

## Risk Factors Comparison 2024-12-23 to 2023-11-27 Form: 10-K

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The following is a summary of the risks and uncertainties that could cause our business, financial condition or operating results to be harmed. We encourage you to carefully review the full risk factors contained in this report in their entirety for additional information regarding these risks and uncertainties.

- Our history of losses and no revenue raises a risk regarding our ability to continue as a going concern in the future;
- We have a very limited relevant operating history upon which an evaluation of our performance and prospects can be made. We may never be able to successfully develop marketable products or generate any revenue. If we cannot generate sufficient revenues, we may suspend or cease operations;
- Our research and development plans will require substantial additional future funding. We may be unable to raise capital when needed, which would force us to delay, reduce or eliminate our research and development activities;
- **We will need additional funding and may be unable to raise additional capital when needed, which would force us to delay, reduce or eliminate our research and development activities;**
- Even if our products are approved, we may not be able to generate significant revenues from or successfully commercialize them, which will adversely affect our financial results and financial condition and we will have to delay or terminate some or all of our research and development plans which may force us to cease operations;
- **Our research and development plans require substantial additional future funding which could impact our operations and financial condition;**
- If we or any companion diagnostic collaborator of ours are unable to timely develop and obtain regulatory approval for companion diagnostic tests for our drug candidates, we may not realize the commercial potential of our drug candidates;
- **The regulatory approval processes of the FDA and comparable foreign regulatory authorities are lengthy, time-consuming and inherently unpredictable, which could lead to our inability to generate product revenue;**
- Regulatory authorities may not accept data from our trials conducted outside the United States;
- Fast Track designation or breakthrough therapy designation that we have received or may seek out may not actually lead to a faster FDA review and approval process;
- We may be unable to maintain any benefits associated with orphan drug designation, including market exclusivity;
- If we fail to demonstrate efficacy in our non-clinical studies and clinical trials our future business prospects, financial condition and operating results will be materially adversely affected;
- **If a particular product candidate causes undesirable side effects, then we may be unable to receive regulatory approval of or commercialize such product candidate;**
- **We are highly dependent on our key personnel and if we are not successful in attracting and retaining highly qualified personnel, we may not be able to successfully implement our business strategy;**
- If we do not obtain the support of qualified scientific collaborators, our revenue, growth and profitability will likely be limited, which would have a material adverse effect on our business;
- We may not be able to develop, market or generate sales of our products to the extent anticipated. Our business may fail and investors could lose all their investment in our Company;
- None of our potential drug compounds may reach the commercial market and our business may fail;
- **Material modifications in the methods of product candidate manufacturing may result in additional costs or delay;**
- Our technologies and future products may be rendered undesirable or obsolete if our competitors succeed in developing products and technologies faster or that are more effective or with a better profile than our own, or if scientific developments change our understanding of the potential scope and utility of our potential products;
- We have advanced our research and development efforts on the treatment of neurodegenerative and central nervous system, or CNS, disorders, a field that has seen very limited success in product development;
- Our reliance on third parties may result in delays in completing, or a failure to complete, non-clinical testing or clinical trials if they fail to perform under our agreements with them or non-compliance with regulations;
- If we fail to compete with respect to partnering, licensing, mergers, acquisitions, joint venture and other collaboration opportunities, our ability to research and develop our potential drug compounds may be limited;
- The use of any of our products in clinical trials may expose us to liability claims, causing our business to suffer;
- If we are unable to safeguard against security breaches with respect to our information systems, our business may be adversely affected;
- Continuing regulatory obligations and ongoing regulatory review may result in additional expense. Our compounds could be subject to restrictions on marketing or withdrawal from the market, and we may be subject to penalties when and if any of them are approved;
- **Changes in funding for the FDA, the SEC and other government agencies could prevent these agencies from performing normal functions on which the operations of our business may rely, which could negatively affect our business;**
- We receive Australian government research and development income tax incentive refunds. Loss of access to such incentives could have a negative effect on our future cash flows and the funding of future research and development projects;
- Operating our business internationally carries various risks which could materially adversely affect our business;
- Our ability to use our net operating loss carryforwards and tax credit carryforwards may be subject to limitation;
- Healthcare laws and regulations could expose us to criminal sanctions, civil and administrative penalties, contractual damages, reputational harm and diminished profits and future earnings, among other penalties;
- We expect current and future legislation affecting the pharmaceutical industry, including drug pricing reform, to impact our business generally, which could adversely affect our business operations;
- Failure to obtain or maintain adequate coverage and reimbursement for our product candidates, if approved, could limit our ability to market those products and decrease our ability to generate product revenue;
- Issuing additional shares of common stock will result in the dilution of our existing stockholders and may cause our stock price to fall. A decline in our stock price could affect our ability to raise further working capital and adversely affect our operations. Raising funds at lower prices would severely dilute existing or future investors;
- Our stock price has been volatile and may be volatile in the future and our common stock may become the target of a “short squeeze”;
- If we fail to maintain an effective system of internal control over financial reporting, we may

not be able to accurately report our financial results or prevent fraud. Our disclosure controls and procedures may not prevent or detect all errors or acts of fraud. As a result, stockholders could lose confidence in our financial and other public reporting, which would harm our business and the trading price of our common stock; ● Patent terms may be inadequate to protect our competitive position on our product candidates. If we are unable to obtain and maintain sufficient intellectual property protection for our product candidates, our competitors could develop and commercialize product candidates similar or identical to ours, and our ability to successfully commercialize our product candidates may be impaired; ● If we fail to comply with our obligations in intellectual property licensing agreements or experience disruptions to our business relationships with our licensors, we could lose important intellectual property rights. If we are unable to protect the confidentiality of our trade secrets, our business would be harmed; ● Intellectual property infringement claims may adversely affect our development and commercialization efforts; ● We may be subject to claims that our employees, consultants or independent contractors have wrongfully used or disclosed confidential information of third parties or that our employees have wrongfully used or disclosed alleged trade secrets of their former employers; ● **We may become involved in lawsuits to protect or enforce our patents or other intellectual property;** Obtaining and maintaining our patent protection depends on compliance with various requirements imposed by governmental patent agencies. Changes in patent law could impair our ability to protect our product candidates; ● ~~We may become involved in lawsuits to protect or enforce our patents or other intellectual property;~~ and ● **Changes in patent law could diminish the value of our patents and patent applications in general.** In addition to other information in this Annual Report on Form 10-K, the following risk factors should be carefully considered in evaluating our business because such factors may have a significant impact on our business, operating results, liquidity and financial condition. As a result of the risk factors set forth below, actual results could differ materially from those projected in any forward- looking statements. Additional risks and uncertainties not presently known to us, or that we currently consider to be immaterial, may also impact our business, operating results, liquidity and financial condition. If any such risks occur, our business, operating results, liquidity and financial condition could be materially affected in an adverse manner. Under such circumstances, the trading price of our securities could decline, and you may lose all or part of your investment. Risks Related to our Company We have had a history of losses and no revenue, which raises a risk regarding our ability to continue as a going concern in the future. Since inception through September 30, ~~2023~~ **2024**, we have accumulated a deficit of approximately \$ ~~293~~ **336** million. We can offer no assurance that we will ever operate profitably or that we will generate positive cash flow in the future. To date, we have not generated any revenues from our operations. Our history of losses and no revenues creates a greater risk of our continued ability to continue as a going concern in the future. As a result, our management expects the business to continue to experience negative cash flows for the foreseeable future and cannot predict when, if ever, our business might become profitable. We will need to raise additional funds, and such funds may not be available on commercially acceptable terms, if at all. If we are unable to raise funds on acceptable terms, we may not be able to execute our business plan, take advantage of future opportunities, or respond to competitive pressures or unanticipated requirements. This may seriously harm our business, financial condition and results of operations. We are an early clinical stage pharmaceutical research and development company and may never be able to successfully develop marketable products or generate any revenue. We have a very limited relevant operating history upon which an evaluation of our performance and prospects can be made. There is no assurance that our future operations will result in profits. If we cannot generate sufficient revenues, we may suspend or cease operations. We are an early clinical stage company and have not generated any revenues to date and have no operating history. Moreover, we cannot be certain that our research and development efforts will be successful or, if successful, that our potential drug compounds will ever be approved for sale to pharmaceutical companies or generate commercial revenues. We have no relevant operating history upon which an evaluation of our performance and prospects can be made. We are subject to all of the business risks associated with a new enterprise, including, but not limited to, risks of unforeseen capital requirements, failure of potential drug compounds either in non- clinical testing or in clinical trials, failure to establish business relationships and competitive disadvantages against larger and more established companies. If we fail to become profitable, we may suspend or cease operations. We will need additional funding and may be unable to raise additional capital when needed, which would force us to delay, reduce or eliminate our research and development activities. To date, we have funded our operations primarily through private placement of our equity securities, **through issuances of shares under the Purchase Agreement with Lincoln Park Capital Fund, LLC (“ Lincoln Park ”) pursuant to which the Company may direct Lincoln Park to purchase shares of common stock registered under and an grants effective registration statement,** or, **historically, through** draws under our “ at - the - market offering ” in connection with ~~an the~~ Amended and Restated Sales Agreement, ~~dated May 1, 2020,~~ with Cantor Fitzgerald & Co. and SVB Leerink LLC (the “ Sales Agents ”), pursuant to which we ~~may could~~ offer and sell shares of common stock registered under an effective registration statement from time to time through the Sales Agents ~~or the through the Purchase Agreement with Lincoln Park Capital Fund, LLC (“ Lincoln Park ”) pursuant to which the Company may direct Lincoln Park to purchase shares of common stock registered under an effective registration statement.~~ The Company **terminated** ~~currently does not have access to sell shares under~~ the Sales Agreement **in July 2024**. We will need to raise additional funding and the current economic conditions may have a negative impact on our ability to raise additional needed capital on terms that are favorable to our Company or at all. We may not be able to generate significant revenues for several years, if at all. Until we can generate significant revenues, if ever, we expect to satisfy our future cash needs through equity or debt financing. We cannot be certain that additional funding will be available on acceptable terms, or at all. If adequate funds are not available, we may be required to delay, reduce the scope of, or eliminate one or more of our research and development activities. Risks Related to our Business Even if we are able to develop our potential drug compounds, we may not be able to receive regulatory approval, or if approved, we may not be able to generate significant revenues or successfully commercialize our products, which will adversely affect our financial results and financial condition and we will have to delay or terminate some or all of our research and development

plans which may force us to cease operations. All of our potential drug compounds are exclusively focused on SIGMAR1 which has not previously been the subject of any approved drug products and will require extensive additional research and development, including non-clinical testing and clinical trials, as well as regulatory approvals, before we can market them. In particular, human therapeutic products are subject to rigorous non-clinical and clinical testing and other approval procedures of the FDA and similar regulatory authorities in other countries. Various federal statutes and regulations also govern or influence testing, manufacturing, safety, labeling, storage, and record-keeping related to such products and their marketing. We cannot predict if or when any of the potential drug compounds we intend to develop will be approved for marketing. There are many reasons that we may fail in our efforts to develop our potential drug compounds. These include:

