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The following is a summary of the material risks to our business, operations, and ownership of our common stock: • We have a history of losses and may not be profitable in the future . • Our ability to continue as a going concern . • We will require additional capital and may be unable to raise capital when needed or on acceptable terms. • Our success is dependent on our continued ability to attract, motivate and retain key personnel, and any failure to attract or retain key personnel may negatively affect our business. • If we experience delays or difficulties in the commencement, site initiation, enrollment of patients or completion of our clinical trials, the time to reach critical trial data and receipt of any necessary regulatory approvals could be delayed. • Our long- term success depends, in part, upon our ability to develop, receive regulatory approval for and commercialize our product candidates. • We may not be successful in establishing and maintaining collaborations that leverage our capabilities in pursuit of developing and commercializing our product candidates. • We face and will continue to face substantial competition and our failure to effectively compete may prevent us from achieving significant market penetration for our product candidates, if approved. • Our business is affected by macroeconomic conditions, including rising and fluctuating inflation, interest rates, market volatility, economic uncertainty, bank failure, and supply chain constraints. • We may not be successful in our efforts to use and further develop our ADAPTIR or ADAPTIR- FLEX platforms. • If we are unable to protect our intellectual proprietary rights, our business could be harmed . • The ongoing COVID- 19 pandemic, including the identification of new variants of the COVID-19 virus, could adversely impact our business, including our clinical trials. Actions of activist stockholders against us have been and could be disruptive and costly and may cause uncertainty about the strategic direction of our business . • Our future eash flow will depend, in part, on the ability of Pfizer to successfully sell RUXIENCE and our receipt of milestone payments from HCR in connection therewith. If Pfizer is unable, or does not devote sufficient resources, to maintain or continue increasing sales of RUXIENCE, or if HCR does not comply with the Royalty Purchase Agreement, our results of operations will be adversely affected. • The results of our current and planned preclinical studies and clinical trials may not satisfy the requirements of the FDA or non- U. S. regulatory authorities. Results from earlypreclinical studies and clinical trials may not be predictive of results from later- stage or other trials and interim or top line data may be subject to change or qualification based on the complete analysis of data. • Serious adverse events, undesirable side effects or other unexpected properties of our product candidates may be identified that could delay, prevent, or cause the withdrawal of regulatory approval, limit the commercial potential, or result in significant negative consequences following marketing approval. • We depend on third parties to conduct our clinical and non-clinical trials. If these third parties do not effectively carry out their contractual duties, comply with regulatory requirements or meet expected deadlines, we may not be able to obtain regulatory approval for or commercialize our product candidates and our business could be substantially harmed. Our stock price is and may continue to be volatile. • Our common stock may be at risk for delisting from the Nasdaq Capital Market in the future if we do not maintain compliance with Nasdaq's continued listing requirements. Delisting could adversely affect the liquidity of our common stock and the market price of our common stock could decrease. • We may be subject to periodic litigation, which could result in losses or unexpected expenditure of time and resources. • Our future income will depend, in part, on the ability of Medexus to successfully further develop, market and commercialize IXINITY, resulting in milestone payments and deferred payments to the Company by Medexus, RISKS RELATED TO OUR BUSINESS Financial Risks We have experienced significant operating losses in the past and may not be profitable in the future. For the year ended December 31, 2022 2023, we had net income loss of \$17.4 million compared to \$8.0 million compared to \$28.5 million net loss income for the same period in 2021-2022. The net income for the year ended December 31, 2022 was due to a onetime \$ 37.2 million gain recognized as a result of Amendment to Royalty Purchase Agreement with HCR. As of December 31, 2022-2023, we had an accumulated deficit of \$ 206-223. 04 million. We expect to continue to incur annual net operating losses for the foreseeable future, and will require substantial resources over the next several years as we expand our efforts to discover, develop and commercialize immunotherapeutic candidates. While Our future success and ability to attain profitability will depend upon our ability to develop and commercialize our product candidates. Our management and board of directors have concluded that a substantial doubt is deemed to exist concerning our ability to continue as a going concern. Accounting Standards Update, or ASU 2014- 15, requires management to assess our ability to continue as a going concern for one year after the date the financial statements are issued. As further discussed in Note 1, Nature of Business and Significant Accounting Policies to our condensed consolidated financial statements in this Form 10-K, substantial doubt is deemed to exist about the company's ability to continue as a going concern through March 2025. Our financial statements do not include any adjustment relating to the recoverability and classification of recorded asset amounts or the amounts and classification of liabilities that might be necessary should we believe be unable to continue as a going concern. Our ability to continue as a going concern will require us to generate positive cash flow from operations, obtain additional financing, enter into strategic alliances and / or sell assets in addition to our existing cash and cash equivalents and the funding provided by our **IXINITY deferred payment streams**, the ability to receive Milestone Amounts under the Royalty-Purchase Agreement with HCR-XOMA, access to credit potential future milestone payments from Medexus under the Credit our LLC Purchase Agreement with MidCap Financial, our ability to issue securities under the Equity Distribution Agreement with Piper Sandler and our Purchase Agreement with Lincoln Park Capital, and exercises - exercise of warrants. The reaction of investors will provide us with sufficient liquidity to meet the inclusion of a going concern statement in this report on Form 10-K, our current lack of cash resources requirements through at least the next twelve months, our future

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success and our potential inability to continue as a going concern may materially adversely affect our share price and our
ability to attain profitability will depend upon raise new capital and enter into strategic alliances. If we become unable to
continue as a going concern, we may have to liquidate our assets and the values we receive for our assets in liquidation
our- or ability to develop and commercialize dissolution could be significantly lower than the values reflected in our product
candidates financial statements. As of December 31, 2022-2023, we had cash and cash equivalents, and restricted cash in
the amount of $ 22-16. 6.9 million. We will require additional funding to grow continue our business including to support the
ongoing clinical development of APVO436 and ALG. APV-527, develop additional products, support commercial marketing
activities or otherwise provide additional financial flexibility. If we are not able to secure adequate additional funding, we may
need to make reductions in spending. This may include extending payment terms with suppliers, liquidating assets, and
suspending or curtailing planned programs. We may also have to delay, reduce the scope of, suspend or eliminate one or more
research and development programs. We may also be forced to grant rights to develop and market our product candidates that
we would otherwise prefer to develop or market ourselves or we may be unable to take advantage of future business
opportunities. A failure to raise the additional funding or to effectively implement cost reductions eould would harm our
business, results of operations and future prospects. Our future capital requirements will depend on many factors, including:
the level, timing and receipt of any milestone or deferred payments under our agreements with Medexus with respect
to the sales of IXINITY; • whether and to what extent future milestone payments are received under our Amendment to Royalty
Purchase Agreement with HCR; • the extent to which we invest in products or technologies; • the ability to satisfy the payment
obligations and covenants under any future indebtedness; • the ability to secure partnerships and / or collaborations that generate
additional cash; • capital improvements to our facilities; • the scope, progress, results, and costs of our development activities; •
clinical development costs, timing, and other requirements to complete dosing of our Phase 1b /2 clinical trial for APVO436
and Phase 1 clinical trial of ALG. APV-527, as well as future clinical trials; • the cost of preparing, filing and prosecuting
patent applications, obtaining, maintaining, enforcing and protecting our intellectual property rights and defending intellectual
property- related claims; and • macroeconomic conditions, including the impact of inflation and cost of capital. Further,
changing circumstances, some of which may be beyond our control, such as macroeconomic conditions, could cause us to
consume capital significantly faster than we currently anticipate, and we may need to seek additional funds sooner than
planned. We cannot guarantee that future financing will be available in sufficient amounts, or on commercially reasonable
terms, or at all. If our capital resources are insufficient to meet our future capital requirements, we will need to finance our cash
needs through bank loans, public or private equity or debt offerings, collaboration and licensing arrangements, or other strategic
transactions. Our ability to raise future capital on acceptable terms or at all will be impacted by the macroeconomic
environment, including rising and fluctuating interest rates, economic uncertainty and volatility in the capital market,
geopolitical tensions, including the ongoing war between Ukraine and Russia and the rising conflict in the Middle East.
reoccurrences of COVID- 19 or other pandemics, or other future widespread public health epidemics, or other factors
could also adversely impact our ability to access capital as and when needed or increase our costs in order to raise capital.
