable to meet demand for our products and would have to delay or terminate our pre- clinical or clinical trials, and we would lose potential revenue. It may also take significant time to establish an alternative source of supply for our clinical product candidate and to have any such new source approved by the FDA or any applicable foreign regulatory authorities. Furthermore, any of the above factors could cause the delay or suspension of initiation or completion of clinical trials, regulatory submissions or required approvals of our clinical product candidate, cause it to incur higher costs and could prevent us from commercializing our clinical product candidate successfully. If we are unable to establish new collaborations and maintain both new and existing collaborations, or if these collaborations are not successful, our business could be adversely affected. Our current business plan contemplates that we will in the future derive revenues or payments from collaborators and licensees that successfully utilize iBio technologies in connection with the production, development and commercialization of vaccines and therapeutic protein product candidates. Our realization of these revenues and payments including dependence on existing collaborations, and any future collaborations we enter into, is subject to a number of risks, including the following: ● collaborators may have significant discretion in determining the efforts and resources that they will apply to these collaborations; ● collaborators may not perform their obligations as expected; ● collaborators may not pursue development and, if successful, commercialization of product candidates or may elect not to continue or renew development or commercialization programs based on clinical trial results, changes ~~59~~ **in** ~~in~~ the collaborators' strategic focus or available funding, or external factors, such as an acquisition, which divert resources or create competing priorities; ● collaborators may delay clinical trials, provide insufficient funding for a clinical trial program, stop a clinical trial or abandon a product candidate, repeat or conduct new clinical trials or require a new formulation of a product candidate for clinical testing; ● collaborators could independently develop, or develop with third parties, products that compete directly or indirectly with our products or product candidates if the collaborators believe that competitive products are more likely to be successfully developed or can be commercialized under terms that are more economically attractive than ours, which may cause collaborators to cease to devote resources to the commercialization of our product candidates; ●

collaborators with marketing and distribution rights to one or more of our product candidates that achieve regulatory approval may not commit sufficient resources to the marketing and distribution of such product or products; or commercialization of product candidates, might lead to additional responsibilities for us with respect to product candidates, or might result in litigation or arbitration, any of which would be time- consuming and expensive; 57 • collaborators may not properly maintain or defend our intellectual property rights or may use our proprietary information in such a way as to invite litigation that could jeopardize or invalidate our intellectual property or proprietary information or expose us to potential litigation; • collaborators may infringe the intellectual property rights of third parties, which may expose us to litigation and potential liability; • collaborations may be terminated for the convenience of the collaborator and, if terminated, we would potentially lose the right to pursue further development or commercialization of the applicable product candidates; • collaborators may learn about our technology and use this knowledge to compete with us in the future; • results of collaborators' preclinical or clinical studies could produce results that harm or impair other products using our technology; • there may be conflicts between different collaborators that could negatively affect those collaborations and others; and • the number and type of our collaborations could adversely affect our attractiveness to future collaborators or acquirers. If our collaborations do not result in the successful development and commercialization of products or if one or more of our collaborators terminates its agreement with us, we may not receive any future research and development funding or milestone or royalty payments under the collaboration. If we do not receive the funding we expect under these agreements, our continued development of our product candidates could be delayed, and we may need additional resources to develop additional product candidates. There can be no assurance that our collaborations will produce positive results or successful products on a timely basis or at all. We seek to establish and collaborate with additional pharmaceutical and biotechnology companies for development and potential commercialization of iBio technology- produced and iBio technology- enhanced product candidates. We face significant competition in seeking appropriate collaborators. Our ability to reach a definitive agreement for a collaboration depends, among other things, upon our assessment of the collaborator's resources and expertise, the terms and conditions of the proposed collaboration and the proposed collaborator's evaluation of several factors. If we fail to reach agreements 60with-- with suitable collaborators on a timely basis, on acceptable terms, or at all, we may have to curtail the development of a product candidate, reduce or delay its development or the development of one or more of our other product candidates, or increase our expenditures and undertake additional development or commercialization activities at our own expense. If we elect to fund and undertake development or commercialization activities on our own, we may need to obtain additional expertise and additional capital, which may not be available to us on acceptable terms or at all. If we fail to enter into collaborations and do not have sufficient funds or expertise to undertake the necessary development and commercialization activities, we may not be able to further develop our product candidates or bring them to market or continue to develop our product portfolio and our business may be materially and adversely affected. If third parties on whom we or our licensees will rely for the conduct of preclinical studies and clinical trials do not perform as contractually required or as we expect, we may not be able to obtain regulatory approval for or commercialize our product candidates and our business may suffer. We have limited resources dedicated to designing, conducting, and managing our preclinical studies and clinical trials. We do not have the ability to independently conduct the preclinical studies and clinical trials required to obtain regulatory approval for our product candidates. We have not yet contracted with any third parties to conduct clinical trials of product candidates we develop independently of collaborators. We will depend on licensees or on independent clinical investigators, contract research organizations and other third- party service providers to conduct the clinical trials of our product candidates. We will rely on these vendors and individuals to perform many facets of the clinical development process on our behalf, including conducting preclinical studies and will rely on them for the recruitment of sites and subjects for participation in our clinical trials, maintenance of good relations with the clinical sites, and ensuring that these sites are conducting our trials in compliance with the trial protocol and applicable regulations. We will rely heavily on these parties for successful execution of our clinical trials but will not control many aspects of their activities. For example, the investigators participating in our clinical trials will not be our employees. However, we will be responsible for ensuring that each of our clinical trials is conducted in accordance with the general investigational plan and protocols for the trial. Third parties may not complete activities on schedule or may not conduct our clinical trials in accordance with regulatory requirements or our stated protocols. The failure of these third parties to carry out their obligations could delay or prevent the development, approval and commercialization of our product candidates. If these third parties fail to perform