- the possibility that non-clinical testing or clinical trials may show that our potential drug compounds are ineffective and / or cause harmful side effects;
- regulators may not authorize us to commence or continue a clinical trial or may impose a clinical hold or may limit the conduct of a clinical trial through the imposition of a partial clinical hold;
- the number of patients required for clinical trials for our drug candidates may be larger than we anticipate, enrollment in these clinical trials may be slower than we anticipate, participants may drop out of these clinical trials at a higher rate than we anticipate or the duration of these clinical trials may be longer than we anticipate;
- our third-party contractors, including investigators, may fail to meet their contractual obligations to us in a timely manner, or at all, or may fail to comply with regulatory requirements;
- our potential drug compounds may prove to be too expensive to manufacture or administer to patients;
- our potential drug compounds may fail to receive necessary regulatory approvals from the United States Food and Drug Administration or foreign regulatory authorities in a timely manner, or at all;
- even if our potential drug compounds are approved, we may not be able to produce them in commercial quantities or at reasonable costs;
- even if our potential drug compounds are approved, they may not achieve commercial acceptance;
- regulatory or governmental authorities may apply restrictions to any of our potential drug compounds, which could adversely affect their commercial success; and
- the proprietary rights of other parties may prevent us or our potential collaborative partners from marketing our potential drug compounds.

If we fail to develop our potential drug compounds, our financial results and financial condition will be adversely affected, we will have to delay or terminate some or all of our research and development plans and may be forced to cease operations. Our research and development plans will require substantial additional future funding which could impact our operations and financial condition. It will take several years before we can develop potentially marketable products, if at all. Our research and development plans will require substantial additional capital, arising from costs to:

- conduct research, non-clinical testing and human clinical trials;
- establish pilot scale and commercial scale manufacturing processes and facilities; and
- establish and develop quality control, regulatory, marketing, sales, finance and administrative capabilities to support these programs.

Our future operating and capital needs will depend on many factors, including:

- the pace of scientific progress in our research and development programs and the magnitude of these programs;
- the scope and results of pre-clinical testing and human clinical trials;
- the time and costs involved in obtaining regulatory approvals;
- the time and costs involved in preparing, filing, prosecuting, securing, maintaining and enforcing patents;
- competing technological and market developments;
- our ability to establish additional collaborations;
- changes in our existing collaborations;
- the cost of manufacturing scale-up; and
- the effectiveness of our commercialization activities.

We base our outlook regarding the need for funds on many uncertain variables. Such uncertainties include the success of our research initiatives, regulatory approvals, the timing of events outside our direct control such as negotiations with potential strategic partners and other factors. Any of these uncertain events can significantly change our cash requirements as they determine such one-time events as the receipt or payment of major milestones and other payments. Additional funds may be required to support our operations and if we are unable to obtain them on favorable terms, we may be required to cease or reduce certain further research and development programs of our drug product platform, sell some or all our intellectual property, merge with another entity or scale back operations. If we or any companion diagnostic collaborator of ours are unable to successfully develop and obtain regulatory approval for companion diagnostic tests for our drug candidates, or experience significant delays in doing so, we may not realize the commercial potential of our drug candidates. We analyze genomic data from clinical trials to identify biomarkers, which we use in the analysis of our clinical trials. Identification of these patients will require the use and development of companion diagnostics. According to the FDA's 2014 guidance document on In Vitro Companion Diagnostic Devices, for novel therapeutic products that depend on the use of a diagnostic test and where the diagnostic device could be essential for the safe and effective use of the corresponding therapeutic product, the premarket application for the companion diagnostic device should be developed and approved or cleared contemporaneously with the therapeutic. We do not have experience or capabilities in developing or commercializing diagnostics. It may be necessary to resolve issues such as selectivity / specificity, analytical validation, reproducibility, or clinical validation of companion diagnostics during the development and regulatory approval processes. Moreover, even if data from preclinical studies and early clinical trials appear to support development of a companion diagnostic for a drug candidate, data generated in later clinical trials may fail to support the analytical and clinical validation of the companion diagnostic. We and our future collaborators may encounter difficulties in developing, obtaining regulatory approval for, manufacturing and commercializing companion diagnostics similar to those we face with respect to our drug candidates, including issues with achieving regulatory clearance or approval, production of sufficient quantities at commercial scale and with appropriate quality standards, and in gaining market acceptance. If we are unable to successfully develop companion diagnostics for our drug candidates, or experience delays in doing so, the development of these drug candidates may be adversely affected, these drug candidates may not obtain marketing approval, and we may not realize the full commercial potential of any of these therapeutics that have or may obtain marketing approval. We may not be able to enter into arrangements with another diagnostic company to develop and obtain regulatory approval for of an alternative diagnostic test for use in connection with the development and commercialization of our drug candidates or do so on commercially reasonable terms, which could adversely affect and / or delay the development or commercialization of our therapeutic candidates or therapeutics. Companion diagnostics are subject to regulation by the FDA and comparable foreign

regulatory authorities as medical devices and will likely require separate regulatory approval prior to commercialization. If we or third parties are unable to successfully develop companion diagnostics for our drug candidates, or experience delays in doing so: • the development of these drug candidates may be delayed because it may be difficult to identify patients for enrollment in our clinical trials in a timely manner; • these drug candidates may not receive marketing approval if their safe and effective use depends on a companion diagnostic; and • we may not realize the full commercial potential of these drug candidates that receive marketing approval if, among other reasons, we are unable to appropriately identify patients or types of tumors targeted by these drug candidates. Even if our drug candidates and any associated companion diagnostics are approved for marketing, the need for companion diagnostics may slow or limit adoption of our drug candidates. Our drug candidates may be perceived negatively compared to alternative treatments that do not require the use of companion diagnostics, either due to the additional cost of the companion diagnostic or the need to complete additional prior to administering our drug candidates. If any of these events were to occur, our business and growth prospects would be harmed materially. **The regulatory approval processes of the FDA and comparable foreign regulatory authorities are lengthy, time-consuming and inherently unpredictable, which could lead to our inability to generate product revenue. The time required to obtain approval by the FDA and comparable foreign regulatory authorities is unpredictable, typically takes many years following the commencement of clinical trials and depends upon numerous factors, including the type, complexity and novelty of the product candidates involved. Seeking foreign regulatory approvals could result in significant delays, difficulties and costs for us and may require additional preclinical studies or clinical trials which would be costly and time consuming. Regulatory requirements can vary widely from country to country and could delay or prevent the introduction of our product candidates in those countries. In addition, approval policies, regulations or the type and amount of clinical data necessary to gain approval may change during the course of a product candidate's clinical development and may vary among jurisdictions, which may cause delays in the approval or the decision not to approve an application. Regulatory authorities have substantial discretion in the approval process and may refuse to accept any application or may decide that our data are insufficient for approval and require additional preclinical, clinical or other data. Satisfying these and other regulatory requirements is costly, time consuming, uncertain and subject to unanticipated delays. Our failure to obtain regulatory approval in any country may delay or have negative effects on the process for regulatory approval in other countries. Even if we eventually complete clinical testing and receive approval of any regulatory filing for our product candidates, the FDA and comparable foreign regulatory authorities may approve our product candidates for a more limited indication or a narrower patient population than we originally requested. If we fail to comply with regulatory requirements in international markets or to obtain and maintain required approvals, our target market will be reduced and our ability to realize the full market potential of our product candidates will be harmed. Applications for our product candidates could fail to receive regulatory approval for many reasons, including but not limited to the following: • the FDA or comparable international regulatory authorities may disagree with the design, implementation or results of our clinical trials; • the FDA or comparable international regulatory authorities may determine that our product candidates are not safe and effective, only moderately effective or have undesirable or unintended side effects, toxicities or other characteristics that preclude our obtaining marketing approval or prevent or limit commercial use; • the population studied in the clinical program may not be sufficiently broad or representative to assure efficacy and potency and safety in the full population for which we seek approval; • the FDA or comparable international regulatory authorities may disagree with our interpretation of data from preclinical studies or clinical trials; • the data collected from clinical trials of our product candidates may not be sufficient to support the submission of a Biologics License Application, New Drug Application or other submission or to obtain regulatory approval in the United States or elsewhere; • we may be unable to demonstrate to the FDA or comparable international regulatory authorities that a product candidate's risk-benefit ratio for its proposed indication is acceptable; • the FDA or comparable international regulatory authorities may fail to approve the manufacturing processes, test procedures and specifications or facilities of third-party manufacturers with which we contract for clinical and commercial supplies; and • the approval policies or regulations of the FDA or international foreign regulatory authorities may significantly change in a manner rendering our clinical data insufficient for approval. In order to market any product candidates outside of the United States, we must establish and comply with numerous and varying regulatory requirements of other countries regarding safety and efficacy and potency and approval standards. Clinical trials conducted in one country may not be accepted by regulatory authorities in other countries, and regulatory approval in one country does not mean that regulatory approval will be obtained in any other country. The ability of the FDA to review and approve new products can be affected by a variety of factors, including government budget and funding levels, ability to hire and retain key personnel and accept the payment of user fees, government shutdowns, including as a result of budget delays or other circumstances like the COVID- 19 pandemic and statutory, regulatory and policy changes. Average review times at the agency have fluctuated in recent years as a result. This lengthy approval process, as well as the unpredictability of the results of clinical trials, may result in our failing to obtain regulatory approval to market any of our product candidates, which would significantly harm our business, results of operations and prospects.** All but one of our clinical trials to date have been conducted outside the United States, and the FDA and other foreign regulatory authorities may not accept data from such trials. The acceptance of study data from clinical trials conducted outside the United States by the FDA may be subject to certain conditions or may not be accepted at all. In cases where data from foreign clinical trials are intended to serve as the sole basis for regulatory approval in the United States, the FDA will generally not approve the application on the basis of foreign data alone unless (i) the data are applicable to the United States population and United States medical practice; (ii) the trials were performed by clinical investigators of recognized competence and pursuant to good clinical practice regulations; and (iii) the data may be considered valid without the need for an on-site inspection by the FDA, or if the FDA considers such inspection to be necessary, the FDA is able to validate