Current capital market conditions, including the impact of inflation, have increased borrowing rates and can be expected to
significantly increase our cost of capital as compared to prior periods. On August 4, 2023, we completed a public offering
related to the issuance and sale of 8, 064, 517 shares of our common stock (or pre-funded warrant in lieu thereof) at a
purchase price of $ 0. 62. We received $ 5 million in gross proceeds from issuance of these shares. Our net proceeds from
the offering amounted to $ 4.3 million after placement agent and other fees. On November 9, 2023, we entered into a
warrant inducement agreement with certain Holders of existing common warrants (" Existing Warrants") issued to
Holders on August 4, 2023, to exercise for cash their Existing Warrants to purchase shares of our common stock at a
purchase price of $ 0, 233. In consideration of the Holders' agreement to exercise their Existing Warrants, we agreed to
issue new common warrants (" New Warrants") to purchase a number of shares of common stock equal to 200 % of the
number of shares of common stock issued upon exercise of the Existing Warrants. We received $ 3.3 million in gross
proceeds from the exercise of 14, 198, 518 common warrants and issued 28, 397, 036 New Warrants. Our net proceeds
from the offering amounted to $ 3.0 million after placement agent and other fees. Future issuances of common stock may
include, but not be limited to, (i) <del>any sale <mark>the issuance</mark> of <mark>581, 826 remaining up to $ 50. 0 million worth of</mark> shares of <del>our</del></del>
common stock pursuant to our Equity Distribution Agreement with Piper Sandler, (ii) any sale of up to $ 35 million worth of
shares of our common stock to issue from our Purchase Agreement with Lincoln Park, (iii-ii) the issuance of up to 350, 589
remaining outstanding shares of common stock upon the exercise of warrants issued in connection with our March 2019 public
offering of common stock and warrants, (iii) the issuance of the remaining outstanding shares of common stock upon the
exercise of warrants issued in connection with or our August 2023 public offering of common stock and warrants that
would result in gross proceeds of $ 1.2 million, (iv) the issuance of the remaining shares of common stock upon the
exercise of warrants issued in connection with our November 2023 Warrant Inducement Agreement with certain Holders
of our Series A and Series B common warrants issued in connection with our August 2023 public offering that would
result in gross proceeds of $ 6.6 million, or (v) the issuance of common stock in a firm commitment offering or private
placement. Public or bank debt financing, if available, may involve agreements that include covenants limiting or restricting our
ability to take specific actions, such as incurring additional debt, making capital expenditures, pursuing acquisition
opportunities, declaring dividends, our ability to acquire, sell or license intellectual property rights and other operating
restrictions that could adversely impact our ability to conduct our business. If we raise funds by issuing equity securities, our
stockholders will experience dilution. If we raise funds through collaboration and licensing arrangements with third parties or
enter into other strategic transactions, it may be necessary to relinquish valuable rights to our technologies or product candidates
or grant licenses on terms that may not be favorable to us. If financing is unavailable or lost, our business, results of operations,
financial condition and financial prospects would be adversely affected and we could be forced to delay, reduce the scope of or
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eliminate many of our planned activities. Further Our shelf registration statement on Form S-3 expired on December 18,
2023. SEC regulations limit the amount of funds we can raise during any 12- month period pursuant to <del>our a</del> shelf registration
statement on Form S-3. On Prior to expiration of our shelf registration statement, on March 29, 2022, we filed an
amendment to the prospectus related to the Registration Statement on Form S-3 filed on December 14, 2020 pursuant to
General Instruction I. B. 6 of Form S-3 (General Instruction I. B. 6), which <del>updates updated</del> the amount of registered shares
that we are were eligible to sell under the Equity Distribution Agreement. So long as the aggregate market value of our
common stock held by non- affiliates <del>is was less than $ 75 million, we <del>will would not be permitted to sell any registered</del></del>
shares under <del>the Equity Distribution Agreement <mark>such Form S- 3</mark> with a value of more than one- third of the aggregate market</del>
value of our common stock held by non- affiliates in any 12- month period due to the limitations of General Instruction I. B. 6 of
Form S- 3 and the then-current public float of our common stock . In the year ended December 31, 2023, we sold $ 1, 6
million worth of shares of our common stock pursuant to our Equity Distribution Agreement with Piper Sandler, which
expired in December 2023. The limitations of General Instruction I. B. 6 do not apply to sales of our shares under our Purchase
Agreement with Lincoln Park Financial LLC as those sales were committed prior to us being subject to the limitations of
General Instruction I. B. 6. If we are required to file a new registration statement on another form, we may incur additional costs
and be subject to delays in raising capital due to review by SEC staff. Our business is affected by macroeconomic conditions,
including rising and fluctuating inflation, interest rates, market volatility, economic uncertainty, and supply chain
constraints. Various macroeconomic factors have in the past and could adversely affect in the future our business and the
results of our operations and financial condition, including changes in inflation, interest rates and overall economic conditions
and uncertainties such as those resulting from the current and future conditions in the global financial markets. For instance,
inflation has negatively impacted the Company by increasing our labor costs, through higher wages and higher interest rates,
and operating costs. Supply chain constraints have led to higher inflation, which if sustained could have a negative impact on
the Company's product development and operations. If inflation or other factors were to significantly increase our business
costs, our ability to develop our current pipeline and new therapeutic products may be negatively affected. Interest rates, the
liquidity of the credit markets and the volatility of the capital markets could also affect the operation of our business and our
ability to raise capital on favorable terms, or at all, in order to fund our operations. We are susceptible to changes in the U.S.
economy. The U. S. economy has been affected from time to time by economic downturns or recessions, supply chain
constraints, rising and fluctuating inflation and interest rates, restricted credit, poor liquidity, reduced corporate profitability,
volatility in credit, equity and foreign exchange markets, bankruptcies and overall uncertainty with respect to the economy . For
example, on March 10 and March 12, 2023, the Federal Deposit Insurance Corporation ("FDIC") took control and was
appointed receiver of Silicon Valley Bank ("SVB") and Signature Bank, respectively, after each bank was unable to continue
their operations. These events exposed vulnerabilities in the banking sector, including legal uncertainties, significant volatility
and contagion risk, and caused market prices of regional bank stocks to plummet. As of the date of this filing, we don't have
any exposure to SVB and Signature Bank, however, we are unable to predict the extent or nature of the impacts of these
evolving circumstances at this time. If, for example, other banks and financial institutions enter receivership or become
insolvent in the future in response to financial conditions affecting the banking system and financial markets, our ability to
access our existing eash, eash equivalents and investments may be threatened. While it is not possible at this time to predict the
extent of the impact that the failure of SVB and Signature Bank or the high market volatility and instability of the banking
sector could have on economic activity and our business in particular, the failure of other banks and financial institutions and the
measures taken by governments, businesses and other organizations in response to these events could adversely impact our
business, financial condition and results of operations. In addition, any further deterioration in the U. S. economy would likely
affect the operation of our business and ability to raise capital. In addition, U. S. debt ceiling and budget deficit concerns have
increased the possibility of additional credit- rating downgrades and economic slowdowns, or a recession in the United States.
Although U. S. lawmakers passed legislation to raise the federal debt ceiling on multiple occasions, ratings agencies have
lowered or threatened to lower the long- term sovereign credit rating on the United States. The impact of this or any further
downgrades to the U. S. government's sovereign credit rating or its perceived creditworthiness could adversely affect the U. S.
and global financial markets and economic conditions. Similarly, these macroeconomic factors could affect the ability of our
third- party suppliers and manufacturers to manufacture clinical trial materials for our product candidates. Stockholders have in
the past and may, from time to time, engage in proxy solicitations or advance stockholder proposals, or otherwise attempt to
effect changes and assert influence on our board of directors and management. For example, on February 9, 2021, Tang Capital
Partners LP, Tang Capital Management, LLC and Kevin Tang (collectively, "Tang") submitted an advisory stockholder
proposal for consideration at our 2021 annual meeting of stockholders to commence a process to sell Aptevo to the highest
bidder. Activist campaigns that contest or conflict with our strategic direction or seek changes in the composition of our board of
directors or management could have an adverse effect on our operating results and financial condition. A proxy contest would
require us to incur significant legal and advisory fees, proxy solicitation expenses and administrative and associated costs and
require significant time and attention by our board of directors and management, diverting their attention from the pursuit of our
business strategy. Any perceived uncertainties as to our future direction and control, our ability to execute on our strategy, or
changes to the composition of our board of directors or senior management team arising from a proxy contest could lead to the
perception of a change in the direction of our business or instability which may result in the loss of potential business
opportunities, make it more difficult to pursue our strategic initiatives, or limit our ability to attract and retain qualified
personnel and business partners, any of which could adversely affect our business and operating results. If individuals are
ultimately elected to our board of directors with a specific agenda, it may adversely affect our ability to effectively implement
our business strategy and create additional value for our stockholders. We may choose to initiate, or may become subject to,
litigation as a result of a proxy contest or matters arising from the proxy contest, which would serve as a further distraction to
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our board of directors and management and would require us to incur significant additional costs. In addition, actions such as
those described above could cause significant fluctuations in our stock price based upon temporary or speculative market
perceptions or other factors that do not necessarily reflect the underlying fundamentals and prospects of our business. On
February 28, 2020, we entered into a Purchase Agreement with Medexus, pursuant to which we sold all of the issued and
outstanding limited liability company interests of Aptevo BioTherapeutics, a subsidiary of Aptevo that wholly owns the
IXINITY and related Hemophilia B business. We are entitled to receive future potential payments to the extent of the
achievement of certain regulatory and commercial milestones and through deferred payments based on net sales of IXINITY.