satisfactorily, or do not adequately fulfill their obligations under the terms of our agreements with them, we may not be able to enter into alternative arrangements without undue delay or additional expenditures, and therefore the preclinical studies and clinical trials of our clinical product candidate may be delayed or prove unsuccessful. Further, the FDA, the EMA, or similar regulatory authorities in other countries, may inspect some of the clinical sites participating in our clinical trials or our third- party vendors' sites to determine if our clinical trials are being conducted according to good clinical practices, or GCPs, or similar regulations. If we or a regulatory authority determine that our third- party vendors are not in compliance with or have not conducted our clinical trials according to applicable regulations, we may be forced to exclude certain data from the results of the trial, or delay, repeat or terminate such clinical trials. We rely on third parties to supply the raw materials needed to operate our research and development activities and do not have any long- term commitments from such suppliers. We currently rely on third parties for the raw materials needed to operate our research and development activities. We do not have any long- term commitments from any raw material suppliers and therefore cannot guarantee that there will be adequate supply of our raw materials. Natural disasters or other disruptions at any of our suppliers' facilities may impair or delay the delivery of our products. Influenza or other pandemics, such as the coronavirus, could disrupt production of our products, reduce demand for certain of our products, or disrupt the marketplace in the food service or retail environment with consequent material adverse effects on our results of operations. To the extent we are unable to, or cannot, financially mitigate the likelihood or potential impact of such events, or effectively manage such events if they occur, particularly when a product is sourced from a single location, there could be a material adverse effect on our

business and results of operations, and additional resources could be required to restore our supply chain. Although we believe we have sufficient supply of our other raw materials at this time, due to supply chain shortages, we may not be able to obtain such materials. ~~61~~ **in** the future our current suppliers should be unable to satisfy our needs. Such suppliers may not be able to provide us with engines in a timely manner due to supply chain shortages and even if other suppliers are able to fulfill our needs they may not be able to do so at the same price as we currently pay for such materials, which could result in lower profit margins or us increasing the price of our services in order to maintain profit margins which could adversely impact demand for our services. Any claims beyond our insurance coverage limits, or that are otherwise not covered by our insurance, may result in substantial costs and a reduction in our available capital resources. We maintain property insurance, employer's liability insurance, product liability insurance, general liability insurance, business interruption insurance, and directors' and officers' liability insurance, among others. Although we maintain what we believe to be adequate insurance coverage, potential claims may exceed the amount of insurance coverage or may be excluded under the terms of the policy, which could cause an adverse effect on our business, financial condition and results from operations. Generally, we would be at risk for the loss of inventory that is not within customer specifications. These amounts could be significant. In addition, in the future we may not be able to obtain adequate insurance coverage, or we may be required to pay higher premiums and accept higher deductibles in order to secure adequate insurance coverage. ~~We 59~~ **We** may be subject to various litigation claims and legal proceedings. We, as well as certain of our directors and officers, may be subject to claims or lawsuits during the ordinary course of business. Regardless of the outcome, these lawsuits may result in significant legal fees and expenses and could divert management's time and other resources. If the claims contained in these lawsuits are successfully asserted against us, we could be liable for damages and be required to alter or cease certain of our business practices. Any of these outcomes could cause our business, financial performance and cash position to be negatively impacted. Risks Related to Intellectual ~~Property~~ **Property** ~~If~~ **If** we or our licensors are unable to obtain and maintain patent protection for our technology and products, or if the scope of the patent protection obtained is not sufficiently broad, competitors could develop and 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 part on our ability to obtain and maintain patent and other intellectual property protection in the United States and other 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 abroad related to our novel technologies and product candidates, and by maintenance of our trade secrets through proper procedures. 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, in a timely manner, or in all jurisdictions. It is also possible that we will fail to identify patentable aspects of our research and development output before it is too late to obtain patent protection. 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 and we may fail to seek or obtain patent protection in all major markets. For example, European patent law restricts the patentability of methods of treatment of the human body more than United States law does. 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 patents or pending patent applications, or that we were the first to file for patent protection of such inventions, nor can we know whether those from whom we license patents were the first to make the inventions claimed or were the first to file. 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 ~~62~~ **which** ~~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 United States and other countries may diminish the value of our patents or narrow the scope of our patent protection. Moreover, we may be subject to a third-party pre-issuance submission of prior art to the U. S. PTO, or become involved in opposition, derivation, reexamination, inter partes review, post-grant review or interference proceedings challenging our patent rights or the patent rights of others. An adverse determination in any such submission, proceeding or litigation could reduce the scope of, or invalidate, our patent rights, allow third parties to commercialize our technology or products and compete directly with us, without payment to us, or result in our inability to manufacture or commercialize products without infringing third-party patent rights. In addition, if the breadth or strength of protection provided by our patents and patent applications is threatened, it could dissuade companies from collaborating with us to license, develop or commercialize current or future product candidates. Even if our pending or future patent applications issue as patents, they may not issue in a form that will provide us with any meaningful protection, prevent competitors from competing with us or otherwise provide us with any competitive advantage. Our competitors may be able to circumvent our patents by developing similar or alternative technologies or products in a non-infringing manner. ~~The 60~~ **The** issuance of a patent is not conclusive as to its inventorship, scope, validity or enforceability, and our patents may be challenged in the courts or patent offices in the United States and abroad. Such challenges may result in loss of exclusivity or freedom to operate or in patent claims being narrowed, invalidated or held unenforceable, in whole or in part, which could limit our ability to stop others from using or commercializing similar or identical technology and products, or limit the duration of the patent protection of our technology and products. Given the amount of time required for the development, testing and regulatory review of new product candidates, patents protecting such candidates might expire before or shortly after such candidates are commercialized. As a result, our patent portfolio may not provide us with sufficient rights to exclude others from commercializing products similar or identical to ours. We may become involved in lawsuits to protect or enforce our patents or other intellectual property, which could be expensive, time-consuming and ultimately unsuccessful. Our commercial success depends upon our ability, and the ability of our collaborators, to develop,