the data through an on-site inspection or other appropriate means. Many foreign regulatory bodies have similar approval requirements. In addition, such foreign trials would be subject to the applicable local laws of the foreign jurisdictions where the trials are conducted. There can be no assurance that the FDA or any other foreign regulatory authority will accept data from trials conducted outside of the United States or the applicable jurisdiction. If the FDA or any comparable foreign regulatory authority does not accept such data, it would result in the need for additional trials, which would be costly and time-consuming and delay aspects of our business plan, and which may result in our product candidates not receiving approval or clearance for commercialization in the applicable jurisdiction. We have received Fast Track designation for one of our compounds and may seek such designation or breakthrough therapy and priority review for other compounds in the future. Fast Track designation or breakthrough therapy designation may not actually lead to a faster FDA review and approval process. For some of our compounds, including ANAVEX ® 2-73, we hope to benefit from the FDA's ~~fast~~ **Fast track Track** and priority review programs. In February 2020, the FDA granted Fast Track designation for the ANAVEX ® 2-73 clinical development program for the treatment of Rett syndrome. Programs with Fast Track designation may benefit from early and frequent communications with the FDA, potential priority review and the ability to submit a rolling application for regulatory review. Fast Track designation applies to both the product candidate and the specific indication for which it is being studied. If any of our compounds receive Fast Track designation but do not continue to meet the criteria for Fast Track designation, or if our clinical trials are delayed, suspended or terminated, or put on clinical hold due to unexpected adverse events or issues with clinical supply, we will not receive the benefits associated with the Fast Track program. Furthermore, Fast Track designation does not change the standards for approval. The receipt of Fast Track designation for a compound may not result in a faster development or regulatory review or approval process compared to products considered for approval under conventional FDA procedures and does not assure ultimate approval by the FDA. In addition, even if any product candidate qualifies for Fast Track designation, the FDA may later decide that the product candidates no longer meet the conditions for qualification or decide that the time period for FDA review or approval will not be shortened. Fast Track designation alone does not guarantee qualification for the FDA's priority review procedures. Under FDA policies, a compound is eligible for priority review, or review within a six-month time frame from the time a complete NDA is accepted for filing, if the compound provides a significant improvement compared to marketed drugs in the treatment, diagnosis or prevention of a disease. The FDA determines whether a drug qualifies for Priority Review after an NDA for such drug is submitted to the FDA. Therefore, until NDAs are submitted for our compounds, we cannot be assured that they will be granted Priority Review. Additionally, even if Priority Review is granted for one of our compounds, the FDA does not always meet its six-month PDUFA goal date for Priority Review and the review process is often extended by FDA requests for additional information or clarification. We may seek Breakthrough Therapy designation for one or more of our current or future compounds. Designation as a Breakthrough Therapy is largely within the discretion of the FDA. Accordingly, even if we believe that a compound meets the criteria for designation as a Breakthrough Therapy, the FDA may disagree and instead determine not to make such designation. In any event, the receipt of a Breakthrough Therapy designation for a product candidate may not result in a faster development process, review or approval compared to candidate products considered for approval under non-expedited FDA review procedures and does not assure ultimate approval by the FDA. In addition, even if one or more compounds qualify as breakthrough therapies, the FDA may later decide that the product no longer meets the conditions for qualification and revoke the designation. ~~Fast track Track~~ **Fast track Track** or ~~breakthrough~~ **Breakthrough therapy Therapy** designation for our compounds may not actually lead to a faster review process, and a delay in the review process or in the approval of our compounds will delay revenue from their potential sales and will increase the capital necessary to fund these compound development programs. We have received orphan drug designation for several of our compounds, but we may be unable to maintain any benefits associated with orphan drug designation, including market exclusivity. Under the Orphan Drug Act, the FDA may grant orphan designation to a drug intended to treat a rare disease or condition or for which there is no reasonable expectation that the cost of developing and making available in the United States a drug for a disease or condition will be recovered from sales in the United States for that drug. If a product that has orphan drug designation subsequently receives the first FDA approval for the indication for which it has such designation, the product is entitled to orphan product exclusivity, which means that the FDA may not approve any other applications, including a full NDA, to market the same drug or biologic for the same indication for seven years, except in limited circumstances, such as a showing of clinical superiority to the product with orphan drug exclusivity. We have received orphan drug designation for several of our compounds, but we may not be able to obtain or maintain orphan drug exclusivity in the United States for ~~those~~ **those** compounds. We may not be the first to obtain marketing approval of any compound for which we have obtained orphan drug designation for the orphan-designated indication due to the uncertainties associated with developing pharmaceutical products. In addition, exclusive marketing rights in the United States may be limited if we seek FDA marketing approval for an indication broader than the orphan designated indication. Additionally, any compound with orphan drug designation may lose such designation if the FDA later determines that the request for designation was materially defective or if the manufacturer is unable to assure sufficient quantities of the product to meet the needs of patients with the rare disease or condition. Even after an orphan drug is approved, the FDA can subsequently approve the same drug with the same active moiety for the same condition if the FDA concludes that the later drug is clinically superior in that it is shown to be safer, more effective or makes a major contribution to patient care. In addition, others may obtain orphan drug exclusivity for products addressing the same diseases or conditions as products we are developing, thus limiting our ability to compete in the markets addressing such diseases or conditions for a significant period of time. Orphan drug designation neither shortens the development time or regulatory review time of a drug nor gives the product candidate any advantage in the regulatory review or approval process or entitles the product candidate to priority review. If we fail to demonstrate efficacy in our non-clinical studies and clinical trials our future business prospects, financial condition and operating results will be materially adversely affected. The success of our research and development efforts will be greatly dependent upon our ability to demonstrate potential drug compound efficacy in non-clinical

studies, as well as in clinical trials. Non-clinical studies involve testing potential drug compounds in appropriate non-human disease models to demonstrate efficacy and safety. Regulatory agencies evaluate these data carefully before they will approve clinical testing in humans. If certain non-clinical data reveals potential safety issues or the results are inconsistent with an expectation of the potential drug compound's efficacy in humans, the regulatory agencies may require additional more rigorous testing before allowing human clinical trials. This additional testing will increase program expenses and extend timelines. We may decide to suspend further testing on our potential drug compounds if, in the judgment of our management and advisors, the non-clinical test results do not support further development. Moreover, success in non-clinical testing and early clinical trials does not ensure that later clinical trials will be successful, and we cannot be sure that the results of later clinical trials will replicate the results of prior clinical trials and non-clinical testing. The clinical trial process may fail to demonstrate that our potential drug compounds are safe for humans and effective for indicated uses. This failure would cause us to abandon a drug candidate and may delay development of other potential drug compounds. Any delay in, or termination of, our non-clinical testing or clinical trials will delay the filing of an IND and NDA with the FDA or the equivalent applications with pharmaceutical regulatory authorities outside the United States and, ultimately, our ability to commercialize our potential drug compounds and generate product revenues. In addition, we expect that our early clinical trials will involve small patient populations. Because of the small sample size, the results of these early clinical trials may not be indicative of future results. Also, the IND process may be extremely costly and may substantially delay the development of our potential drug compounds. Moreover, positive results of non-clinical tests will not necessarily indicate positive results in subsequent clinical trials. Following successful non-clinical testing, potential drug compounds will need to be tested in a clinical development program to provide data on safety and efficacy prior to becoming eligible for product approval and licensure by regulatory agencies. From the first human trial through to regulatory approval can take many years and 10-12 years is not unusual for certain compounds. If any of our future clinical development potential drug compounds become the subject of problems, our ability to sustain our development programs will become critically compromised. For example, efficacy or safety concerns may arise, whether or not justified, that could lead to the suspension or termination of our clinical programs. Examples of problems that could arise include, among others: • efficacy or safety concerns with the potential drug compounds, even if not justified; • manufacturing difficulties or concerns; • regulatory proceedings subjecting the potential drug compounds to potential recall; • publicity affecting doctor prescription or patient use of the potential drug compounds; • pressure from competitive products; or • introduction of more effective treatments. Each clinical phase is designed to test attributes of the drug and problems that might result in the termination of the entire clinical plan can be revealed at any time throughout the overall clinical program. The failure to demonstrate efficacy in our clinical trials would have a material adverse effect on our future business prospects, financial condition and operating results. **If a particular product candidate causes undesirable side effects, then we may be unable to receive regulatory approval of or commercialize such product candidate. We may experience numerous unforeseen events during, or as a result of, the testing process that could delay or prevent commercialization of any of our product candidates, including the occurrence of undesirable side effects. Such side effects could lead to clinical trial challenges, such as difficulties in subject recruitment, retention, and adherence, potential product liability claims, and possible termination by health authorities. These types of clinical trial challenges could in turn, delay or prevent regulatory approval of our product candidate. Side effects may also lead regulatory authorities to require stronger product warnings on the product label, costly post-marketing studies, and / or a REMS, among other possible requirements. If the product candidate has already been approved, such approval may be withdrawn. Any delay in, denial, or withdrawal of marketing approval for one of our product candidates will adversely affect our business, including our results of operations and financial position. Even if one or more of our product candidates receives marketing approval, undesirable side effects may limit such product's commercial viability. Patients may not wish to use our product, physicians may not prescribe our product, and our reputation may suffer. Any of these events may significantly harm our business and financial prospects. We are highly dependent on our key personnel, and if we are not successful in attracting and retaining highly qualified personnel, we may not be able to successfully implement our business strategy. Our ability to compete in the highly competitive biotechnology and pharmaceutical industries depends upon our ability to attract and retain highly qualified managerial, scientific and medical personnel. We are highly dependent on our management, scientific and medical personnel. The loss of the services of any of our executive officers, other key employees and other scientific and medical advisors, and an inability to find suitable replacements could result in delays in product development and harm our business. Competition for skilled personnel in our market is intense and may limit our ability to hire and retain highly qualified personnel on acceptable terms or at all. Despite our efforts to retain valuable employees, members of our management, scientific and development teams may terminate their employment or service with us on short notice. Although we have employment agreements with our key employees, these employment agreements provide for at-will employment, which means that any of our employees could leave our employment at any time, with or without notice. Our success also depends on our ability to continue to attract, retain and motivate highly skilled junior, mid-level and senior managers as well as junior, mid-level and senior scientific and medical personnel in an extremely competitive market for employees and other service providers. If we do not obtain the support of qualified scientific collaborators, our revenue, growth and profitability will likely be limited, which would have a material adverse effect on our business. We will need to establish relationships with leading scientists and research institutions. We believe that such relationships are pivotal to establishing products using our technologies as a standard of care for various indications. Additionally, although in discussion, there is no assurance that our current research partners will continue to work with us or that we will be able to attract additional research partners. If we are not able to establish scientific relationships to assist in our research and development, we may not be able to successfully develop our potential drug compounds. If this happens, our business will be adversely affected. We may not be able to develop, market or generate sales of our products to the**

extent anticipated. Our business may fail and investors could lose all their investment in our Company. Assuming that we are successful in developing our potential drug compounds and receiving regulatory clearances to market our products, our ability to successfully penetrate the market and generate sales of those products may be limited by a number of factors, including the following:

- If our competitors receive regulatory approvals for and begin marketing similar products in the United States, the European Union, Japan and other territories before we do, greater awareness of their products as compared to ours will cause our competitive position to suffer;
- Information from our competitors or the academic community indicating that current products or new products are more effective or offer compelling other benefits than our future products could impede our market penetration or decrease our future market share; and
- The pricing and reimbursement environment for our future products, as well as pricing and reimbursement decisions by our competitors and by payers, may have an effect on our revenues. If this happens, our business will be adversely affected. None of our potential drug compounds may reach the commercial market for a number of reasons and our business may fail. Successful research and development of pharmaceutical products is high risk. Most products and development candidates fail to reach the market. Our success depends on the discovery of new drug compounds that we can commercialize. It is possible that our products may never reach the market for a number of reasons. They may be found ineffective or may cause harmful side effects during non-clinical testing or clinical trials or fail to receive necessary regulatory approvals. We may find that certain products cannot be manufactured at a commercial scale and, therefore, they may not be economical to produce. Our potential products could also fail to achieve market acceptance or be precluded from commercialization by proprietary rights of third parties. Our patents, patent applications, trademarks and other intellectual property may be challenged, and this may delay or prohibit us from effectively commercializing our products. Furthermore, we do not expect our potential drug compounds to be commercially available for a number of years, if at all. If none of our potential drug compounds reach the commercial market, our business will likely fail and investors will lose all of their investment in our Company. If this happens, our business will be adversely affected.

**Material modifications in the methods of product candidate manufacturing may result in additional costs or delay. As product candidates progress from preclinical studies to late-stage clinical trials to marketing approval and commercialization, it is common that various aspects of the development program, such as manufacturing methods, materials and processes, are altered along the way in an effort to optimize yield, manufacturing batch size, minimize costs and achieve consistent purity, identity, potency, quality and results. Such changes carry the risk that they will not achieve these intended objectives. Any of these changes could cause our product candidates to perform differently and could affect planned or other clinical trials conducted with product candidates produced using the modified manufacturing methods, materials, and processes. This could delay completion of clinical trials and could require non-clinical or clinical bridging and comparability studies, which could increase costs, delay approval of our product candidates and jeopardize our ability to commercialize our product candidates, if approved.**

If our competitors succeed in developing products and technologies faster or that are more effective or with a better profile than our own, or if scientific developments change our understanding of the potential scope and utility of our potential products, then our technologies and future products may be rendered undesirable or obsolete. We face significant competition from industry participants that are pursuing technologies in similar disease states to those that we are pursuing and are developing pharmaceutical products that are competitive with our products. Nearly all of our industry competitors have greater capital resources, larger overall research and development staffs and facilities, and a longer history in drug discovery and development, obtaining regulatory approval and pharmaceutical product manufacturing and marketing than we do. With these additional resources, our competitors may be able to respond to the rapid and significant technological changes in the biotechnology and pharmaceutical industries faster than we can. Our future success will depend in large part on our ability to maintain a competitive position with respect to these technologies. Rapid technological development, as well as new scientific developments, may result in our products becoming obsolete before we can recover any of the expenses incurred to develop them. For example, changes in our understanding of the appropriate population of patients who should be treated with a targeted therapy like we are developing may limit the drug's market potential if it is subsequently demonstrated that only certain subsets of patients should be treated with the targeted therapy. We have advanced our research and development efforts on the treatment of neurodegenerative and central nervous system, or CNS, disorders, a field that has seen very limited success in product development. We have advanced our research and development efforts on addressing neurodegenerative, neurodevelopmental and CNS disorders. Collectively, efforts by pharmaceutical companies in the field of neurodegenerative, neurodevelopmental and CNS disorders have seen very limited successes in product development. The development of neurodegenerative and CNS therapies presents unique challenges, including an imperfect understanding of the biology, the presence of the blood brain barrier, or BBB, that can restrict the flow of drugs to the brain, a frequent lack of translatability of preclinical study results in subsequent clinical trials and dose selection, and the product candidate having an effect that may be too small to be detected using the outcome measures selected in clinical trials or if the outcomes measured do not reach statistical significance. Our reliance on third parties, such as university laboratories, contract manufacturing organizations and contract or clinical research organizations, may result in delays in completing, or a failure to complete, non-clinical testing or clinical trials if they fail to perform under our agreements with them or non-compliance with regulations. In the course of product development, we may engage university laboratories, other biotechnology companies or contract or clinical manufacturing organizations to manufacture drug material for us to be used in non-clinical and clinical testing and contract research organizations to conduct and manage non-clinical studies and clinical trials. If we engage these organizations to help us with our non-clinical and clinical programs, many important aspects of this process have been and will be out of our direct control. If any of these organizations we may engage in the future fail to perform their obligations under our agreements with them or fail to perform non-clinical testing and / or clinical trials in a satisfactory manner, we may face delays in completing our clinical trials, as well as commercialization of any of our potential drug compounds. Furthermore, any loss or delay in obtaining contracts with such entities may also delay the completion of our clinical trials, regulatory filings and the potential market approval of our potential

drug compounds. In addition, any of these third parties may engage in misconduct or other improper activities, including non-compliance with regulatory standards and requirements. Misconduct by these parties could include intentional, reckless and / or negligent conduct or disclosure of unauthorized activities to us that violate the regulations of any regulatory authorities, including those laws requiring the reporting of true, complete and accurate information to such authorities; healthcare fraud and abuse laws and regulations in the United States and abroad; or laws that require the reporting of financial information or data accurately. It is not always possible to identify and deter misconduct by employees and other third parties, and the precautions we take to detect and prevent this activity may not be effective in controlling unknown or unmanaged risks or losses or in protecting us from governmental investigations or other actions or lawsuits stemming from a failure to comply with these laws or regulations. If we fail to compete successfully with respect to partnering, licensing, mergers, acquisitions, joint venture and other collaboration opportunities, we may be limited in our ability to research and develop our potential drug compounds. Our competitors compete with us to attract established biotechnology and pharmaceutical companies or organizations for partnering, licensing, mergers, acquisitions, joint ventures or other collaborations. Collaborations include contracting with academic research institutions for the performance of specific scientific testing. If our competitors successfully enter into partnering arrangements or license agreements with academic research institutions, we will then be precluded from pursuing those specific opportunities. Since each of these opportunities is unique, we may not be able to find a substitute. Other companies have already begun many drug development programs, which may target diseases that we are also targeting, and have already entered into partnering and licensing arrangements with academic research institutions, reducing the pool of available opportunities. Universities and public and private research institutions also compete with us. While these organizations primarily have educational or basic research objectives, they may develop proprietary technology and acquire patent applications and patents that we may need for the development of our potential drug compounds. In some instances, we will attempt to license this proprietary technology, if available. These licenses may not be available to us on acceptable terms, if at all. If we are unable to compete successfully with respect to acquisitions, joint venture and other collaboration opportunities, we may be limited in our ability to develop new products. The use of any of our products in clinical trials may expose us to liability claims, which may cost us significant amounts of money to defend against or pay out, causing our business to suffer. The nature of our business exposes us to potential liability risks inherent in the testing, manufacturing and marketing of our products. We currently have one drug compound in clinical trials ; however, when any of our products enter clinical trials or become marketed products, they could potentially harm people or allegedly harm people possibly subjecting us to costly and damaging product liability claims. Some of the patients who participate in clinical trials are already ill when they enter a trial or may intentionally or unintentionally fail to meet the exclusion criteria. The waivers we obtain may not be enforceable and may not protect us from liability or the costs of product liability litigation. Although we intend to obtain product liability insurance, which we believe is adequate, we are subject to the risk that our insurance will not be sufficient to cover such claims. The insurance costs along with the defense or payment of liabilities above the amount of coverage could cost us significant amounts of money and management distraction from other elements of the business, causing our business to suffer. If our information systems or data, or those of third parties upon whom we rely, are or were compromised, our business may be adversely affected. In the course of our business, we, or third parties upon which whom we rely, may gather, collect, receive, use, transmit, store / retain or dispose of data and confidential information (such as confidential employee information or health-related data), sensitive data, intellectual property and trade secrets. Cyberattacks, malicious internet-based activity, online and offline fraud and other similar activities threaten the confidentiality, integrity, and availability of our sensitive information and information technology systems, and those of the third parties upon which whom we rely. We, and the third parties upon which whom we may rely, may be subject to a variety of these evolving threats. Although we endeavor to protect confidential information through the implementation of security technologies, processes and procedures, it is possible that an individual or group could defeat security measures and access sensitive information about our business and employees. The existence of a remote workforce also poses increased risks to our information technology systems and data, as more of our employees work from home, utilizing network connections outside our premises. Any misappropriation, loss or other unauthorized disclosure of confidential information gathered, stored or used by us or by third parties on our behalf, could have a material impact on the operation of our business, including damaging our reputation with our employees, third parties and investors. We could also incur significant costs implementing additional security measures and organizational changes, implementing additional protection technologies, training employees or engaging consultants. Our contracts with third parties upon which whom we may rely, may not contain limitations of liability, and even where they do, there can be no assurance that limitations of liability in our contracts are sufficient to protect us from liabilities, damages, or claims related to our data privacy and security obligations. In addition, we could incur increased litigation as a result of any potential cyber- security breach and our insurance coverage may not be adequate or sufficient in type or amount to protect us from or to mitigate liabilities arising out of our privacy and security practices. We are not aware that we have experienced any material misappropriation, loss or other unauthorized disclosure of confidential or personally identifiable information as a result of a cyber- security breach or other act, however, a cyber- security breach or other act and / or disruption to our information technology systems could have a material adverse effect on our business, prospects, financial condition or results of operations. Even if we receive regulatory approval for one or more compounds, we will be subject to continuing regulatory obligations and ongoing regulatory review, which may result in significant additional expense. Additionally, our compounds, if approved, could be subject to labeling and other restrictions on marketing or withdrawal from the market, and we may be subject to penalties, if we fail to comply with regulatory requirements or if we experience unanticipated problems with our compounds, when and if any of them are approved. Following potential approval of any our compounds, the FDA may impose significant restrictions on a drug's indicated uses or marketing or require potentially costly and time-consuming post-approval studies, post-market surveillance or clinical trials to monitor the safety and efficacy of the drug. The FDA may also require a Risk Evaluation and Mitigation Strategy ("REMS") as a condition of approval of one or more of our compounds,