Royalties were earned at the rate of 2 % of net revenue through June 2022. As of June 30, 2022, the royalty rate on net revenue
of IXINITY increased to 5 %. On March 29 We no longer control the development, marketing 2023, we entered into and
closed a Purchase Agreement with XOMA pursuant commercialization of IXINITY and are dependent on Medexus to which
we sold successfully do so. Although Medexus has agreed to XOMA use commercially reasonable efforts to commercialize
EXINITY in the ordinary course of business in good faith, Medexus may not commit adequate resources to the further
development, marketing, and commercialization of IXINITY, may experience financial difficulties, may face competition, or
our right may prioritize other products or initiatives. Medexus' ability to continue to successfully commercialize the IXINITY
business may be affected, title, and interest to all we may experience potential impacts on our future deferred payments from
Medexus and a portion of potential milestones. As consideration, we received $ 9.6 million at closing from XOMA and
an additional $ 0. 05 million post- closing payment. We accounted for the $ 9. 6 million Closing Payment and the $ 0. 05
million post- closing payment from XOMA as other income in accordance with ASC 610-20 Other Income- Gains and
Losses from the Derecognition of Nonfinancial Assets in the first quarter of 2023. We no longer control the development,
marketing, and commercialization of IXINITY and are dependent on Medexus to successfully do so. Although Medexus
has agreed to use commercially reasonable efforts to commercialize IXINITY in the ordinary course of business in good
faith, Medexus may not commit adequate resources to the further development, marketing, and commercialization of
IXINITY, may experience financial difficulties, may face competition, or may prioritize other products or initiatives.
Medexus' ability to continue to successfully commercialize the IXINITY business may be affected, and we may
experience potential impacts on our future milestone payments from Medexus due to the macroeconomic and geopolitical
environment and ongoing COVID-19 pandemie. The failure of Medexus to successfully market and commercialize IXINITY,
including because of factors outside of Medexus' control, could result in lower than expected milestone or deferred payments to
us and negatively impact our future financial and operating results. Our operating results are unpredictable and may fluctuate.
Our operating results are difficult to predict and will likely fluctuate from quarter to quarter and year to year, as a result of a
variety of factors, including: • the level and timing of any milestone or deferred payments with respect to sales of IXINITY by
Medexus; • the extent of any payments received from collaboration arrangements and development funding as well as the
achievement of development and clinical milestones under collaboration and license agreements that we may enter into from
time to time and that may vary significantly from quarter to quarter; and, • the timing, cost, and level of investment in our
research and development and clinical activities as well as expenditures we will or may incur to acquire or develop additional
technologies, products and product candidates. Due to the ongoing COVID-19 pandemic and macroeconomic and geopolitical
environment, we may experience delays in opportunities to partner our product candidates, due to financial and other impacts on
potential partners. Additionally, we may experience potential impacts on our future milestone or deferred payments from
Medexus, which may impact Medexus' ability to continue to successfully commercialize the IXINITY businesses. These and
other factors may have a material adverse effect on our business, results of operations and financial condition. On June 25,
2020, we announced that we were entitled to royalty payments from Pfizer related to sales of a rituximab biosimilar product,
RUXIENCE (Rituximab-pvvr), which was approved by the U. S. Food and Drug Administration in July 2019 and launched by
Pfizer in the United States and Japan in early 2020, and the European Union in the third guarter of 2020. The payments from
Pfizer relate to a Collaboration and License Agreement acquired by us as part of our spin- off from Emergent in 2016, which
applies a fixed royalty rate of 2.5 % on global net sales of RUXIENCE. The agreement was originally executed by Trubion
Pharmaceuticals (which was subsequently acquired by Emergent) and Wyeth (a wholly-owned subsidiary of Pfizer). On March
30, 2021, we entered into and closed a Royalty Purchase Agreement with HCR (Royalty Purchase Agreement) pursuant to
which we sold to HCR the right to receive royalty payments made by Pfizer in respect of net sales of RUXIENCE. Under the
terms of the Royalty Purchase Agreement, we received $ 35 million at closing and we were eligible to receive additional
payments in aggregate of up to an additional $ 32.5 million based on the achievement of sales milestones in 2021, 2022 and
2023. The Company received the 2021 milestone payments in the collective amount of $ 10 million on March 8, 2022. The
proceeds from these milestone payments, net of transaction costs, were recorded as an additional liability related to the sale of
royalties on the consolidated balance sheet as of March 31, 2022. In order to non-dilutively address a Nasdaq listing compliance
matter, on June 7, 2022, we entered into and closed an amendment to the Royalty Purchase Agreement (the Amendment to
Royalty Purchase Agreement), pursuant to which we agreed to forego our right to receive 50 % of incremental RUXIENCE
royalty revenue after HCR received aggregate royalty payments totaling 190 % of the Investment Amount plus Milestone
Amounts to the extent paid by HCR. We received 2022 milestone payment of $ 2.5 million on February 28, 2023. The proceed
from 2022 milestone payment was recorded as other income in the consolidated statement of operations for the year ended
December 31, 2022. The Amendment to Royalty Purchase Agreement continues to include the opportunity receive additional
milestone payment of $ 10 million based on achievement of sales milestones in 2023. We have no control over the sales of
RUXIENCE and are therefore dependent on the efforts and ability of Pfizer to generate net sales of RUXIENCE sufficient for
us to receive Milestone Payments under the Royalty Purchase Agreement. The failure of Pfizer to successfully generate such net
sales could negatively impact our future financial and operating results and our results of operations could therefore be
adversely affected. Additionally, even if Pfizer is able to generate net sales of RUXIENCE sufficient for us to receive such
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milestone payments, if HCR breaches the Royalty Purchase Agreement (for example, by not making required payments when due, or at all), disputes or litigation may arise. Such disputes or litigation could be time- consuming and expensive and could adversely affect our business. We face product liability exposure, which could cause us to incur substantial liabilities and negatively affect our business, financial condition, and results of operations. The nature of our business exposes us to potential liability inherent in pharmaceutical products, including with respect to the testing of our product candidates in clinical trials and any product candidates that we successfully develop. Product liability claims might be made by patients in clinical trials, consumers, health care providers or pharmaceutical companies or others that sell any products that we successfully develop. These claims may be made even with respect to those products that are manufactured in licensed and regulated facilities or otherwise receive regulatory approval for study or commercial sale. We cannot predict the frequency, outcome or cost to defend any such claims. If we cannot successfully defend ourselves against future claims that our product candidates caused injuries, we may incur substantial liabilities. Regardless of merit or eventual outcome, product liability claims may result in: • adverse publicity and / or injury to our reputation; • withdrawal of clinical trial participants; • costs to defend the related litigation; • substantial monetary awards to trial participants or patients; • decreased demand or withdrawal of an approved product; • loss of revenue; and • an the inability to commercialize products that we may develop. The amount of insurance that we currently hold may not be adequate to cover all liabilities that may occur. Further product liability insurance may be difficult and expensive to obtain. We may not be able to maintain insurance coverage at a reasonable cost and we may not be able to obtain insurance coverage that will be adequate to satisfy all potential liabilities. Claims or losses in excess of our product liability insurance coverage could have a material adverse effect on our business, financial condition, and results of operations. The cost of defending any product liability litigation or other proceeding, even if resolved in our favor, could be substantial. Uncertainties resulting from the initiation and continuation of product liability litigation or other proceedings could have a material adverse effect on our ability to compete in the marketplace. Product liability claims, regardless of merit or eventual outcome, may absorb significant management time and result in reputational harm, potential loss of revenue from decreased demand for any product candidates we successfully develop, withdrawal of clinical trial participants and potential termination of clinical trial sites or entire clinical programs, and could cause our stock price to fall. Because of the specialized scientific nature of our business, our ability to develop products and to compete with our current and future competitors largely depends upon our ability to attract, retain and motivate highly qualified managerial and key scientific and technical personnel. If we are unable to retain the services of one or more of the principal members of senior management, including our Chief Executive Officer, Marvin L. White, our Chief Operating Officer, Jeffrey G. Lamothe, our Chief Financial Officer, Daphne Taylor, our General Counsel, SoYoung Kwon, or other key employees, our ability to implement our business strategy could be materially harmed. We face intense competition for qualified employees from biotechnology and pharmaceutical companies, research organizations and academic institutions. Moreover, we have experienced increased levels of attrition. Attracting, retaining or replacing these personnel on acceptable terms may be difficult and time- consuming given the high demand in our industry for similar personnel. We believe part of being able to attract, motivate and retain personnel is our ability to offer a competitive compensation package, including equity incentive awards. If we cannot offer a competitive compensation package or otherwise attract and retain the qualified personnel necessary for the continued development of our business, we may not be able to maintain our operations or grow our business. We do not currently The COVID-19 pandemic has caused severe global economic and societal disruptions and uncertainties, and we have enough shares experienced disruptions that have impacted our business and clinical trials. Although nearly all of the restrictions placed to reduce the spread of COVID-19 have been lifted and COVID-19 vaccines are available, we