manufacture, market and sell our product candidates and use our proprietary technologies without infringing the proprietary rights of third parties. There is considerable intellectual property litigation in the biotechnology and pharmaceutical industries. Competitors may infringe our issued patents or other intellectual property. To counter infringement or unauthorized use, we may be required to file infringement claims, which can be expensive and time-consuming. Any claims we assert against perceived infringers could provoke these parties to assert counterclaims against us alleging that we infringe their intellectual property. In addition, in a patent infringement proceeding, a court may decide that a patent of ours is invalid or unenforceable, in whole or in part, construe the patent's claims narrowly or refuse to stop the other party from using the technology at issue on the grounds that our patents do not cover the technology in question. An adverse result in any litigation proceeding could put one or more of our patents at risk of being invalidated or interpreted narrowly, which could adversely affect us and our collaborators. While no such litigation has been brought against us and we have not been held by any court to have infringed a third party's intellectual property rights, we cannot guarantee that our technology, products or use of our products do not infringe third-party patents. It is also possible that we have failed to identify relevant third-party patents or applications. For example, applications filed before November 29, 2000, and certain applications filed after that date that will not be filed outside the United States remain confidential until patents issue. Patent applications in the United States and elsewhere are published approximately 18 months after the earliest filing date, which is referred to as the priority date. Therefore, patent applications covering our products or technology could have been filed by others without our knowledge. Additionally, pending patent applications which have been published can, subject to certain limitations, be later amended in a manner that could cover our technologies, our products or the use of our products. We may become party to, or threatened with, future adversarial proceedings or litigation regarding intellectual property rights with respect to our products and technology, including interference or derivation proceedings before the U. S. PTO ~~63~~ and ~~and~~ similar bodies in other countries. Third parties may assert infringement claims against us based on existing intellectual property rights and intellectual property rights that may be granted in the future. If we are found to infringe a third party's intellectual property rights, we could be required to obtain a license from such third party to continue developing and marketing our products and technology. However, we may not be able to obtain any required license on commercially reasonable terms or at all. Even if we were able to obtain a license, it could be non-exclusive, thereby giving our competitors access to the same technologies licensed to us. We could be forced, including by court order, to cease commercializing the infringing technology or product. In addition, we could be found liable for monetary damages, including treble damages and attorneys' fees if we are found to have willfully infringed a patent. A finding of infringement could prevent us from commercializing our product candidates or force us to cease some of our business operations, which could materially harm our business. Claims that we have misappropriated the confidential information or trade secrets of third parties could have a similar negative impact on our business. In addition, the uncertainties associated with litigation could have a material adverse effect on our ability to raise the funds necessary to continue our clinical trials, continue our research programs, license necessary technology from third parties, or enter into development partnerships that would help us bring our product candidates to market. Furthermore, because of the substantial amount of discovery required in connection with intellectual property litigation, there is a risk that some of our confidential information could be compromised by disclosure during this type of litigation. ~~In~~ ~~61~~ ~~In~~ spite of our efforts, our licensors might allege that we have materially breached our obligations under such license agreements and might therefore attempt to terminate the license agreements, thereby removing or limiting our ability to develop and commercialize products and technology covered by these license agreements. If these in-licenses are terminated, or if the underlying patents fail to provide the intended exclusivity, competitors or other third parties might have the freedom to seek regulatory approval of, and to market, products identical to ours and we may be required to cease our development and commercialization of our lead products or other product candidates that we may identify. Any of the foregoing could have a material adverse effect on our competitive position, business, financial conditions, results of operations, and prospects. Moreover, disputes may arise regarding intellectual property subject to a licensing agreement, including: • the scope of rights granted under the license agreement and other interpretation-related issues; • the extent to which our product candidates, technology and processes infringe on intellectual property of the licensor that is not subject to the licensing agreement; • the sublicensing of patent and other rights under our collaborative development relationships; • our diligence obligations under the license agreement and what activities satisfy those diligence obligations; • the inventorship and ownership of inventions and know-how resulting from the joint creation or use of intellectual property by our licensors and us and our partners; and • the priority of invention of patented technology. ~~64~~ ~~In~~ addition, the agreements under which we currently license intellectual property or technology from third parties are complex, and certain provisions in such agreements may be susceptible to multiple interpretations. The resolution of any contract interpretation disagreement that may arise could narrow what we believe to be the scope of our rights to the relevant intellectual property or technology or increase what we believe to be our financial or other obligations under the relevant agreement, either of which could have a material adverse effect on our business, financial condition, results of operations, and prospects. Moreover, if disputes over intellectual property that we have licensed prevent or impair our ability to maintain our current licensing arrangements on commercially acceptable terms, we may be unable to successfully develop and commercialize the affected product candidates, which could have a material adverse effect on our business, financial conditions, results of operations, and prospects. Patent terms may be inadequate to protect our competitive position on our product candidates for an adequate amount of time. Patents have a limited lifespan. In the United States, if all maintenance fees are timely paid, the natural expiration of a patent is generally 20 years from its earliest U. S. non-provisional filing date. Various extensions may be available, but the life of a patent, and the protection it affords, is limited. Even if patents covering our product candidates are obtained, once the patent life has expired, we may be open to competition from competitive products, including generics or biosimilars. Given the amount of time required for the development, testing and regulatory review of new product candidates, patents protecting such candidates might expire before or shortly after such candidates are commercialized. As a result, our owned and licensed patent portfolio may not provide us with sufficient rights to exclude others