which could include requirements for a medication guide, physician communication plans or additional elements to ensure safe use of the drug. Additional REMS elements may include restricted distribution methods, patient registries and other risk minimization tools. In addition, if the FDA or a comparable foreign regulatory authority approves one or more of our compounds, the manufacturing processes, labeling, packaging, distribution, adverse event reporting, storage, advertising, promotion, import, export and recordkeeping for the approved drug will be subject to additional and potentially extensive ongoing regulatory requirements. These requirements include submissions of safety and other post-marketing information and reports, establishment registration, as well as continued compliance with cGMPs and GCP requirements for any clinical trials that we conduct post-approval. Later discovery of previously unknown problems with our products, including adverse events of unanticipated severity or frequency, or with our third-party manufacturers or manufacturing processes, or failure to comply with regulatory requirements, may result in, among other things: • restrictions on the marketing or manufacturing of our products, withdrawal of the product from the market or voluntary or mandatory product recalls; • fines, restitutions, disgorgement of profits or revenues, warning letters, untitled letters or holds on clinical trials; • restrictions on product distribution or use, or requirements to conduct post-marketing studies or clinical trials; • product seizure or detention, or refusal to permit the import or export of our products; • injunctions or the imposition of civil or criminal penalties; and • refusal by the FDA to approve pending applications or supplements to approved applications filed by us or suspension or revocation of approvals. The occurrence of any event or penalty described above may limit our ability to commercialize our compounds and generate revenue—and could require us to expend significant time and resources in response or generate negative publicity. If any of our compounds are approved, our product labeling, advertising and promotion will also be subject to regulatory requirements and ongoing regulatory review. The FDA strictly regulates the promotional claims that may be made about drug products. In particular, a drug may not be promoted for uses that are not approved by the FDA as reflected in the drug's approved labeling. If we receive marketing approval for a compound, physicians may nevertheless lawfully prescribe it to their patients in a manner that is inconsistent with the approved label. While the FDA recently clarified that mere knowledge that a physician is prescribing an approved drug for off-label use is not sufficient to constitute unlawful off-label promotion, if we are found to have actively promoted such off-label uses, we may become subject to significant liability under the FDCA. The federal government has levied large civil and criminal fines against companies for alleged improper promotion and has enjoined several companies from engaging in off-label promotion. Additionally, promotion for off-label uses could result in significant liability under the False Claims Act. The FDA has also requested that companies enter into consent decrees or permanent injunctions under which specified promotional conduct is changed or curtailed. The FDA's and other regulatory authorities' policies are subject to change at any time, and additional government regulations may be enacted that could prevent, limit or delay regulatory approval of our compounds. If we are unable to timely adapt to changes in existing requirements or the adoption of new requirements or policies, or if we are not able to maintain regulatory compliance post-marketing, we may lose any marketing approval that we may have obtained, and we may not achieve or sustain profitability. Finally, we cannot predict the likelihood, nature or extent of government regulation that may arise from future legislation or administrative or executive action, either in the United States or abroad. It is difficult to predict how any such legislative, administrative or executive actions will be implemented, and the extent to which they will impact the FDA's ability to exercise its regulatory authority. If these legislative or executive actions impose constraints on the FDA's ability to engage in oversight and implementation activities in the normal course, our business may be negatively impacted.

**Changes in funding for the FDA, the SEC and other government agencies could hinder their ability to hire and retain key leadership and other personnel, prevent new products and services from being developed or commercialized in a timely manner or otherwise prevent those agencies from performing normal functions on which the operation of our business may rely, which could negatively impact our business. The ability of the FDA to review and approve new products can be affected by a variety of factors, including government budget and funding levels, ability to hire and retain key personnel and accept payment of user fees, statutory, regulatory and policy changes, and business disruptions, such as those caused by the COVID- 19 pandemic. Average review times at the agency have fluctuated in recent years as a result. In addition, government funding of the SEC and other government agencies on which our operations may rely, including those that fund research and development activities is subject to the political process, which is inherently fluid and unpredictable. Disruptions at the FDA and other agencies may also slow the time necessary for new drugs to be reviewed and / or approved by necessary government agencies, which would adversely affect our business. For example, over the last several years, the U. S. government has shut down several times and certain regulatory agencies, such as the FDA and the SEC, have had to furlough critical FDA, SEC and other government employees and stop critical activities. If a prolonged government shutdown occurs, it could significantly impact the ability of the FDA to timely review and process our regulatory submissions, which could have a material adverse effect on our business. Further, future government shutdowns could impact our ability to access the public markets and obtain necessary capital in order to properly capitalize and continue our operations.** We receive Australian government research and development income tax incentive refunds. If our research and development expenditures are not deemed to be eligible for the refund, proposed modifications to the tax incentive program are enacted, or the tax incentive program is discontinued by the Australian government, it could have a negative effect on our future cash flows and the funding of future research and development projects. Our subsidiary, Anavex Australia Pty Ltd., is incorporated in Australia where we are currently engaged in research and development activities for ANAVEX ® 2- 73 and ANAVEX ® 3- 71. Our subsidiary is eligible to participate in the Australian Federal Government's Research and Development Tax Incentive program, under which the government provides a cash refund for a portion of eligible research and development expenditures (currently 43. 5 % to 48. 5 % depending on the entity's corporate tax rate) by small Australian entities, which are defined as Australian entities with less than \$ 20 million (Australian) in revenue. The Research and Development Tax Incentive refund is offered by the Australian federal government for eligible research and development purposes based on the filing of an

annual application. As part of this program, our subsidiary applied for and received cash refunds from the Australian Taxation Office, or the ATO, for a percentage of the research and development costs expended by our subsidiary in Australia. Since the fiscal year ended September 30, 2015, we have been receiving Research and Development Tax Incentive refunds related to research and development expenditures made. Certain research and development expenses incurred outside of Australia are also eligible for the Australian research and development tax incentive program, provided we obtain an Advance Overseas Finding from AusIndustry, a division of the Australian Government’s Department of Industry, Innovation and Science (“ AusIndustry ”). To receive an Advance Overseas Finding, the expenses must have been for eligible research and development activities, as determined by AusIndustry, and the expenditures must have a scientific link to the Australian activities, be unable to be conducted in Australia and the total actual and reasonably anticipated overseas costs must be expected to be less than the total actual and reasonably anticipated expenditures for activities conducted within Australia, as determined by AusIndustry at the time of application for an Advance Overseas Finding (“ OSF ”). This OSF binds both AusIndustry and the Commissioner of Taxation for three income years. However, for compliance purposes, specific issue guidance jointly issued by AusIndustry and the ATO in 2014 provides that an OSF can apply for the duration of the overseas activity provided the activities are not new or materially different ~~then~~ **than** the activities described in the OSF. Currently, the Company is outside of the binding three- year period with respect to OSF applicable to some of its programs being claimed in Australia. To the extent that some or all of our research and development expenditures are deemed to be “ ineligible, ” then our refunds may decrease or be eliminated. In addition, the Australian government may in the future modify the requirements of, reduce the amounts of the refunds available under, or discontinue the Research and Development Tax Incentive program. Any such change to our anticipated refunds or change to the Research and Development Tax Incentive program would have a negative effect on our future cash flows. A variety of risks are associated with operating our business internationally which could materially adversely affect our business. We are presently conducting clinical development solely in Australia, United Kingdom, The Netherlands, Germany and Canada and may choose to conduct additional international and U. S. clinical trials in the future. Additionally, while we have not taken any steps to enter into any non- U. S. markets, we may do so in the future. Accordingly, we are subject to risks related to operating in foreign countries, including: • different standards of care in various countries that could complicate the evaluation of our product candidates; • different United States and foreign drug import and export rules; • reduced protection for intellectual property rights in certain countries; • unexpected changes in tariffs, trade barriers and regulatory requirements; • economic weakness, including inflation, or political instability in particular foreign economies and markets; • compliance with tax, employment, immigration, and labor laws for employees living or traveling abroad; • compliance with the FCPA and other anti- corruption and anti- bribery laws; • foreign taxes, including withholding of payroll taxes; • foreign currency fluctuations, which could result in increased operating expenses and reduced revenue, and other obligations incident to doing business in another country; • workforce uncertainty in countries where labor unrest is more common than in the United States; • production shortages resulting from any events affecting raw material supply or manufacturing capabilities abroad; • different payor reimbursement regimes, governmental payors or patient self- pay systems and price controls; • potential liability resulting from development work conducted by foreign partners; • business interruptions resulting from natural disasters, outbreaks of contagious diseases, such as COVID- 19, or geopolitical actions, including war and terrorism, or systems failure including cybersecurity breaches; and • compliance with evolving and expansive foreign regulatory requirements, including data privacy laws (such as the GDPR). Additionally, in connection with the ongoing conflict between Russia and Ukraine, the U. S. government and European Union countries have imposed enhanced export controls on certain products and sanctions on certain industry sectors and parties in Russia. The U. S. government has also indicated it will consider imposing additional sanctions and other similar measures in the near future. Although we do not currently conduct any clinical trials in Russia or Ukraine, further escalation of geopolitical tensions could have a broader impact that expands into other markets where we do business or conduct certain research and development operations, which could adversely affect our business, our supply chain for our product candidates, our collaborators or our ability to carry out our clinical trials. Our ability to use our net operating loss (“ NOL ”) carryforwards and certain tax credit carryforwards may be subject to limitation. As of September 30, ~~2023~~ **2024**, we had approximately \$ ~~126-128.3-5~~ million of U. S. federal and \$ ~~192-16.0-9~~ million of state and local NOL carryforwards. We had approximately \$ ~~42-16.9-6~~ million of NOL carryforwards in Australia as of the same period. Our NOL carryforwards are subject to review and possible adjustment by the U. S. and state tax authorities. In addition, under Sections 382 and 383 of the **Internal Revenue** Code and corresponding provisions of state law, if a corporation undergoes an “ ownership change, ” which is generally defined as a greater than 50 % change (by value) in its equity ownership over a three- year period, the corporation’s ability to use its pre- change NOL carryforwards and research and development credits to offset its post- change income may be limited. This could limit the amount of NOLs or research and development credit carryforwards that we can utilize annually to offset future taxable income or tax liabilities. Subsequent ownership changes and changes to the U. S. tax rules in respect of the utilization of NOLs and research and development credits carried forward may further affect the limitation in future years. In addition, at the state level, there may be periods during which the use of NOLs is suspended or otherwise limited, which could accelerate or permanently increase state taxes owed. We conducted a Section 382 study during the year ended September 30, 2021 and determined that, during the year ended September 30, 2015, there was a change in ownership which resulted in \$ 25. 8 million of federal NOLs being subject to an annual limitation. During the year ended September 30, 2021, we reduced our federal NOLs by \$ 12. 1 million and our research and development tax credit carryforwards by \$ 0. 8 million, which are the amount of tax assets that will expire unutilized pursuant to the Section 382 study. This resulted in a reduction of \$ 2. 5 million of NOLs and \$ 0. 8 million of research and development credits and a corresponding reduction in the valuation allowance of \$ 3. 3 million, which was recorded in the 2021 fiscal year. Subsequent ownership changes in future years could trigger additional limitations of our NOLs. During the year ended September 30, ~~2024 and 2023 and 2022~~, we determined that there were no changes in ownership pursuant to Section 382. We are subject to healthcare laws and regulations which may require substantial