may continue under our 2018 Stock Incentive Plan to experience disruptions in the grant awards to senior management and future -awards to or our employees additional disruptions that could severely impact our business, such as delays or difficulties to the financing environment and raising capital due to economic uncertainty or volatility; supply constraints; delays in opportunities to partner our product candidates, due to financial and other impacts on potential partners; diversion of healthcare resources away from the conduct of clinical trials; potential impacts on our future deferred payments and milestones from Medexus due to the environment which may impact Medexus' ability to continue to successfully commercialize the IXINITY business or Pfizer to successfully commercialize RUXIENCE; and negative impacts on suppliers and licensees. The extent to which the direct and indirect effects of the ongoing COVID-19 pandemic may impact our business and clinical trials will depend on future developments, which are highly uncertain and cannot be predicted with eonfidence. For example, new variants may emerge and may result in the need to delay initiation of trial sites, suspend enrollment into studies, patient withdrawals, postponement of preclinical studies, study modification, suspension, or termination, the introduction of remote study procedures and modified informed consent procedures, study site changes, direct delivery of investigational products to patient homes requiring state licensing, study deviations or noncompliance, and changes or delays in site monitoring. The foregoing may also impact the integrity of our study data. The pandemic could further impact our ability to interact with the FDA or other regulatory authorities, and may result in delays in the conduct of inspections or review of pending submissions. The ongoing COVID-19 pandemic may further impact our suppliers and manufacturers. If any of our suppliers cannot obtain the necessary supplies, or if such third parties need to prioritize other products or customers over us, we may experience delays or disruptions in our supply chain, which could have a material and adverse impact on our business and development plans. Third party manufacturers may also need to implement measures and changes, or deviate from typical requirements, pandemie that may otherwise adversely impact our supply chains or the quality of the resulting products or supplies. The ongoing COVID-19 pandemic may result in changes in laws, policies, and regulations. By example, due to the potential impact of the COVID-19 pandemic FDA issued guidance several times concerning how sponsors and investigators may address these challenges. FDA's guidance is continually evolving. This and any future changes in law may require that we change our internal processes and procedures to ensure continued compliance. The terms of our credit agreement may restrict the operation of our business and limit the eash available for investment in our business operations. In August 2020, we entered

into a Credit and Security Agreement (the Credit Agreement), by and among us and certain of our subsidiaries as borrowers, MidCap Financial, as agent, and the lenders from time- to- time party thereto. The terms of the Credit Agreement and borrowings we may make under the Credit Agreement in the future, could have significant adverse consequences for our business, including: • requiring us to dedicate a substantial portion of any cash flow from operations to payment on our debt, which would reduce the amounts available to fund other corporate initiatives; • increasing the amount of interest that we have to pay on borrowings under the Credit Agreement if market rates of interest increase; • requiring compliance with restrictive covenants restricting, among other things, certain indebtedness, liens, dividends and other distributions, repayment of subordinated indebtedness, mergers, dispositions, investments, acquisitions, transactions with affiliates and modification of organizational documents or our inability to attract, certain other agreements, subject to certain exceptions; • requiring compliance with affirmative covenants including payment and reporting covenants; and • placing us at a competitive disadvantage compared to our competitors that have less debt, better debt servicing options or stronger debt servicing capacity. We may not have sufficient funds or be able to obtain additional financing to pay the amounts due under the Credit Agreement. In addition, failure to comply with the covenants under the Credit Agreement, including those outside of our control, could result in an and motivate event of default. An event of default could result in the acceleration of amounts due under the Credit Agreement, and we may not be able to obtain additional financing to make any accelerated payments. Under these eircumstances, our key personnel lenders could seek to enforce security interests in our assets securing our indebtedness, including our intellectual property. We completed a Section 382 study and have concluded that we experienced an "ownership change" as defined in Section 382 of the U. S. Internal Revenue Code of 1986, as amended (the "Code"), and thus the tax benefits of our pre- "ownership change" net operating loss carryforwards and certain other tax attributes will be subject to an annual limitation under Sections 382 and 383 of the Code. In general, a corporation undergoes an "ownership change" under Section 382 of the Code if, among other things, the stockholders who own, directly or indirectly, 5 % or more of the corporation's stock (by value), or are otherwise treated as "5 % stockholders" under Section 382 of the Code and the Treasury regulations promulgated thereunder, increase their aggregate percentage ownership (by value) of the corporation's stock by more than 50 percentage points over the lowest percentage of stock owned by the 5 % stockholders at any time during the applicable testing period, which is generally the rolling three-year period preceding the date of the potential ownership change testing event. Such potential ownership change testing events include changes involving a stockholder becoming a 5 % stockholder or arising from a new issuance of capital stock or share repurchases by the corporation, subject to certain exceptions. In the event of an "ownership change," Sections 382 and 383 of the Code impose an annual limitation on the amount of taxable income a corporation may offset with pre- change net operating loss carryforwards and certain other tax attributes. The annual limitation is generally equal to the value of the outstanding stock of the corporation immediately before the ownership change (excluding certain capital contributions), multiplied by the long-term tax- exempt rate as published by the IRS for the month in which the ownership change occurs (the long-term tax- exempt rate for November 2020 is 0. 89 %). Any unused annual limitation may generally be carried over to subsequent years until the pre- ownership change net operating loss carryforwards and certain other tax attributes expire or are fully utilized by the corporation. Similar provisions of state tax law may also apply to limit the use of state net operating loss carryforwards and certain other tax attributes. Additionally, Section 382 of the Code includes special rules that apply to a corporation with a significant amount of net unrealized built- in gains or net unrealized built- in losses in its assets immediately prior to ownership change under Section 382 of the Code. In general, certain built- in gains recognized during the five- year period beginning on the date of the ownership change increases the corporation's annual limitation under Sections 382 and 383 of the Code in the taxable year that such built- in gains are recognized or deemed recognized (but only up to the amount of the net unrealized built- in gain), while certain built- in losses recognized during such five-year period are subject to the annual limitation under Section 382 of the Code (but only up to the amount of the net unrealized built- in loss). As of December 31, 2022 2023, we had approximately \$ 156-168. 2 million and \$ 71-70. 1-5 million of federal and state net operating loss carryforwards, respectively, available to reduce future taxable income that will begin to expire in 2037 for federal income tax purposes. We completed an IRC Section 382 study through December 31, 2021. The study concluded that we have experienced an ownership change in November of 2020 and December of 2020 and \$ 162. 6 of our NOL carry forwards are subject to an annual limitation. It is not expected that the annual limitations will result in the expiration of NOL carryforwards prior to utilization assuming sufficient income. We cannot predict or control the occurrence or timing of another ownership change under Section 382 of the Code in the future. In addition, it is possible that any offering of securities by us could result in an ownership change. If another ownership change were to occur, future limitations could apply to our net operating losses and certain other tax attributes, which could result in a material amount of our net operating loss carryforwards and certain other tax attributes becoming unavailable to offset future income tax liabilities. The realization of all or a portion of our deferred income tax assets (including net operating loss carryforwards) is dependent upon the generation of future income during the statutory carryforward periods. Our inability to utilize our limited pre-ownership change net operating loss carryforwards and certain other tax attributes, or the occurrence of a future ownership change and resulting additional limitations to these tax attributes, could have a material adverse effect on our financial condition, results of operations and cash flows. The change to the deductibility of our research and development expenditures enacted under the Tax Cuts and Jobs Act ("TCJA") could increase the amount of taxes to which we are subject and our effective tax rate. Beginning in 2022, the TCJA eliminates the option to deduct research and development expenditures currently and requires taxpayers to capitalize and amortize these expenditures over five or fifteen years depending on the type of research and development expenditure pursuant to Section 174 of the Code. Such change to the deductibility of our research and development expenditures could increase the amount of taxes to which we are subject and our effective tax rate. Our investments are subject to market and credit risks that could diminish their value and these risks could be greater during periods of extreme volatility or disruption in the financial and credit markets, which could adversely impact our business, financial condition, results of operations, liquidity

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and cash flows. Our investments are subject to risks of credit defaults and changes in market values. Periods of macroeconomic
weakness or recession, heightened volatility or disruption in the financial and credit markets, such as the current macroeconomic
environment, increase these risks, potentially resulting in other-than-temporary impairment of assets in our investment
portfolio. The impact of geopolitical tension, such as a deterioration in the bilateral relationship between the US and China, the
rising conflict in the Middle East, or Russia's invasion of Ukraine, including any additional sanctions, export controls or other