from commercializing products similar or identical to ours. If we are unable to protect our trade secrets, our business and competitive position would be harmed. In addition to seeking patents for some of our technology and product candidates, we also rely on trade secrets, including unpatented know-how, technology and other proprietary information, to maintain our competitive position. We seek to protect these trade secrets, in part, by entering into non-disclosure and confidentiality agreements with parties who have access to them, such as our employees, corporate collaborators, outside scientific collaborators, contract manufacturers, consultants, ~~62~~ consultants, advisors and other third parties. We also seek to enter into confidentiality and invention or patent assignment agreements with our employees and consultants. Despite these efforts, any of these parties may breach the agreements and disclose our proprietary information, including our trade secrets, and we may not be able to obtain adequate remedies for such breaches. Our trade secrets may also be obtained by third parties by other means, such as breaches of our physical or computer security systems. Enforcing a claim that a party illegally disclosed or misappropriated a trade secret is difficult, expensive and time-consuming, and the outcome is unpredictable. In addition, some courts inside and outside the United States are less willing or unwilling to protect trade secrets. If any of our trade secrets were to be lawfully obtained or independently developed by a competitor, we would have no right to prevent them, or those to whom they communicate it, from using that technology or information to compete with us. If any of our trade secrets were to be disclosed to or independently developed by a competitor, our competitive position would be harmed. We may be subject to claims challenging the inventorship of our patent filings and other intellectual property. Many of our employees, including our senior management, were previously employed at other biotechnology or pharmaceutical companies. These employees typically executed proprietary rights, non-disclosure and non-competition agreements in connection with their previous employers. Although we try to ensure that our employees do not use the proprietary information or know-how of others in their work for us, we may be subject to claims that we or these employees have used or disclosed intellectual property, including trade secrets or other proprietary information, of any such employee's former employer. We or our licensors may be subject to claims that former employees, collaborators or other third parties have an interest in our owned or in-licensed patents, trade secrets, or other intellectual property as an inventor or co-inventor. For example, we or our licensors may have inventorship disputes arise from conflicting obligations of employees, consultants or others who are involved in developing our product candidates. Litigation may be necessary to defend against these and other claims challenging inventorship or our or our licensors' ownership of our owned or in-licensed patents, trade secrets or other intellectual property. If we or our licensors fail in defending any such claims, in addition to paying monetary damages, we may lose valuable intellectual property rights, such as exclusive ownership of, ~~65~~ or right to use, intellectual property that is important to our product candidates. Even if we are successful in defending against such claims, litigation could result in substantial costs and be a distraction to management and other employees. Any of the foregoing could have a material adverse effect on our business, financial condition, results of operations and prospects. In addition, while we require our employees and contractors who may be involved in the conception or development of intellectual property to execute agreements assigning such intellectual property to us, we may be unsuccessful in executing such an agreement with each party who, in fact, conceives or develops intellectual property that we regard as our own. The assignment of intellectual property rights may not be self-executing, or the assignment agreements may be breached, and we may be forced to bring claims against third parties, or defend claims that they may bring against us, to determine the ownership of what we regard as our intellectual property. Intellectual property rights do not necessarily address all potential threats to our competitive advantage. The degree of future protection afforded by our intellectual property rights is uncertain because intellectual property rights have limitations and may not adequately protect our business or permit us to maintain our competitive advantage. The following examples are illustrative: ● others may be able to make products that are similar to our product candidates but that are not covered by the claims of the patents that we license; ● our licensors or collaborators might not have been the first to make the inventions covered by an issued patent or pending patent application; ● our licensors or collaborators might not have been the first to file patent applications covering an invention; ● others may independently develop similar or alternative technologies or duplicate any of our or our licensors' technologies without infringing our intellectual property rights; ● pending patent applications may not lead to issued patents; ~~63~~ ● issued patents may not provide us with any competitive advantages, or may be held invalid or unenforceable, as a result of legal challenges by our competitors; ● our competitors might conduct research and development activities in countries where we do not have patent rights and then use the information learned from such activities to develop competitive products for sale in our major commercial markets; ● we may not develop or in-license additional proprietary technologies that are patentable; ● the patents of others may have an adverse effect on our business; and ● we may choose not to file a patent application for certain trade secrets or know-how, and a third party may subsequently obtain a patent covering such intellectual property. Should any of these events occur, they could significantly harm our business, results of operations and prospects. We may not be able to protect our intellectual property rights throughout the world. Filing, prosecuting and defending patents on our product candidates in all countries throughout the world would be prohibitively expensive, and our intellectual property rights in some countries outside the United States can be less extensive than those in the United States. In addition, the laws of some foreign countries do not protect intellectual property rights to the same extent as federal and state laws in the United States. Consequently, we may not be able to prevent third parties from practicing our inventions in all countries outside the United States, or from selling or importing products made ~~66~~ using -- using our inventions in and into the United States or other jurisdictions. Competitors may use our technologies in jurisdictions where we have not obtained patent protection to develop their own products and may also export infringing products to territories where we have patent protection, but enforcement is not as strong as that in the United States. These products may compete with our products and our patents or other intellectual property rights may not be effective or sufficient to prevent them from competing. Many companies have encountered significant problems in protecting and defending intellectual property rights in foreign jurisdictions. The legal systems of certain countries, particularly certain developing countries, do not favor the enforcement of patents, trade secrets, and other intellectual property protection, particularly those relating to biotechnology products, which could make it difficult for us