compliance efforts and could expose us to criminal sanctions, civil and administrative penalties, contractual damages, reputational harm and diminished profits and future earnings, among other penalties. Healthcare providers, physicians and others will play a primary role in the recommendation and prescription of our products, if approved. Our arrangements with such persons and third- party payors and our general business operations will expose us to broadly applicable fraud and abuse and other healthcare laws and regulations that may constrain the business or financial arrangements and relationships through which we research, market, sell and distribute our drugs, if we obtain marketing approval. Restrictions under applicable U. S. federal, state and foreign healthcare laws and regulations include, but are not limited to, the following: ● the U. S. federal Anti-Kickback Statute, which prohibits, among other things, persons or entities from knowingly and willfully soliciting, offering, receiving or providing remuneration, including any kickback, bribe or rebate, directly or indirectly, in cash or in kind, to induce or reward, or in return for, either the referral of an individual for, or the purchase or lease, order or recommendation of, any item, good, facility or service, for which payment may be made under federal healthcare programs such as Medicare and Medicaid; ● U. S. federal civil and criminal false claims laws and civil monetary penalties laws, including the civil False Claims Act, which impose criminal and civil penalties, including those from civil whistleblower or qui tam actions, against individuals or entities for, among other things, knowingly presenting, or causing to be presented, claims for payment that are false or fraudulent or making a false statement to avoid, decrease, or conceal an obligation to pay money to the federal government; ● The Stark Law prohibits a physician from making referrals for certain “ designated health services ” payable by Medicare to an entity in which the physician or an immediate family member of such physician has an ownership or investment interest or with which the physician has entered into a compensation arrangement, unless a statutory exception applies. There are a number of exceptions to the Stark Law. Such exceptions permit certain payments and arrangements that, although they would otherwise potentially implicate the Stark Law, are not treated as a violation under the same if the requirements of the specific exceptions are met. ● HIPAA, which among other things, created additional federal criminal statutes that impose criminal and civil liability for, such actions as executing or attempting to execute a scheme to defraud any healthcare benefit program or knowingly and willingly falsifying, concealing or covering up a material fact or making false statements relating to healthcare matters; ● The privacy and security provisions of HIPAA, which impose certain requirements on covered entities and their business associates, including mandatory contractual terms, with respect to safeguarding the privacy, security and transmission of individually identifiable health information; ● U. S. federal transparency requirements under the Physician Payments Sunshine Act, enacted as part of the Affordable Care Act that require applicable manufacturers of covered drugs, devices, biologics and medical supplies for which payment is available under Medicare, Medicaid or the Children’s Health Insurance Program, with specific exceptions, to track and annually report to CMS payments and other transfers of value provided to physicians, certain other healthcare providers (such as physicians assistants and nurse practitioners), and teaching hospitals, as well as ownership and investment interests held by physicians or their immediate family members; and ● analogous state or foreign laws and regulations, such as state anti- kickback and false claims laws, which may apply to items or services reimbursed by any third- party payor, including commercial insurers, state marketing and / or transparency laws applicable to manufacturers that may be broader in scope than the federal requirements, state laws that require biopharmaceutical companies to comply with the biopharmaceutical industry’s voluntary compliance guidelines and the relevant compliance guidance promulgated by the federal government and state laws governing the privacy and security of health information in certain circumstances, many of which differ from each other in significant ways and may not have the same effect as HIPAA, thus complicating compliance efforts. Ensuring that our business arrangements with third parties comply with applicable healthcare laws and regulations will likely be costly. It is possible that governmental authorities will conclude that our business practices do not comply with current or future statutes, regulations or case law involving applicable fraud and abuse or other healthcare laws and regulations. If our operations were found to be in violation of any of these laws or any other governmental regulations that may apply to us, we may be subject to significant civil, criminal and administrative penalties, damages, fines, disgorgement, imprisonment, possible exclusion from government funded healthcare programs, such as Medicare and Medicaid, contractual damages, reputational harm, diminished profits and future earnings and curtailment of our operations, any of which could substantially disrupt our operations. If the physicians or other providers or entities with whom we expect to do business are found not to be in compliance with applicable laws, they may be subject to criminal, civil or administrative sanctions, including exclusions from government funded healthcare programs. We may incur significant costs achieving and maintaining compliance with applicable federal and state privacy, security, and fraud laws. Any action against us for violation of these laws, even if we successfully defend against it, could cause us to incur significant legal expenses and divert our attention from the operation of our business. We expect current and future legislation affecting the pharmaceutical industry, including drug pricing reform, to impact our business generally, which could adversely affect our business operations. In the United States, there have been, and continue to be proposed and enacted legislation at the federal and state levels designed to, among other things, bring more transparency to drug pricing, review the relationship between pricing and manufacturer patient programs, reduce the cost of drugs under Medicare, and reform government program reimbursement methodologies for drugs. For example, in July 2021, the Biden administration released an executive order, “ Promoting Competition in the American Economy, ” with multiple provisions aimed at prescription drugs. In response to Biden’s executive order, on September 9, 2021, HHS released a Comprehensive Plan for Addressing High Drug Prices that outlines principles for drug pricing reform and sets out a variety of potential legislative policies that Congress could pursue as well as potential administrative actions HHS can take to advance these principles. In addition, the IRA, among other things, (1) directs HHS to negotiate the price of certain single- source drugs and biologics covered under Medicare and (2) imposes rebates under Medicare Part B and Medicare Part D to penalize price increases that outpace inflation. These provisions will take effect progressively starting in fiscal year 2023, although they may be subject to legal challenges. It is currently unclear how the IRA will be implemented but is likely to have a significant impact on the pharmaceutical industry. If any of our products are subject to such negotiation, we may lose a significant amount of the revenues expected during the full life cycle of these products.

Further, the Biden administration released an additional executive order on October 14, 2022, directing HHS to submit a report within 90 days on how the Center for Medicare and Medicaid Innovation can be further leveraged to test new models for lowering drug costs for Medicare and Medicaid beneficiaries. We expect that additional U. S. federal healthcare reform measures will be adopted in the future, any of which could limit the amounts that the U. S. federal government will pay for healthcare products and services, which could result in reduced demand for our product candidates or additional pricing pressures. The coverage and reimbursement status of newly approved products is uncertain. Failure to obtain or maintain adequate coverage and reimbursement for our product candidates, if approved, could limit our ability to market those products and decrease our ability to generate product revenue. Significant uncertainty exists as to the coverage and reimbursement status of any compound for which we may seek regulatory approval. Sales in the United States will depend in part on the availability of sufficient coverage and adequate reimbursement from third- party payors, which include government health programs such as Medicare, Medicaid, CHIP, TRICARE and the Veterans Administration, as well as managed care organizations and private health insurers. Prices at which we or our customers seek reimbursement for our therapeutic compounds can be subject to challenge, reduction or denial by payors. The process for determining whether a payor will provide coverage for a product is typically separate from the process for setting the reimbursement rate that the payor will pay for the product. A payor' s decision to provide coverage for a product does not imply that an adequate reimbursement rate will be available. Additionally, in the United States there is no uniform policy among payors for coverage or reimbursement. Third- party payors often rely upon Medicare coverage policy and payment limitations in setting their own coverage and reimbursement policies, but also have their own methods and approval processes. Therefore, coverage and reimbursement for products can differ significantly from payor to payor. If coverage and adequate reimbursement are not available, or are available only at limited levels, successful commercialization of, and obtaining a satisfactory financial return on, any product we develop may not be possible. Third- party payors are increasingly challenging the price and examining the medical necessity and cost- effectiveness of medical products and services, in addition to their safety and efficacy. In order to obtain coverage and reimbursement for any product that might be approved for marketing, we may need to conduct expensive studies in order to demonstrate the medical necessity and cost- effectiveness of any products, which would be in addition to the costs expended to obtain regulatory approvals. Third- party payors may not consider our compounds to be medically necessary or cost- effective compared to other available therapies, or the rebate percentages required to secure favorable coverage may not yield an adequate margin over cost or may not enable us to maintain price levels sufficient to realize an appropriate return on our investment in drug development. Additionally, we or our collaborators may develop companion diagnostic tests for use with our product candidates. Companion diagnostic tests require coverage and reimbursement separate and apart from the coverage and reimbursement for their companion pharmaceutical or biological products. Similar challenges to obtaining coverage and reimbursement, applicable to pharmaceutical or biological products, will apply to companion diagnostics. Our inability to promptly obtain coverage and adequate reimbursement from third- party payors for the product candidates, and for us or our collaborators to obtain coverage and adequate reimbursement for related companion diagnostic tests that may be developed, could have a material and adverse effect on our business, financial condition, results of operations and prospects. Risks Related to our Common Stock A decline in the price of our common stock could affect our ability to raise further working capital and adversely impact our operations and would severely dilute existing or future investors if we were to raise funds at lower prices. A prolonged decline in the price of our common stock could result in a reduction in our ability to raise capital. Because our operations have been financed through the sale of equity securities, a decline in the price of our common stock could be especially detrimental to our continued operations. Any reduction in our ability to raise equity capital in the future would force us to reallocate funds from other planned uses and would have a significant negative effect on our business plans and operations, including our ability to develop new products and continue our current operations. If our stock price declines, there can be no assurance that we can raise additional capital or generate funds from operations sufficient to meet our obligations. We believe the following factors could cause the market price of our common stock to continue to fluctuate widely and could cause our common stock to trade at a price below the price at which you purchase your shares of common stock: ● actual or anticipated variations in our quarterly operating results; ● announcements of new services, products, acquisitions or strategic relationships by us or our competitors; ● changes in accounting treatments or principles; ● changes in earnings estimates by securities analysts and in analyst recommendations; and ● general political, economic, regulatory and market conditions. The market price for our common stock may also be affected by our ability to meet or exceed expectations of analysts or investors. Any failure to meet these expectations, even if minor, could materially adversely affect the market price of our common stock. If we issue additional shares of common stock in the future, it will result in the dilution of our existing stockholders and may cause the share price of our common stock to fall. We have 200, 000, 000 shares of common stock authorized for issuance and we also have 10, 000, 000 shares of preferred stock authorized. Our Board of Directors has the authority to issue additional shares of preferred and common stock up to the authorized capital stated in the articles of incorporation. Our Board of Directors may choose to issue some or all such shares of common stock to acquire one or more businesses or to provide additional financing in the future. The issuance of any such shares of common stock will result in a reduction of the book value or market price of the outstanding shares of our common stock. If we do issue any such additional shares of common stock, such issuance also will cause a reduction in the proportionate ownership and voting power of all other stockholders. Further, any such issuance may result in a change of control of our corporation. In the event we do issue or sell additional shares of common or preferred stock, it may result in stockholder dilution and may cause our share price to fall. Our stock price has been volatile and may be volatile in the future. Our stock price has been volatile at certain times historically, and may be volatile in the future. We may incur rapid and substantial increases or decreases in our stock price in the foreseeable future that ~~are~~ do not coincide in timing with the disclosure of news or developments by us. The stock market in general, and the market for biotechnology and pharmaceutical companies in particular, has experienced extreme volatility that has often been unrelated to the operating performance of particular companies. The market price for our common stock may be influenced by