restrictive actions that may be imposed by the United States and / or other countries against governmental or other entities in, for
example, Russia, also could lead to disruption, instability and volatility in the global markets, which may have an impact on our
investments across negatively impacted sectors or geographies. Severe global economic and societal disruptions and
uncertainties, such as reoccurrences of COVID- 19 or other pandemics, or other future widespread public health
epidemics may cause disruptions that could severely impact our business, such as delays or difficulties to the financing
environment and raising capital due to economic uncertainty or volatility. Product Development Risks The results of our
current and planned preclinical studies and clinical trials may not satisfy the requirements of the FDA or non- U. S. regulatory
authorities. Results from early preclinical studies and clinical trials may not be predictive of results from later- stage or other
trials and interim or top line data may be subject to change or qualification based on the complete analysis of data. We
<mark>completed <del>are conducting</del> our Phase 1b dose expansion clinical trial with APVO436 in 2023 and plan to initiate a dose</mark>
optimization Phase 1b / 2 study in the first half of 2024 to assess safety and efficacy of APVO436 and to determine and-
an optimal dose in front line patients. Additionally, we initiated a first- in- human Phase 1 clinical study of ALG. APV- 527
in the first quarter of 2023 and we are currently enrolling new patients. None of our other product candidates have entered
clinical development. Clinical failure can occur at any stage of preclinical or clinical development. Preclinical studies and
clinical trials may produce inconsistent, negative or inconclusive results. The FDA or a non- US regulatory authority may
require us to conduct additional clinical or preclinical testing. Success in early preliminary data, preclinical studies and clinical
trials does not mean that future larger registration clinical trials will be successful and interim results of a clinical trial do not
necessarily predict final results. Product candidates in later- stage clinical trials may fail to demonstrate sufficient safety and
efficacy to the satisfaction of the FDA and non- U. S. regulatory authorities despite having progressed through initial clinical
trials. In some instances, there can be significant variability in safety or efficacy results between different clinical trials of the
same product candidate due to numerous factors, including changes in trial procedures set forth in protocols, differences in the
size and type of the patient populations, changes in adherence to the dosing regimen and other clinical trial protocols and the
rate of dropout among clinical trial participants. In addition, preclinical and clinical data are often susceptible to various
interpretations and analyses, and many companies whose product candidates performed satisfactorily in preclinical studies and
clinical trials have nonetheless failed to obtain marketing approval. Product candidates in later stages of clinical trials may fail to
show the desired safety and efficacy profile despite having progressed through preclinical studies and initial clinical trials. A
number of companies in the pharmaceutical and biopharmaceutical industry have suffered significant setbacks in advanced
clinical trials due to lack of efficacy or adverse safety profiles, notwithstanding promising results in earlier studies, and we
cannot be certain that we will not face similar setbacks. Even if early-stage clinical trials are promising, we may need to
conduct additional clinical trials of our product candidates in additional patient populations or under different treatment
conditions before we are able to seek approvals from the FDA and regulatory authorities outside the United States to market and
sell these product candidates. Any of these events could limit the commercial potential of our product candidates and have a
material adverse effect on our business, prospects, financial condition and results of operations. A number of companies in the
pharmaceutical industry, including those with greater resources and experience than us, have suffered significant setbacks in
advanced clinical trials, even after obtaining promising results in earlier clinical trials. In addition, our APVO436 clinical trial is
an open-label study and is conducted at a limited number of clinical sites on a limited number of patients. An "open-label"
clinical trial is one where both the patient and investigator know whether the patient is receiving the investigational product
candidate or an existing approved drug. Most typically, open-label clinical trials test only the investigational product candidate
and sometimes may do so at different dose levels or in combination with other drugs. Open-label clinical trials are subject to
various limitations that may exaggerate any therapeutic effect as patients in open-label clinical trials are aware when they are
receiving treatment. Open-label clinical trials may be subject to a "patient bias" where patients perceive their symptoms to
have improved merely due to their awareness of receiving an experimental treatment. In addition, open-label clinical trials may
be subject to an "investigator bias" where those assessing and reviewing the physiological outcomes of the clinical trials are
aware of which patients have received treatment and may interpret the information of the treated group more favorably given
this knowledge. The results from these clinical trials may not be predictive of future clinical trial results with APVO436 or other
product candidates. In addition, although the FDA issued a "may proceed" notification which allowed us and Alligator to
initiate our Phase 1 clinical trial of ALG. APV- 527, we cannot guarantee that this trial or future trials of ALG. APV- 527 will
show the desired safety and efficacy. We may publicly disclose top line or interim data from time to time, which is based on a
preliminary analysis of then- available data, and the results and related findings and conclusions are subject to change following
a more comprehensive review of the data related to the particular study or trial. The top line or interim results that we report
may differ from future results of the same studies, or different conclusions or considerations may qualify such results once
additional data have been received and fully evaluated. For example, we released preliminary data regarding our APVO436
Phase 1b clinical trial study which may change or be inconsistent with future results. Even in situations where a clinical stage
candidate appears to be benefiting a patient -that benefit may not be of a permanent nature. Top line and interim data also
remain subject to audit and verification procedures -that may result in the final data being materially different from the
preliminary data we previously published. In addition, the achievement of one primary endpoint for a trial does not guarantee
that additional co-primary endpoints or secondary endpoints will be achieved. Further, others, including regulatory agencies,
may not accept or agree with our assumptions, estimates, calculations, conclusions or analyses or may interpret or weigh the
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importance of data differently, which could impact the value of the particular program, the approvability or commercialization
of the particular product candidate or product and our company in general. In addition, the information we choose to publicly
disclose regarding a particular study or clinical trial is based on what is typically extensive information, and you or others may
not agree with what we determine is material or otherwise appropriate information to include in our disclosure. Our future
clinical trials may not be successful. Moreover, should there be a flaw in a clinical trial, it may not become apparent until the
clinical trial is well advanced. We may also experience numerous unforeseen events during, or as a result of, clinical trials that
could delay or prevent our ability to receive marketing approval or commercialize our product candidates, including: • regulators
or Institutional Review Boards ("IRBs") may not authorize us or our investigators to commence or continue a clinical trial,
conduct a clinical trial at a prospective trial site, or amend trial protocols, or regulators or IRBs may require that we modify or
amend our clinical trial protocols; • we may experience delays in reaching, or fail to reach, agreement on acceptable clinical trial
contracts or clinical trial protocols with prospective trial sites and our contract research organizations ("CROs"); • regulators
may require us to perform additional or unanticipated clinical trials to obtain approval or we may be subject to additional post-
marketing testing, surveillance, or Risk Evaluation and Mitigation Strategy ("REMS") requirements to maintain regulatory approval; • clinical trials of our product candidates may produce negative or inconclusive results, or our studies may fail to reach
the necessary level of statistical significance; • changes in marketing approval policies, laws, regulations, or the regulatory
review process during the development period rendering our data insufficient to obtain marketing approval; • the cost of clinical
trials of our product candidates may be greater than we anticipate or we may have insufficient funds for a clinical trial or to pay
the substantial user fees required by the FDA upon the filing of a marketing application; • the supply or quality of our product
candidates or other materials necessary to conduct clinical trials of our product candidates may be insufficient or inadequate; •
we may fail to reach an agreement with regulators or IRBs regarding the scope, design, or implementation of our clinical trials; •
we may have delays in adding new investigators or clinical trial sites, or we may experience a withdrawal of clinical trial sites; •
there may be regulatory questions or disagreements regarding interpretations of data and results, or new information may
emerge regarding our product candidates; • the FDA or comparable foreign regulatory authorities may disagree with our study
design, including endpoints, or our interpretation of data from non-clinical studies and clinical trials or find that a product
candidate's benefits do not outweigh its safety risks; • the FDA or comparable foreign regulatory authorities may not accept
data from studies with clinical trial sites in foreign countries; • the FDA or comparable regulatory authorities may disagree with
our intended indications; • the FDA or comparable foreign regulatory authorities may fail to approve or subsequently find fault
with the manufacturing processes or our contract manufacturer's manufacturing facility for clinical and future commercial
supplies; and • we may not be able to demonstrate that a product candidate provides an advantage over current standards of care
or current or future competitive therapies in development. Further, our product candidates may not be approved even if they
achieve their primary endpoints in Phase 3 clinical trials or registration trials. Regardless of any advisory committee
recommendation, the FDA may decline to approve the BLA for a number of reasons including, if the clinical benefit, safety
profile or effectiveness of the drug is not deemed by the FDA to warrant approval. The FDA or other non-U. S. regulatory