to stop the infringement of our patents or marketing of competing products in violation of our proprietary rights generally. Proceedings to enforce our patent rights in foreign jurisdictions, whether or not successful, could result in substantial costs and divert our efforts and attention from other aspects of our business, could put our patents at risk of being invalidated or interpreted narrowly and our patent applications at risk of not issuing and could provoke third parties to assert claims against us. We may not prevail in any lawsuits that we initiate, and the damages or other remedies awarded, if any, may not be commercially meaningful. Accordingly, our efforts to enforce our intellectual property rights around the world may be inadequate to obtain a significant commercial advantage from the intellectual property that we develop or license. If we should fail to comply with various patent laws our patent protection could be reduced or eliminated. Periodic maintenance fees, renewal fees, annuity fees and various other governmental fees on patents and / or applications will be due to be paid to the USPTO and various governmental patent agencies outside of the United States in several stages over the lifetime of the patents and / or applications. We have systems in place to remind us to pay these fees, and we employ an outside firm and rely on our outside counsel to pay these fees due to non- U. S. patent agencies. The USPTO and various non- U. S. governmental patent agencies require compliance with a number of procedural, documentary, fee payment and other similar provisions during the patent application process. We employ reputable law firms and other professionals to help us comply, and in many cases, an inadvertent lapse can be cured by payment of a late fee or by other means in accordance with the applicable rules. However, there are situations in which non- compliance can result in abandonment or lapse of the patent or patent application, resulting in partial or complete loss of patent rights in the relevant jurisdiction. In such an event, our competitors might be able to enter the market and this circumstance would have a material adverse effect on our business. **Changes 64** Changes in patent law, including recent patent reform legislation, could increase the uncertainties and costs surrounding the prosecution of our patent applications and the enforcement or defense of our issued patents. Changes in either the patent laws or interpretation of the patent laws in the United States could increase the uncertainties and costs surrounding the prosecution of patent applications and the enforcement or defense of issued patents. Assuming that other requirements for patentability are met, prior to March 2013, in the United States, the first to invent the claimed invention was entitled to the patent, while outside the United States, the first to file a patent application was entitled to the patent. After March 2013, under the Leahy- Smith America Invents Act, or the America Invents Act, enacted in September 2011, the United States transitioned to a first inventor to file system in which, assuming that other requirements for patentability are met, the first inventor to file a patent application will be entitled to the patent on an invention regardless of whether a third party was the first to invent the claimed invention. A third party that files a patent application in the USPTO after March 2013, but before us could therefore be awarded a patent covering an invention of ours even if we had made the invention before it was made by such third party. This will require us to be cognizant of the time from invention to filing of a patent application. Since patent applications in the United States and most other countries are confidential for a period of time after filing or until issuance, we cannot be certain that we or our licensors were the first to either (i) file any patent application related to our product candidates or (ii) invent any of the inventions claimed in our or our licensor' s patents or patent applications. In addition, the patent positions of companies in the development and commercialization of pharmaceuticals are particularly uncertain. Recent U. S. Supreme Court rulings have narrowed the scope of patent protection available in certain circumstances and weakened the rights of patent owners in certain situations. This combination of events has created uncertainty with respect to the validity and enforceability of patents, once obtained. Depending on future actions by the U. S. Congress, the federal courts, and the USPTO, the laws and regulations governing patents could change in unpredictable ways that could have a material adverse effect on our existing patent portfolio and our ability to protect and enforce our intellectual property in the future. **67** Risks -- **Risks** Related to iBio' s Operations **We recently** **In the past we have** identified and remediated material weaknesses in our internal controls, and we cannot provide assurances additional material weaknesses will not occur in the future. Effective internal control over financial reporting is necessary for us to provide reliable financial reports and, together with adequate disclosure controls and procedures, is designed to prevent fraud. During the preparation of the Quarterly Report for the quarter ended March 31, 2023, we identified a material weakness in our controls relating to accounting for stock- based compensation expense relating to the vesting of severed employees' awards. If our internal control over financial reporting or our disclosure controls and procedures are not effective, we may not be able to accurately report our financial results, prevent fraud, or file our periodic reports in a timely manner, which may cause investors to lose confidence in our reported financial information and may lead to a decline in our stock price. In addition, a material weakness will not be considered remediated until the applicable controls operate for a sufficient period of time and management has concluded, through testing, that these controls are designed and operating effectively. As of June 30, 2023, management believes that significant progress has been made in enhancing internal controls and has concluded that the enhanced controls are operating effectively. Therefore, as of June 30, 2023, the material weakness described in Item 4 Controls and Procedures in our Quarterly Report on Form 10- Q for quarter ended March 31, 2023 has been fully remediated **and management believes it does not have any weaknesses in internal controls**. Although the material weakness has been remediated, there can be no assurance that the internal control over financial reporting, as modified, will enable us to identify or avoid material weaknesses in the future. Any failure to implement required new or improved controls, or difficulties encountered in their implementation could cause us to fail to meet our reporting obligations. In addition, any testing by us, as and when required, conducted in connection with Section 404 of the Sarbanes- Oxley Act, or Section 404, or any subsequent testing by our independent registered public accounting firm, as and when required, may reveal deficiencies in our internal control over financial reporting that are deemed to be material weaknesses or that may require prospective or retroactive changes to our financial statements or identify other areas for further attention or improvement. As a growing company, implementing and maintaining effective controls may require more resources, and we may encounter internal control integration difficulties. Inferior internal controls could also cause investors to lose confidence in our reported financial information, which could have a negative effect on the trading price of our common stock. **65** **The** We have experienced turnover in our senior management team, and the loss of one or more of our executive

officers or key employees or an inability to attract and retain highly skilled employees could adversely affect our business. Our success depends largely upon the continued services of our key executive officers. ~~We have in the past and may in the future experience changes in our executive management team resulting from the departure of executives, which may be disruptive to our business.