many factors, including the following: ● announcements of new data, clinical trial results or those of companies that are perceived to be similar to us; ● announcements related to any delays in any preclinical or clinical trials related to our products; ● announcements related to our products' ability to demonstrate efficacy or an acceptable safety profile of our product candidates or similar announcements by companies that are perceived to be similar to us; ● our ability to meet or exceed expectations of analysts or investors; ● news that the number of patients required for clinical trials for our drug candidates may be larger than we anticipate, enrollment in these clinical trials may be slower than we anticipate, participants may drop out of these clinical trials at a higher rate than we anticipate or the duration of these clinical trials may be longer than we anticipate; ● actions taken by regulatory agencies with respect to our product candidates or the progress of our clinical trials, including with respect to any fast track or orphan drug designations; ● announcements of significant acquisitions, strategic partnerships, joint ventures or capital commitments by us, our strategic collaboration partners or our competitors; ● grants awarded to us or companies that are perceived to be similar to us from outside entities; ● variations in our financial results or those of companies that are perceived to be similar to us; ● trading volume of our common stock; ● developments concerning our collaborations or partners; ● the impact of the COVID- 19 outbreak and its effect on us; ● the perception of the biotechnology or pharmaceutical industries by the public, legislatures, regulators and the investment community; ● developments or disputes concerning intellectual property rights; ● significant lawsuits, including patent or stockholder litigation; ● our ability or inability to raise additional capital and the terms on which we raise it; ● sales of our common stock by us or our stockholders; ● declines in the market prices of stocks generally or of companies that are perceived to be similar to us; and ● general economic, industry and market conditions. In addition, companies trading in the stock market in general, and The Nasdaq Capital Market in particular, have experienced extreme price and volume fluctuations that have often been unrelated or disproportionate to the operating performance of these companies. These broad market and industry factors may seriously harm the market price of our common stock, regardless of our operating performance. 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. Our common stock may become the target of a " short squeeze. " Securities of certain companies have experienced significant and extreme volatility in stock price due to short sellers of shares of common stock, known as a " short squeeze. " These short squeezes have caused extreme volatility in those companies and in the market and have led to the price per share of those companies to trade at a significantly inflated rate that is disconnected from the underlying value of the company. Many investors who have purchased shares in those companies at an inflated rate face the risk of losing a significant portion of their original investment as the price per share has declined steadily as interest in those stocks have abated. There can be no assurance that we will not in the future be a target of a short squeeze, and you may lose a significant portion or all of your investment if you purchase our shares at a rate that is significantly disconnected from our underlying value. If we fail to maintain an effective system of internal control over financial reporting, we may not be able to accurately report our financial results or prevent fraud. As a result, stockholders could lose confidence in our financial and other public reporting, which would harm our business and the trading price of our common stock. Pursuant to Section 404 of the Sarbanes- Oxley Act, our management is required to report upon the effectiveness of our internal control over financial reporting. We cannot assure you that there will not be material weaknesses or significant deficiencies in our internal control over financial reporting in the future. Any failure to maintain internal control over financial reporting could severely inhibit our ability to accurately report our financial condition, results of operations or cash flows. If we are unable to conclude that our internal control over financial reporting is effective, or if our independent registered public accounting firm determines we have a material weakness or significant deficiency in our internal control over financial reporting, investors may lose confidence in the accuracy and completeness of our financial reports, the market price of our common stock could decline, and we could be subject to sanctions or investigations by the Nasdaq Stock Market, the SEC or other regulatory authorities. Failure to remedy any material weakness in our internal control over financial reporting, or to implement or maintain other effective control systems required of public companies, could also restrict our future access to the capital markets. Our disclosure controls and procedures may not prevent or detect all errors or acts of fraud. We are subject to the periodic reporting requirements of the Exchange Act. We designed our disclosure controls and procedures to reasonably assure that information we must disclose in reports we file or submit under the Exchange Act is accumulated and communicated to management, and recorded, processed, summarized and reported within the time periods specified in the rules and forms of the SEC. We believe that any disclosure controls and procedures or internal controls and procedures, no matter how well- conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met. These inherent limitations include the realities that judgments in decision- making can be faulty, and that breakdowns can occur because of simple error or mistake. For example, our directors or executive officers could inadvertently fail to disclose a new relationship or arrangement causing us to fail to make a required related party transaction disclosure. Additionally, controls can be circumvented by the individual acts of some persons, by collusion of two or more people or by an unauthorized override of the controls. Accordingly, because of the inherent limitations in our control system, misstatements due to error or fraud may occur and not be detected. Risks Related to our Intellectual Property If we are unable to obtain and maintain sufficient intellectual property protection for our product candidates, or if the scope of the intellectual property protection obtained is not sufficiently broad, our competitors could develop and commercialize product candidates similar or identical to ours, and our ability to successfully commercialize our product candidates that we may pursue may be impaired. Our success depends in large part on our ability to obtain and maintain protection of our intellectual property, particularly patents, in the United States and other countries with respect to our product candidates and technology. We seek to protect our proprietary position by filing patent applications in the United States and abroad related to our product candidates or by in- licensing intellectual property. U. S. patents related to ANAVEX ® 2- 73 are directed to ANAVEX ® 2- 73 in its various optical or crystal forms, its therapeutic

indications, and dosage forms comprising certain doses of ANAVEX ® 2- 73 combined with another therapeutic agent. We may not be able to obtain broader scope patent protection for ANAVEX ® 2- 73 as a single drug or in other jurisdictions. The patent position of biotechnology and pharmaceutical companies generally is highly uncertain, involves complex legal, technological 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, or vice versa. Further, we may not be aware of all third-party intellectual property rights potentially relating to and / or interfering with our product candidates. 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 patents or pending patent applications, or that we were the first to file for patent protection of such inventions. As a result, the issuance, scope, validity, enforceability and / or commercial value of our patent rights are highly uncertain. Our pending and future patent applications may not result in patents being issued that protect our product candidates, in whole or in part, or which could effectively prevent others from commercializing competitive product candidates. Even if our 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 product candidates in a non- infringing manner. Moreover, we may be subject to a third- party pre- issuance submission of prior art to the United States Patent and Trademark Office, or the USPTO, 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 product candidates and compete directly with us, without payment to us, or result in our inability to manufacture or commercialize drugs without infringing on third- party patent rights. In addition, if the breadth or strength of protection provided by our patents and patent applications is threatened, regardless of the outcome, it could dissuade companies from collaborating with us to license, develop or commercialize current or future product candidates. In addition, the issuance of a patent is not conclusive as to its inventorship, scope, validity and / 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 product candidates, or limit the duration of the patent protection of our product candidates. 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 drugs similar or identical to ours. We hold ownership or exclusive rights to twenty- two U. S. patents, twenty- three U. S. patent applications, and various PCT or ex- U. S. patent applications relating to our drug candidates, methods associated therewith, and to our research programs. Neither patents nor patent applications ensure the protection of our intellectual property for a number of reasons, including the following: 1. Competitors may interfere with our patenting process in a variety of ways. Competitors may claim that Anavex is we are not entitled to an issued patent for a variety of legal reasons. Competitors may also claim that we are infringing their patents and restrict our freedom to operate. If a court or, in some circumstances, a board of a national patent authority, agrees, we would lose some or all of our patent protection. As a company, we have no meaningful experience with competitors interfering with our patents or patent applications. 2. Because of the time, money and effort involved in obtaining and enforcing patents, our management may spend less time and resources on developing potential drug compounds than they otherwise would, which could increase our operating expenses and delay product programs. 3. Issuance of a patent may not provide significant practical protection. If we receive a patent of narrow scope, then it may be possible for competitors to design products that do not infringe our patent (s). 4. Anavex is We are seeking patent protection for a number of indications, combination products and drug regimens. The lack of patent protection in global markets for a specific end product or indication may inhibit our ability to advance our compounds and may make Anavex us less attractive to potential partners. 5. Defending a patent lawsuit takes significant time and can be very expensive. 6. If a court decides that an Anavex compound, its method of manufacture or use, infringes on a competitor' s patent, we may have to pay substantial damages for infringement. 7. A court may prohibit us from making, selling or licensing the potential drug compound unless the patent holder grants a license. A patent holder is not required to grant a license. If a license is available, we may have to pay substantial royalties or grant cross licenses to our patents, and the license terms may be unacceptable. 8. Redesigning our potential drug compounds so that they do not infringe on other patents may not be possible or could require substantial funds and time. It is also unclear whether our trade secrets are adequately protected. While we use reasonable efforts to protect our trade secrets, our employees or consultants may unintentionally or willfully disclose our information to competitors. Enforcing a claim that someone illegally obtained and is using our trade secrets, like patent litigation, is expensive and time consuming, and the outcome is unpredictable. In addition, courts outside the United States are sometimes less willing to protect trade secrets. Our competitors may independently develop equivalent knowledge, methods and know- how. We may also support and collaborate in research conducted by government organizations, hospitals, universities or other educational institutions. These research partners may be unable or unwilling to grant us exclusive rights to technology or products derived from these collaborations. If we do not obtain required intellectual property licenses or rights, we could encounter delays in our product development efforts while we attempt to design around other patents or even be prohibited from developing, manufacturing or selling potential drug compounds requiring these rights or licenses. There is also a risk that legal disputes may arise as to the rights to technology or potential drug compounds developed in collaboration with other parties, all with attendant risk, distraction, expense, and lack of predictability. 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. Depending upon the timing, duration and specifics of FDA marketing approval of product candidates that we identify, one of the U. S. patents covering such product candidate or the use thereof may be eligible for up to five years of patent term extension under the Hatch- Waxman Act. The Hatch- Waxman Act allows a maximum of one patent to be extended per FDA approved product as compensation for the patent term lost during the FDA regulatory review process. A patent term extension cannot extend the remaining term of a patent beyond a total of 14 years from the date of product approval and only those claims covering such approved drug product, a method for using it or a method for manufacturing it may be extended. Patent term extension also may be available in certain foreign countries upon regulatory approval of our product candidates. Nevertheless, we may not be granted patent term extension either in the United States or in any foreign country because of, for example, failing to exercise due diligence during the testing phase or regulatory review process, failing to apply within applicable deadlines, failing to apply prior to expiration of relevant patents or otherwise failing to satisfy applicable requirements. Moreover, the term of extension, as well as the scope of patent protection during any such extension, afforded by the governmental authority could be less than what we request. If we are unable to obtain patent term extension or restoration, or the term of any such extension is less than we request, the period during which we will have the right to exclusively market our product may be shortened and our competitors may obtain approval of competing products following our patent expiration sooner, and our revenue could be reduced, possibly materially. Also, there are detailed rules and requirements regarding the patents that may be submitted to the FDA for listing in the Approved Drug Products with Therapeutic Equivalence Evaluations, or the Orange Book. We may be unable to obtain patents covering our product candidates that contain one or more claims that satisfy the requirements for listing in the Orange Book. Even if we submit a patent for listing in the Orange Book, the FDA may decline to list the patent, or a manufacturer of generic drugs may challenge the listing. If one of our product candidates is approved and a patent covering that product candidate is not listed in the Orange Book, a manufacturer of generic drugs would not have to provide advance notice to us of any abbreviated new drug application filed with the FDA to obtain permission to sell a generic version of such product candidate. If we fail to comply with our obligations in the agreements under which we license intellectual property rights from third parties or otherwise experience disruptions to our business relationships with our licensors, we could lose intellectual property rights that are important to our business. We are party to an exclusive license agreement with Life Science Research Israel Ltd., with respect to certain in- licensed intellectual property related to our ANAVEX ® 3- 71 product candidate, and we may need to obtain additional licenses from others in the future. Our license agreement with Life Science Research Israel Ltd. imposes, and we expect that future license agreements will impose, various development, diligence, commercialization, and other obligations on us. In spite of our efforts, our licensors might conclude that we have materially breached our obligations under such license agreements and might therefore 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 would have the freedom to seek regulatory approval of, and to market, products identical to ours and we may be required to cease our development and commercialization of ANAVEX ® 3- 71 or other product candidates covered by any such future licenses. 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. 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 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. Third- party claims of intellectual property infringement may prevent or delay our development and commercialization efforts. Our success will also depend in part on our ability to commercialize our compounds without infringing the proprietary rights of others. However, our research, development and commercialization activities may be subject to claims that we infringe or otherwise violate patents or other intellectual property rights owned or controlled by third parties. We have not conducted extensive freedom of use patent searches and no assurance can be given that patents do not exist or could be issued which would have an adverse effect on our ability to market our technology or maintain our competitive position with respect to our technology. Because patent applications can take many years to issue, there may be currently pending patent applications which may later result in issued patents that our product candidates may infringe. In addition, third parties may