authorities may disagree with our trial design, and our interpretation of data from non-clinical studies and clinical trials. In
particular, the FDA may not view our data as being clinically meaningful or statistically persuasive. The regulatory authorities
and policies governing the development of our product candidates may also change at any time. In addition, any of these
regulatory authorities may change requirements for the approval of a product candidate even after reviewing and providing
comments or advice on a protocol for a pivotal Phase 3 clinical trial. Any of these regulatory authorities may also approve a
product candidate for fewer or more limited indications than we request or may grant approval contingent on the performance of
costly post-marketing clinical trials. The FDA or other non- U. S. regulatory authorities may not approve the labeling claims
that we believe would be necessary or desirable for the successful commercialization of our product candidates. We may not be
able to file INDs, or IND amendments to commence additional clinical trials on the timelines we expect, and even if we are
able to, the FDA may not permit us to proceed. We have submitted an IND INDs and received approvals to proceed into
clinical trials for multiple product candidates, including ALG. APV- 527 and APVO436, to the FDA in the second half of
2022 for which we received a "may proceed" notification from the FDA. However however, we may not be able to file future
INDs for our product candidates on the timelines we expect. For example, we may experience manufacturing delays or other
delays with IND- enabling studies. Moreover, we cannot be sure that submission of future INDs will result in the FDA allowing
clinical trials to begin, or that, once begun, issues will not arise that suspend or terminate clinical trials. Additionally, even if
such regulatory authorities agree with the design and implementation of the clinical trials set forth in an IND, we cannot
guarantee that such regulatory authorities will not change their requirements in the future. These considerations also apply to
new clinical trials we may submit as amendments to existing INDs or to a new IND. Any failure to file INDs on the timelines
we expect or to obtain regulatory approvals for our trials may prevent us from completing our clinical trials or commercializing
our products on a timely basis, if at all. We may not be able to initiate or continue clinical trials for our product candidates if we
are unable to locate, enroll and maintain a sufficient number of eligible patients to participate in these trials as required by the
FDA or similar regulatory authorities outside the United States. In addition, some of our competitors have ongoing clinical trials
for product candidates that treat the same indications as our product candidates, and patients who would otherwise be eligible
for our clinical trials may instead enroll in clinical trials of our competitors' product candidates. Furthermore, APVO436 has
received orphan drug designation for acute myelogenous leukemia and thus has a relatively small patient population. Also, the
eligibility criteria of our clinical trials may further limit the pool of available study participants as we require that patients have
specific characteristics that we can measure to assure their disease is either severe enough or not too advanced to include them in
a study. In addition, the global spread of the COVID-19 pandemic makes it more difficult to initiate clinical trials and enroll
patients and the process of finding and diagnosing eligible patients under these conditions may prove costly. Patient enrollment
is affected by other factors including: • the severity of the disease under investigation; • the design of the clinical trial, including
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the patient eligibility criteria for the study in question; • the perceived risks and benefits of the product candidate under study; • our payments for conducting clinical trials; • the patient referral practices of physicians; • our ability to recruit clinical trial investigators with the appropriate competencies and experiences; • our ability to obtain and maintain patient consents; • the ability to monitor patients adequately during and after treatment; • reporting of preliminary results of any of our clinical trial sites; and • the proximity and availability of clinical trial sites for prospective patients; and • factors we may not be able to control that may limit patients, principal investigators or staff or clinical site availability, such as the ongoing COVID-19 pandemie. Our inability to enroll a sufficient number of patients for clinical trials could result in significant delays and could require us to abandon one or more clinical trials altogether. Site initiation and enrollment delays in our clinical trials may result in increased development costs for our product candidates, delays in the availability of preliminary or final results, and delays to commercially launching our product candidates, if approved, which may cause the value of our company to decline and limit our ability to obtain additional financing. Serious adverse events or undesirable side effects caused by, or other unexpected properties of any of our product candidates, either when used alone or in combination with other approved or investigational therapies, could cause us or regulatory authorities to interrupt, delay or halt our development activities and manufacturing and distribution operations and could result in a more restrictive label, the imposition of a clinical hold, suspension, distribution or use restrictions or the delay or denial of regulatory approval by the FDA or comparable foreign regulatory authorities. If any of our product candidates are associated with serious adverse events or undesirable side effects or have properties that are unexpected, we may need to abandon their development or limit development to certain uses or subpopulations in which the undesirable side effects or other characteristics are less prevalent, less severe or more acceptable from a risk-benefit perspective. Many compounds that initially showed promise in clinical or earlier stage testing have later been found to cause undesirable or unexpected side effects that prevented further development of the compound. As we continue developing our product candidates and conduct clinical trials of our product candidates, serious adverse events, or SAEs, undesirable side effects, relapse of disease or unexpected characteristics may emerge causing us to abandon these product candidates or limit their development to more narrow uses or subpopulations in which the SAEs or undesirable side effects or other characteristics are less prevalent, less severe or more acceptable from a risk-benefit perspective or in which efficacy is more pronounced or durable. Undesirable side effects, or other unexpected adverse events or properties of any of our product candidates, could arise or become known either during clinical development or, if approved, after the approved product has been marketed. If such an event occurs during development, the FDA or comparable foreign regulatory authorities could suspend or terminate a clinical trial or deny approval of our product candidates. Furthermore, we are currently and may in the future evaluate our product candidates in combination with approved and / or experimental therapies. These combinations may have additional or more severe side effects than caused by our product candidate as monotherapies. The uncertainty resulting from the use of our product candidate in combination with other therapies may make it difficult to accurately predict side effects or efficacy in potential future clinical trials. If our product candidates receive marketing approval and we or others later identify undesirable side effects caused by such products, a number of potentially significant negative consequences may result, including: • regulatory authorities may require us to conduct additional clinical trials or abandon our research efforts for our other product candidates; • regulatory authorities may require additional warnings on the label or impose distribution or use restrictions; • regulatory authorities may require one or more post- market studies; • we may be required to create a medication guide outlining the risks of such side effects for distribution to patients; • regulatory authorities may require implementation of a REMS, Field Safety Corrective Actions or equivalent, which may include safety surveillance, restricted distribution and use, patient education, enhanced labeling, special packaging or labeling, expedited reporting of certain adverse events, preapproval of promotional materials and restrictions on direct- to- consumer advertising; • we could be sued and held liable for harm caused to patients; and • our reputation may suffer. Any of these events could prevent us from achieving or maintaining market approval and acceptance of the affected product candidate, or could substantially increase commercialization costs and expenses, which could delay or prevent us from generating revenue from the sale of our products and materially harm our business and results of operations. We do not have the ability to independently conduct the clinical and preclinical trials required to obtain regulatory approval for our product candidates. We depend on third parties, such as independent clinical investigators, research sites, contract research organizations, or CROs, and other third- party service providers to conduct the clinical and preclinical trials of our product candidates, and we expect to continue to do so. For example, Dr. Dirk Huebner, Chief Medical Officer, is providing clinical trial and medical affairs oversight duties as an independent consultant. We rely heavily on Dr. Huebner and these other third parties for successful execution and oversight of our clinical and non-clinical trials, but we do not exercise day to day control over their activities. While we have agreements governing the activities of third parties, we have limited influence and control over their actual performance and activities. For instance, our third-party service providers are not our employees, and except for remedies available to us under our agreements with such third parties we cannot control whether or not they devote sufficient time and resources to our ongoing clinical, and non-clinical programs. Our third- party service providers may also have relationships with other entities, some of which may be our competitors, for whom they may also be conducting trials or other therapeutic development activities that could harm our competitive position. If these third parties do not successfully carry out their contractual duties, meet expected deadlines or conduct our non-clinical studies or clinical trials in accordance with regulatory requirements or our stated protocols, if they need to be replaced or if the quality or accuracy of the data they obtain is compromised due to the failure to adhere to our protocols, regulatory requirements or for other reasons, our trials may be repeated, extended, delayed, or terminated, we may not be able to obtain, or may be delayed in obtaining, marketing approvals for our product candidates, we may not be able to, or may be delayed in our efforts to, successfully commercialize our product candidates, or we or they may be subject to regulatory enforcement actions. Our reliance on third- party service providers does not relieve us of our regulatory responsibilities, including ensuring that our trials are conducted in accordance with the FDAapproved good clinical practices, or GCPs, and the plans and protocols contained in the relevant regulatory application. In