~~ To continue to develop our pipeline and execute our strategy, we also must attract and retain highly skilled personnel in our industry. A failure by iBio to hire and retain an appropriately skilled and adequate workforce could adversely impact the ability to operate ~~and function~~ **our R & D facility** efficiently. iBio's operations will depend, in part, on our ability to attract and retain an appropriately skilled and sufficient workforce to operate our R & D facility. These employees may voluntarily terminate their employment with us at any time. The R & D facility is located in San Diego, California, a growing biotechnology hub and competition for skilled workers will continue to increase as the industry undergoes further growth in the area. There can be no assurance that we will be able to retain key personnel, or to attract and retain additional qualified employees especially in light of our cash position. Our inability to attract and retain key personnel as we grow in two locations may have a material adverse effect on our business. Use of our laboratory space in San Diego is critical to our success. A natural disaster or other disruptions at our laboratory would adversely affect our business, financial condition, and results of operations. We currently conduct all of our pre-clinical research at our laboratory in San Diego using specialized equipment that we have purchased. Any natural disaster or other serious disruption to our facility due to fire, flood, earthquake, or any other unforeseen circumstance would adversely affect our business, financial condition, and results of operations. Although we ~~68do do~~ believe that we could find alternative space in the case of a natural disaster, there can be no assurance that we will find suitable space near the location of our employees or that our equipment will survive a natural disaster. The occurrence of any disruption at our laboratory, even for a short period of time, may have an adverse effect on our research and development operations, during and after the period of the disruption. Although we maintain property, casualty, and business interruption insurance of the types and in the amounts that we believe are customary for the industry, we are not fully insured against all potential natural disasters or other disruptions to our laboratory. We may be unable to manage our future growth effectively, which could make it difficult to execute our business strategy. We intend to grow our business operations as demand increases and increase the number of our employees to accommodate such potential growth, which may cause us to experience periods of rapid growth and expansion. This potential future growth could create a strain on our organizational, administrative and operational infrastructure, including manufacturing operations, quality control, technical support and other administrative functions. Our ability to manage our growth properly will require us to continue to improve our operational, financial and management controls. As our commercial operations and sales volume grow, we will need to continue to increase our capacity for manufacturing, customer service, billing and general process improvements and expand our internal quality assurance program, among other things. We may also need to purchase additional equipment, some of which can take several months or more to procure, set up and validate, and increase our manufacturing, maintenance, software and computing capacity to meet increased demand. These increases in scale, expansion of personnel, purchase of equipment or process enhancements may not be successfully implemented. If we are unable to protect the confidentiality of our partners' or collaborators' proprietary information, we may be subject to claims. The research and development processes developed by us or our partners' or collaborators' products are subject to trade secret protection, patents or other intellectual property protections owned or licensed by such partners. While we make significant efforts to protect our partners' proprietary and confidential information, including requiring our employees to enter into agreements protecting such information, if any of our employees breaches the non-disclosure provisions in such agreements, or if our partners make claims that their proprietary information has been disclosed, our reputation may suffer ~~damage-66~~ **damage** and we may become subject to legal proceedings that could require us to incur significant expenses and divert our management's time, attention and resources. If we acquire companies, products or technologies, we may face integration risks and costs associated with those acquisitions that could negatively impact our business, results from operations and financial condition. If we are presented with appropriate opportunities, we may acquire or make investments in complementary companies, products or technologies. We may not realize the anticipated benefit of any acquisition or investment. If we acquire companies or technologies, we will face risks, uncertainties and disruptions associated with the integration process, including difficulties in the integration of the operations of an acquired company, integration of acquired technology with our products, diversion of our management's attention from other business concerns, the potential loss of key employees or customers of the acquired business, and impairment charges if future acquisitions are not as successful as we originally anticipate. In addition, our operating results may suffer because of acquisition-related costs or amortization expenses or charges relating to acquired intangible assets. Any failure to successfully integrate other companies, products, or technologies that we may acquire may have a material adverse effect on our business and results of operations. Furthermore, we may have to incur debt or issue equity securities to pay for any additional future acquisitions or investments, the issuance of which could be dilutive to our existing stockholders. **We rely extensively** on our information technology systems and are vulnerable to damage and ~~interruption-interruption~~ **interruption**, including ~~cybersecurity and data leakage risks.~~ **We rely** on our information technology systems and infrastructure to process transactions, summarize results and manage our business, including maintaining client and supplier information. Additionally, we utilize third parties, including cloud providers, to store, transfer and process data. Our information technology systems, as well as the systems of our suppliers and other partners, whose systems we do not control, are vulnerable to outages and an increasing risk of continually evolving deliberate intrusions to gain access to company sensitive information. Likewise, data security incidents and breaches by employees and others with or without permitted access to our systems pose a risk that sensitive data may be exposed to unauthorized persons or to the public. A cyber-attack or other significant disruption involving our information technology systems, or those of our vendors, suppliers and other partners, could also result in disruptions in critical ~~systems~~ **72systems**, corruption or loss of data and theft of data, funds or intellectual property. A security breach of any kind, including physical or electronic break-ins, computer viruses and attacks by hackers, employees or others, could expose us to risks of data loss, litigation, government enforcement actions, regulatory penalties and costly response measures, and could seriously disrupt

our operations. We may be unable to prevent outages or security breaches in our systems. We remain potentially vulnerable to additional known or yet unknown threats as, in some instances, we, our suppliers and our other partners may be unaware of an incident or its magnitude and effects. We also face the risk that we expose our vendors or partners to cybersecurity attacks. Any or all of the foregoing could harm our reputation and adversely affect our results of **operations and our business reputation**

**Risks** Related to Our Common Stock Our stockholders will experience substantial dilution from the issuance of the development milestone payments if paid in equity and may not realize a benefit from the acquisition of substantially all of the assets RubrYc commensurate with the ownership dilution they will experience in connection therewith. We have the option to pay the contingent development milestone consideration owed to the RubrYc shareholders in shares of our common stock. Our stockholders will experience substantial dilution from the issuance of shares of common stock to pay the contingent development milestone consideration, should we elect to pay such development milestones in shares of common stock in lieu of cash. **Our failure to comply with the NYSE American continued listing standards of the NYSE American could result in delisting from the NYSE American.** In order to maintain its listing with NYSE American, we must remain in compliance with the continued listing standards as set forth in the NYSE American Company Guide (the "Company Guide"), including the listing standard set forth in Section 1003 of the Guide, which applies if a listed company has stockholders' equity below certain threshold amounts and has sustained losses from continuing operations and / or net losses in its five most recent fiscal years. In the past, we have received notification of noncompliance with the continued listing requirements, which to date have been **remediated. There can be no assurance that we will continue to meet all of the Exchange's continued listing standards of NYSE American, or exemptions therefrom, in the future.