obtain patents in the future and claim that use of our technologies infringes upon these patents. If our compounds or other subject matter are claimed under other United States patents or other international patents or are otherwise protected by third party proprietary rights, we may be subject to infringement actions. In such event, we may challenge the validity of such patents or other proprietary rights, or we may be required to obtain licenses from such companies in order to develop, manufacture or market our technology. There can be no assurances that we would be successful in a challenge or be able to obtain such licenses or that such licenses, if available, could be obtained on commercially reasonable terms. Furthermore, the failure to succeed in a challenge, develop a commercially viable alternative or obtain needed licenses could be materially adverse. Adverse consequences include delays in marketing some or all of our potential drug compounds based on our drug technology or the inability to proceed with the development, manufacture or sale of potential drug compounds requiring such licenses. If we defend ourselves against charges of patent infringement or to protect our proprietary rights against third parties, substantial costs will be incurred regardless of whether we are successful. Such proceedings are typically protracted with no certainty of success. An adverse outcome could subject us to significant liabilities to third parties and force us to curtail or cease the research and development of our technology. Parties making claims against us may obtain injunctive or other equitable relief, which could effectively block our ability to further develop and commercialize ANAVEX ® 2- 73 or our other product candidates. Defense of these claims, regardless of their merit, would involve substantial litigation expense and would be a substantial diversion of employee resources from our business. In the event of a successful claim of infringement against us, we may have to pay substantial damages, including treble damages and attorneys' fees for willful infringement, pay royalties, redesign our infringing products or obtain one or more licenses from third parties, which may be impossible or require substantial time and monetary expenditure. Additionally, parties making claims against us may be able to sustain the costs of complex patent litigation more effectively than we can because they have substantially greater resources. Furthermore, because of the substantial amount of discovery required in connection with intellectual property litigation or administrative proceedings, there is a risk that some of our confidential information could be compromised by disclosure. In addition, any uncertainties resulting from the initiation and continuation of any litigation could have a material adverse effect on our ability to raise additional funds or otherwise have a material adverse effect on our business, results of operations, financial condition and prospects. If we are unable to protect the confidentiality of our trade secrets, the value of our technology could be materially adversely affected and our business would be harmed. While we use reasonable efforts to protect our trade secrets, our employees or consultants may unintentionally or willfully disclose our information to competitors. Enforcing a claim that someone illegally obtained and is using our trade secrets, like patent litigation, is expensive and time consuming, and the outcome is unpredictable. In addition, courts outside the United States are sometimes less willing to protect trade secrets. Our competitors may independently develop equivalent knowledge, methods and know- how. We seek to protect our confidential proprietary information, in part, by confidentiality agreements and invention assignment agreements with our employees, consultants, scientific advisors, contractors and collaborators. These agreements are designed to protect our proprietary information. However, we cannot be certain that such agreements have been entered into with all relevant parties, and we cannot be certain that our trade secrets and other confidential proprietary information will not be disclosed or that competitors will not otherwise gain access to our trade secrets or independently develop substantially equivalent information and techniques. For example, 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. We also seek to preserve the integrity and confidentiality of our confidential proprietary information by maintaining physical security of our premises and physical and electronic security of our information technology systems, but it is possible that these security measures could be breached. If any of our confidential proprietary information were to be lawfully obtained or independently developed by a competitor, we would have no right to prevent such competitor from using that technology or information to compete with us, which could harm our competitive position. We may be subject to claims that our employees, consultants or independent contractors have wrongfully used or disclosed confidential information of third parties or that our employees have wrongfully used or disclosed alleged trade secrets of their former employers. As is common in the biotechnology and pharmaceutical industry, we employ individuals who were previously employed at universities or other biotechnology or pharmaceutical companies, including our competitors or potential competitors. Although we try to ensure that our employees, consultants and independent contractors do not use the proprietary information or know- how of others in their work for us, we may be subject to claims that we or our employees, consultants or independent contractors have inadvertently or otherwise used or disclosed intellectual property, including trade secrets or other proprietary information, of any of our employee' s former employer or other third parties. Litigation may be necessary to defend against these claims. If we fail in defending any such claims, in addition to paying monetary damages, we may lose valuable intellectual property rights or personnel, which could adversely impact our business. Even if we are successful in defending against such claims, litigation could result in substantial costs and be a distraction to management and other employees. We may become involved in lawsuits to protect or enforce our patents or other intellectual property, which could be expensive, time consuming and unsuccessful and could harm our business. Competitors may infringe our patents or other intellectual property. Although we are not currently involved in any litigation, if we were to initiate legal proceedings against a third party to enforce a patent covering ANAVEX ® 2- 73 or our other product candidates, the defendant could counterclaim that the patent covering our product candidate is invalid and / or unenforceable. In patent litigation in the United States, defendant counterclaims alleging invalidity and / or unenforceability are commonplace. Grounds for a validity challenge could be an alleged failure to meet any of several statutory requirements, including lack of novelty, obviousness, written description or non- enablement. Grounds for an unenforceability assertion could be an allegation that someone connected with prosecution of the patent withheld relevant information from the USPTO, or made a misleading statement, during prosecution. The outcome following legal assertions of invalidity and unenforceability is unpredictable. Interference or derivation proceedings provoked by third parties or brought by us or declared by the USPTO may be necessary to determine the priority of inventions with respect to our patents or patent applications. An

unfavorable outcome could require us to cease using the related technology or to attempt to license rights to it from the prevailing party. Our business could be harmed if the prevailing party does not offer us a license on commercially reasonable terms or at all, or if a non-exclusive license is offered and our competitors gain access to the same technology. Our defense of litigation or interference or derivation proceedings may fail and, even if successful, may result in substantial costs and distract our management and other employees. In addition, the uncertainties associated with litigation could have a material adverse effect on our ability to raise the funds necessary to continue our clinical trials, continue our research programs, license necessary technology from third parties, or enter into development partnerships that would help us bring ANAVEX ® 2-73 or our other product candidates to market. We may be subject to claims challenging the inventorship of our patents and other intellectual property. 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, 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. Obtaining and maintaining our patent protection depends on compliance with various procedural, document submission, fee payment and other requirements imposed by governmental patent agencies, and our patent protection could be reduced or eliminated for non-compliance with these requirements. Periodic maintenance 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. 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 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. Changes in patent law could diminish the value of our patents and patent applications in general, thereby impairing our ability to protect our product candidates. Changes in either the patent laws or interpretation of the patent laws in the United States and other countries could increase the uncertainties and costs surrounding the prosecution of patent applications and the enforcement or defense of issued patents. 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. The America Invents Act also includes a number of significant changes that affect the way patent applications will be prosecuted and also may affect patent litigation. Therefore, the America Invents Act and its implementation could increase the uncertainties and costs surrounding the prosecution of our owned or in-licensed patent applications and the enforcement or defense of our owned or in-licensed issued patents, all of which could have a material adverse effect on our business, financial condition, results of operations, and prospects. 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. The risk factors disclosed in this Annual Report on Form 10-K could materially and adversely affect our business, financial condition

and results of operations. The risks described herein are not the only risks we face. Our operations could also be affected by additional factors that are not presently known to us or by factors that we currently consider immaterial to our business.