addition, these organizations and individuals may not complete these activities on our anticipated or desired timeframe. We also may experience unexpected cost increases that are beyond our control. Problems with the timeliness or quality of the work of a contract research organization may lead us to seek to terminate the relationship and use an alternative service provider, which may prove difficult and / or costly and result in a delay of our trials. In addition, business disruptions arising from circumstances out of our control, such as the ongoing COVID-19 pandemic could negatively affect the ability of some of the independent clinical investigators, contract research organizations and other third- party service providers that conduct our clinical and preclinical trials of our product candidates. Any delay in or inability to complete our trials could delay or prevent the development, approval, and commercialization of our product candidates. If CROs or other third parties assisting us or our study sites fail to comply with applicable GCPs, the clinical data generated in our clinical trials may be deemed unreliable and the FDA or its non- U. S. counterparts may require us to perform additional clinical trials before approving our marketing applications. We or they may also face regulatory enforcement action. We cannot assure you that, upon inspection, the FDA or non-U. S. regulatory agencies will determine that any of our clinical trials comply with GCP. In addition, our clinical trials must be conducted with product produced under GMP and similar regulations outside of the United States. Our failure, or the failure of our product candidate manufacturers, to comply with these regulations may require us to repeat or redesign clinical trials, or conduct additional trials, which would increase our development costs and delay or impact the conduct of our preclinical studies, clinical trials, and the likelihood of regulatory approval. If third parties do not carry out their duties under their agreements with us, if the quality or accuracy of the data they obtain is compromised due to the failure to adhere to our clinical protocols, including dosing requirements, or regulatory requirements, or if they otherwise fail to comply with clinical trial protocols or meet expected deadlines, our clinical trials may not meet regulatory requirements. If our clinical trials do not meet regulatory requirements or if these third parties need to be replaced, our clinical trials may be extended, delayed, suspended or terminated. Agreements with third parties conducting or otherwise assisting with our clinical or non-clinical studies might terminate for a variety of reasons, including a failure to perform by the third parties. If any of our relationships with these third parties terminate, we may not be able to enter into arrangements with alternative providers or to do so on commercially reasonable terms. Switching or adding additional third parties involves additional cost and requires management time and focus. In addition, there is a natural transition period when a new third - party commences work. As a result, if we need to enter into alternative arrangements, it could delay our product development activities and adversely affect our business. Though we carefully manage our relationships with our third parties, there can be no assurance that we will not encounter challenges or delays in the future or that these delays or challenges will not have a material adverse impact on our business, financial condition and prospects, and results of operations. If any of these events occur, we may not be able to obtain regulatory approval of our product candidates or succeed in our efforts to create approved line extensions for certain of our existing products or generate additional useful clinical data in support of these products. Moreover, if we are unable to obtain any necessary third-party services on acceptable terms or if these service providers do not successfully carry out their contractual duties or meet expected deadlines, our efforts to obtain regulatory approvals for our product candidates may be delayed or prevented. Manufacture of our product candidates, especially in large quantities, is complex and time consuming. The loss of any of our third-party manufacturers, or delays or problems in the manufacture of our product candidates, could result in product shortages and / or delays in clinical development. We do not have manufacturing capabilities and do not plan to develop such capacity in the foreseeable future. We depend on a limited number of third- party suppliers for the production of our product candidates. Accordingly, our ability to develop and deliver product candidates in a timely and competitive manner and to enable us to conduct our development programs depends on our third- party manufacturers being able to continue to meet our ongoing clinical trial needs and perform their contractual obligations. In order to successfully develop and commercialize our product candidates in a timely manner, we and our third-party manufacturers must be able to develop and execute on manufacturing processes and reach agreement on contract terms. Our current and anticipated future dependence upon others for the manufacture of our product candidates or any product that we develop may adversely affect our future profit margins and our ability to commercialize any products that receive marketing approval on a timely and competitive basis. In addition, any performance failure on the part of our existing or future manufacturers could delay clinical development or marketing approval. If these third- party manufacturers do not successfully carry out their contractual duties, meet expected deadlines or manufacture and / or store our product candidates in accordance with regulatory requirements, if there are disagreements between us and such parties, or if such parties are unable to expand capacities to support commercialization of any of our product candidates for which we obtain marketing approval, we may not be able to produce, or may be delayed in producing sufficient product candidates to meet our supply requirements. Any delays in obtaining adequate supplies with respect to our product candidates and components may delay the development or commercialization of our product candidates. We may not succeed in our efforts to establish manufacturing relationships or other alternative arrangements for any of our product candidates, components, and programs. Our product candidates may compete with other products and product candidates for access to manufacturing facilities. There are a limited number of manufacturers that operate under cGMP regulations and that are both capable of manufacturing for us and willing to do so. If our existing third- party manufacturers, or the third parties that we engage in the future to manufacture a product or component for commercial sale or for our clinical trials should cease to continue to do so for any reason, we likely would experience delays in obtaining sufficient quantities of our product candidates for us to meet commercial demand or to advance our clinical trials while we identify and qualify replacement suppliers. These third-party facilities may also be affected by natural disasters, such as floods or fire, or such facilities could face manufacturing issues, such as contamination or regulatory findings following a regulatory inspection of such facility. In such instances, we may need to locate an appropriate replacement third- party relationship, which may not be readily available or on acceptable terms, which would cause additional delay and increased expense. In some cases, the technical skills required to manufacture our products or product candidates may be unique or proprietary to the original manufacturer and we may have difficulty, or there may be

contractual restrictions prohibiting us from, transferring such skills to an alternate supplier in a timely fashion if at all. The addition of a new or alternative manufacturer may also require FDA approvals and may have a material adverse effect on our business. If for any reason we are unable to obtain adequate supplies of our product candidates or the components used to manufacture them, it will be more difficult for us to develop our product candidates and compete effectively. Further, even if we do establish such collaborations or arrangements, our third- party manufacturers may breach, terminate, or not renew these agreements. We or our third- party manufacturers may also encounter shortages in the raw materials or therapeutic substances necessary to produce our product candidates in the quantities needed for our clinical trials or, if our product candidates are approved, in sufficient quantities for commercialization or to meet an increase in demand. Such shortages may occur for a variety of reasons, including capacity constraints, delays or disruptions in the market, and shortages caused by the purchase of such materials by our competitors or others. We may also not be able to obtain such materials on favorable terms as a result of global trade policies. Our third-party manufacturers' failure to obtain the raw materials, therapeutic substances, or active pharmaceutical ingredients necessary to manufacture sufficient quantities of our product candidates may have a material adverse effect on our business. All of our current product candidates are biologics. Our product candidates must be made consistently and in compliance with a clearly defined manufacturing process. Problems may arise during manufacturing for a variety of reasons, including problems with raw materials, equipment malfunction or replacement and failure to follow specific protocols and procedures. Slight deviations anywhere in the manufacturing process, including obtaining materials, maintaining master seed or cell banks and preventing genetic drift, seed or cell growth, fermentation and contamination including from, among other things, particulates, filtration, filling, labeling, packaging, storage and shipping, and quality control testing, may result in lot failures or manufacturing shut-down, delays in the release of lots, product recalls, spoilage or regulatory action. Due to the ongoing COVID-19 pandemic, our third-party manufacturers may experience difficulties, such as supply shortages, that impact our product candidates and production timelines. Additionally, our development and commercialization strategy involves entering into arrangements with corporate and academic collaborators, contract research organizations, distributors, third-party manufacturers, licensors, licensees and others to conduct development work, manage or conduct our clinical trials, manufacture our product candidates and market and sell our products outside of the United States and maintain our existing arrangements with respect to the commercialization or manufacture of our products. We may not have the expertise or the resources to conduct all of these activities for all products and product candidates on our own and, as a result, are particularly dependent on third parties in many areas. Any current or future arrangements for development and commercialization may not be successful, as the amount and timing of resources that third parties devote to developing, manufacturing, and commercializing our