** **A failure to comply with such listing standards could result in delisting from NYSE American.** Provisions in our certificate of incorporation, bylaws and under Delaware law could discourage a takeover that stockholders may consider favorable. Provisions of our certificate of incorporation, bylaws and provisions of applicable Delaware law may discourage, delay or prevent a merger or other change in control that a stockholder may consider favorable. Pursuant to our certificate of incorporation, our Board of Directors may issue additional shares of common stock or preferred stock. Any additional issuance of common stock could have the effect of impeding or discouraging the acquisition of control of us by means of a merger, tender offer, proxy contest or otherwise, including a transaction in which our stockholders would receive a premium over the market price for their shares, and thereby protect the continuity of our management. Specifically, if in the due exercise of its fiduciary obligations, the Board of Directors were to determine that a takeover proposal was not in our best interest, shares could be issued by our Board of Directors without stockholder approval in one or more transactions that might prevent or render more difficult or costly the completion of the takeover by: • diluting the voting or other rights of the proposed acquirer or insurgent stockholder group, **68** • putting a substantial voting bloc in institutional or other hands that might undertake to support the incumbent Board of Directors, or • effecting an acquisition that might complicate or preclude the takeover. Our certificate of incorporation also allows our Board of Directors to fix the number of directors in the by-laws. Our certificate of incorporation does not contemplate cumulative voting in the election of directors and thus, under Delaware law, cumulative voting in the election of directors is not permitted. Our Board of Directors is divided into three classes, each of which serves for a staggered term of three years. This division of our Board of Directors could have the effect of impeding an attempt to take over our company or change or remove management, since only one class will be elected annually. Thus, only approximately one-third of the existing Board of Directors could be replaced at any election of directors. **70** **The effect of these provisions may be to delay or prevent a tender offer or takeover attempt that a stockholder may determine to be in his, her or its best interest, including attempts that might result in a premium over the market price for the shares held by the stockholders.** Our Second Amended and Restated Bylaws provides that the Court of Chancery of the State of Delaware is the exclusive forum for certain disputes between us and our stockholders, which could limit our stockholders' ability to obtain a favorable judicial forum for disputes with us or our directors, officers or employees. Our Second Amended and Restated Bylaws provides that the Court of Chancery of the State of Delaware shall be the sole and exclusive forum for any derivative action or proceeding brought on behalf of the Company, any action asserting a claim of breach of a fiduciary duty owed by any director, officer or other employee of the Company to the Company or the Company's stockholders, any action asserting a claim arising pursuant to any provision of the Delaware General Corporation Law or any action asserting a claim governed by the internal affairs doctrine. The federal district courts of the United States of America shall, to the fullest extent permitted by law, be the sole and exclusive forum for the resolution of any complaint asserting a cause of action arising under the Securities Act of 1933, as amended and the forum selection provision does not apply to claims arising exclusively under the Exchange Act or the Investment Company Act, or any other claim for which the federal courts have exclusive jurisdiction. This forum selection provision may limit a stockholder's ability to bring certain claims in a judicial forum that it finds favorable for disputes with us or any of our directors, officers, other employees or stockholders, which may discourage lawsuits with respect to such claims, although our stockholders will not be deemed to have waived our compliance with federal securities laws and the rules and regulations thereunder. If a court were to find this forum selection provision to be inapplicable or unenforceable in an action, we may incur additional costs associated with resolving such action in other jurisdictions, which could adversely affect our business and financial condition. The issuance of preferred stock could adversely affect the rights of the holders of shares of our common stock. Our Board of Directors is authorized to issue up to 1,000,000 shares of preferred stock without any further action on the part of our stockholders. Our Board of Directors has the authority to fix and determine the voting rights, rights of redemption and other rights and preferences of preferred stock. Our Board of Directors may, at any time, designate a new series of preferred stock that would grant to holders the preferred right to our assets upon liquidation, the right to receive dividend payments before dividends are distributed to the holders of common stock, and the right to the redemption of the shares, together with a premium, before the redemption of our common stock and authorize the issuance of such series of preferred stock, which may have a material adverse effect on the rights of the holders of our common stock. In addition, our Board of Directors, without further

stockholder approval, may, at any time, issue large blocks of preferred stock. In addition, the ability of our Board of Directors to designate and issue shares of preferred stock without any further action on the part of our stockholders may impede a takeover of our company and may prevent a transaction that is favorable to our stockholders. ~~We~~ ~~69~~ ~~We~~ do not anticipate paying cash dividends for the foreseeable future, and therefore investors should not buy our stock if they wish to receive cash dividends. We have never declared or paid any cash dividends or distributions on our capital stock. We currently intend to retain our future earnings 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. Changes in general economic conditions, geopolitical conditions, domestic and foreign trade policies, monetary policies and other factors beyond our control may adversely impact our business and operating results. The uncertain financial markets, disruptions in supply chains, mobility restraints, and changing priorities as well as volatile asset values could impact our business in the future. We and our third- party contract manufacturers, contract research organizations, and any clinical sites that may conduct our clinical trials in the future may also face disruptions in procuring items that are essential to our research and development activities, including, for example, medical and laboratory supplies used in our clinical trials or preclinical studies, in each case, that are sourced from abroad or for ~~71~~ ~~which~~ -- ~~which~~ there are shortages because of ongoing efforts to address the outbreak. These minor disruptions have had an immaterial effect on business, which we have been able to address with minimal impact to our business operations to date. Further, although we have not experienced any material adverse effects on our business due to increasing inflation, it has raised operating costs for many businesses and, in the future, could impact demand or pricing manufacturing of our drug candidates or services providers, foreign exchange rates or employee wages. We are actively monitoring the effects these disruptions and increasing inflation could have on our operations. Our operations and performance depend on global, regional and U. S. economic and geopolitical conditions. Russia' s invasion and military attacks on Ukraine have triggered significant sanctions from U. S. and European leaders. Resulting changes in U. S. trade policy could trigger retaliatory actions by Russia, its allies and other affected countries, including China, resulting in a “ trade war. ” The above factors, including a number of other economic and geopolitical factors both in the U. S. and abroad, could ultimately have material adverse effects on our business, financial condition, results of operations or cash flows, including the following: • effects of significant changes in economic, monetary and fiscal policies in the U. S. and abroad including currency fluctuations, inflationary pressures and significant income tax changes; • supply chain disruptions; • a global or regional economic slowdown in any of our market segments; • changes in government policies and regulations affecting the Company or its significant customers; • industrial policies in various countries that favor domestic industries over multinationals or that restrict foreign companies altogether; • new or stricter trade policies and tariffs enacted by countries, such as China, in response to changes in U. S. trade policies and tariffs; • postponement of spending, in response to tighter credit, financial market volatility and other factors; • rapid material escalation of the cost of regulatory compliance and litigation; • difficulties protecting intellectual property; • longer payment cycles; ~~70~~ • credit risks and other challenges in collecting accounts receivable; and • the impact of each of the foregoing on outsourcing and procurement arrangements. ~~We rely extensively on our information..... results of operations and our business reputation.~~ Holders of our warrants issued in our offerings have no rights as common stockholders until they exercise their warrants and acquire our common stock. Until the holders of the warrants we issued in our offerings acquire shares of our common stock by exercising their warrants, the holders of the warrants have no rights as a stockholder with respect to the shares of common stock underlying their securities. Upon exercise of the warrants they will be entitled to the rights of a common stockholder only as to matters for which the record date occurs after the exercise date. Whether the outstanding warrants will have any value will depend on the market conditions for, and the price of, our common stock, which conditions will depend on factors related and unrelated to the success of our clinical development program, and cannot be predicted at this time. If our common stock price does not increase to an amount sufficiently above the exercise price of the warrants during the periods the warrants are exercisable, holders of warrants will be unable to recover any of their investment in the warrants. Because there is no established public trading market for any of our warrants we issued, the liquidity of each such security is limited. We do not expect a market to develop, nor do we intend to apply to list the warrants on any securities exchange. Upon exercise of the warrants, our stockholders will experience dilution. The market price of our common stock has been and may continue to be volatile and adversely affected by various factors. Our stock price has fluctuated in the past, has recently been volatile and may be volatile in the future. By way of example, on ~~September 11~~ ~~January 19,~~ ~~2023-2024,~~ the price of our common stock closed at \$ ~~0-1.~~ ~~28-06~~ per share while on ~~April 19~~ ~~March 28,~~ ~~2023-2024,~~ our stock price closed at \$ ~~1-4.~~ ~~30-06~~ per share. We may incur rapid and substantial decreases in our stock price in the foreseeable future that are unrelated to our operating performance or prospects. The stock market in general and the market for biotechnology and pharmaceutical companies in particular have experienced extreme volatility that has often been unrelated to the operating performance of particular companies. As a result of this volatility, investors may experience losses on their investment in our common stock. The market price of our common stock could fluctuate significantly in response to various factors and events, including: • investor reaction to our business strategy; • the success of competitive products or technologies; • our continued compliance with the listing standards of the NYSE American; • results of our preclinical and clinical trials; • actions taken by regulatory agencies with respect to our products, clinical studies, manufacturing process or sales and marketing terms; • variations in our financial results or those of companies that are perceived to be similar to us; • developments or disputes concerning patents or other proprietary rights, including patents, litigation matters and our ability to obtain patent protection for our products; ~~73~~ • our ability or inability to raise additional capital and the terms on which we raise it; • declines in the market prices of stocks generally; ~~71~~ • trading volume of our common stock; • sales of our common stock by us or our stockholders; • announcements of licensing or other business development initiatives; • general economic, industry and market conditions; and • other events or factors, including those resulting from such events, or the prospect of such events, including war, terrorism and other international conflicts, public health issues including health epidemics or pandemics, and natural disasters such as fire, hurricanes, earthquakes, tornados or other adverse weather and climate conditions, whether

occurring in the United States or elsewhere, could disrupt our operations, disrupt the operations of our suppliers or result in political or economic instability. These broad market and industry factors may seriously harm the market price of our common stock, regardless of our operating performance. Since the stock price of our common stock has fluctuated in the past, has been recently volatile and may be volatile in the future, investors in our common stock could incur substantial losses. In the past, following periods of volatility in the market, securities class- action litigation has often been instituted against companies. Such litigation, if instituted against us, could result in substantial costs and diversion of management' s attention and resources, which could materially and adversely affect our business, financial condition, results of operations and growth prospects. There can be no guarantee that our stock price will remain at current prices or that future sales of our common stock will not be at prices lower than those sold to investors. Reports published by securities or industry analysts, including projections in those reports that exceed our actual results, could adversely affect our common stock price and trading volume. Securities research analysts, including those affiliated with our underwriters from prior offerings, establish and publish their own periodic projections for our business. These projections may vary widely from one another and may not accurately predict the results we actually achieve. Our stock price may decline if our actual results do not match securities research analysts' projections. Similarly, if one or more of the analysts who writes reports on us downgrades our stock or publishes inaccurate or unfavorable research about our business or if one or more of these analysts ceases coverage of our company or fails to publish reports on us regularly, our stock price or trading volume could decline. While we expect securities research analyst coverage to continue going forward, if no securities or industry analysts begin to cover us, the trading price for our stock and the trading volume could be adversely affected. We are a " smaller reporting company ", and the reduced disclosure requirements applicable to smaller reporting companies may make our common stock less attractive to investors. We are a " smaller reporting company " as defined in Rule 12b- 2 promulgated under the Exchange Act. We may remain a smaller reporting company until we have a non- affiliate public float in excess of \$ 250 million or annual revenues in excess of \$ 100 million and a non- affiliate public float in excess of \$ 700 million, each as determined on an annual basis. For so long as we remain smaller reporting company, we are permitted and may take advantage of specified reduced reporting and other burdens that are otherwise applicable generally to public companies. These provisions include: • an exemption from compliance with the auditor attestation requirement of Section 404 of the Sarbanes- Oxley Act of 2002, or the Sarbanes- Oxley Act, on the design and effectiveness of our internal controls over financial reporting; and • scaled reporting and disclosure requirements including about our executive compensation arrangements. **74-We cannot predict whether investors will find our common stock less attractive if we rely on such exemptions. If some investors find our common stock less attractive as a result, there may be a less active trading market for our common stock and the market price of our common stock may be more volatile. 72**