products candidates are not within our control. If we are not able to establish or maintain agreements relating to our product candidates in development, our results of operations and prospects would be materially and adversely affected. Any loss of a third-party manufacturer, any delays, or problems in the manufacture of our products, or termination of any arrangements for development and commercialization of our products could have a material adverse effect on our business, operations, results of operations and financial condition. We may be required to replace our manufacturer and if this were to occur, we may incur added costs and delays in identifying and qualifying any such replacements. We may also not be able to enter into such arrangements on favorable commercial terms. Changes in product candidate manufacturing or formulation may result in additional costs or delay. As product candidates are developed through preclinical studies to late- stage clinical trials toward approval and commercialization, it is common that various aspects of the development program, such as manufacturing methods, manufacturing sites, and formulation, are altered along the way in an effort to optimize processes and results. Any of these changes could cause our product candidates to perform differently and affect the results of planned clinical trials or other future clinical trials conducted with the altered materials. Such changes may also require additional testing, clinical trials, FDA notification, or FDA approval. Any of the foregoing could limit our future revenues and growth. Failure of our third-party manufacturers to successfully manufacture material that conforms to our specifications and the FDA's or foreign regulatory authorities' strict regulatory requirements, may prevent regulatory approval of those manufacturing facilities. We rely on third parties to manufacture all clinical trial materials for our product candidates, and we will rely on third parties to manufacture commercial supplies, if any such product candidates are ultimately approved for commercial sale. Manufacturers of our product candidates and therapeutic substances must comply with GMP requirements enforced by the FDA that are applicable to both finished products and their active components used both for clinical and commercial supply. The FDA enforces these requirements through its facilities inspection program. Our product candidates, including APVO436 and ALG. APV- 527, will not be approved for marketing by the FDA or other foreign regulatory authorities unless the FDA or their foreign equivalents also approve the facilities used by our third- party manufacturers to produce them for commercialization. If our third- party manufacturers cannot successfully manufacture material that conforms to our specifications and the FDA's or foreign regulatory authorities' strict regulatory requirements, the FDA or their foreign counterparts will not approve their manufacturing facilities, which would result in significant delays in obtaining FDA or foreign marketing approvals for our product candidates. If this were to occur, we may also never receive marketing approval, we may need to repeat clinical trials, we may need to undertake costly corrective actions, including product recalls, we may risk harm to subjects or patients, and we may face enforcement actions. While we are ultimately responsible for the manufacture of our product candidates, other than through our contractual arrangements, we have little control over our manufacturers' compliance with these regulations and standards. If the FDA or a comparable foreign regulatory authority does not approve these facilities for the manufacture of our product candidates or if it withdraws any such approval in the future, we may need to find alternative manufacturing facilities, which would significantly impact our ability to develop, obtain and maintain regulatory approval for or market our product candidates, if approved. Additionally, we may be unable to contract with alternative manufacturers on favorable or reasonable terms. Any new manufacturers would need to either obtain or develop the necessary manufacturing know- how, and obtain the necessary equipment and materials, which may take substantial time and investment. In some cases, the technical skills required to

manufacture our products or product candidates may be unique or proprietary to the original manufacturer and we may have difficulty, or there may be contractual restrictions prohibiting us from, transferring such skills to a back- up or alternate supplier, or we may be unable to transfer such skills at all. In addition, if we are required to change manufacturers for any reason, we will be required to verify that the new manufacturer maintains facilities and procedures that comply with quality standards and with all applicable regulations. We will also need to verify, such as through a manufacturing comparability study, that any new manufacturing process will produce our product candidate according to the specifications previously submitted to the FDA or any other regulatory authority. The delays associated with the verification of a new manufacturer could negatively affect our ability to develop product candidates or commercialize our products in a timely manner or within budget. Furthermore, a manufacturer may possess technology related to the manufacture of our product candidate that such manufacturer owns independently. This would increase our reliance on such manufacturer or require us to obtain a license from such manufacturer in order to have another manufacturer produce our product candidates. In addition, changes in manufacturers often involve changes in manufacturing procedures and processes, which could require that we conduct bridging studies between our prior clinical supply used in our clinical trials and that of any new manufacturer. We may be unsuccessful in demonstrating the comparability of clinical supplies which could require the conduct of additional clinical trials. We must also receive FDA approval for the use of any new manufacturers for commercial supply. We and our third- party manufacturers may not be able to meet these manufacturing process requirements for any of our current product candidates, all of which have complex manufacturing processes, which make meeting these requirements even more challenging. Due to the direct and indirect effects of the ongoing COVID-19 pandemic, our third-party manufacturers may experience difficulties that impact our product eandidates. If we are unable to develop manufacturing processes for our clinical product candidates that satisfy these requirements, we will not be able to supply sufficient quantities of test material to conduct our clinical trials in a timely or costeffective manner, and as a result, our development programs will be delayed, our financial performance will be adversely impacted and we will be unable to meet our long- term goals. Certain of our product candidates have received orphan drug designation from the FDA. However, there is no guarantee that we will be able to maintain this designation, receive this designation for any of our other product candidates, or receive or maintain any corresponding benefits, including periods of exclusivity. Certain of our product candidates have received orphan drug designation. We may also seek orphan drug designation for our other product candidates, as appropriate. While orphan drug designation does provide us with certain advantages, it neither shortens the development time or regulatory review time of a product candidate nor gives the product candidate any advantage in the regulatory review or approval process. Generally, if a product candidate with orphan drug designation subsequently receives marketing approval before another product considered by the FDA to be the same for the same orphan indication, the product is entitled to a period of marketing exclusivity, which precludes the FDA from approving another marketing application for the same drug or biologic for the same indication for a period of seven years in the United States. We may not be able to obtain any future orphan drug designations that we apply for. Orphan drug designations do not guarantee that we will be able to successfully develop our product candidates, and there is no guarantee that we will be able to maintain any orphan drug designations that we receive. For instance, orphan drug designations may be revoked if the FDA finds that the request for designation contained an untrue statement of material fact or omitted material information, or if the FDA finds that the product candidate was not eligible for designation at the time of the submission of the request. Moreover, even if we are able to receive and maintain orphan drug designations, we may ultimately not receive any period of regulatory exclusivity if our product candidates are approved. For instance, we may not receive orphan product regulatory exclusivity if the indication for which we receive FDA approval is broader than the orphan drug designation. Orphan exclusivity may also be lost for the same reasons that orphan drug designation may be lost. Orphan exclusivity may further be lost if we are unable to assure a sufficient quantity of the product to meet the needs of patients with the rare disease or condition. Even if we obtain orphan exclusivity for any of our current or future product candidates, that exclusivity may not effectively protect the product from competition as different products can be approved for the same condition or products that are the same as ours can be approved for different conditions. Even after an orphan product is approved, the FDA can also subsequently approve a product containing the same principal molecular features for the same condition if the FDA concludes that the later product is clinically superior. The FDA may further grant orphan drug designation to multiple sponsors for the same compound or active molecule and for the same indication. If another sponsor receives FDA approval for such product before we do, we would be prevented from launching our product in the United States for the orphan indication for a period of at least seven years, unless we can demonstrate clinical superiority. Moreover, third- party payors may reimburse for products off- label even if not indicated for the orphan condition. We may seek Breakthrough Therapy designation by the FDA for a product candidate that we develop, and we may be unsuccessful. If we are successful, the designation may not lead to a faster development or regulatory review or approval process, and it does not increase the likelihood that our product candidates will receive marketing approval. We may seek Breakthrough Therapy designation for any product candidate that we develop. A breakthrough therapy is defined as a drug that is intended, alone or in combination with one or more other drugs, to treat a serious or life-threatening disease or condition, and preliminary clinical evidence indicates that the drug may demonstrate substantial improvement over currently approved therapies on one or more clinically significant endpoints, such as substantial treatment effects observed early in clinical development. For drugs that have been designated as breakthrough therapies, interaction and communication between the FDA and the sponsor of the trial can help to identify the most efficient path for clinical development while minimizing the number of patients placed in ineffective control regimens. Drugs designated as breakthrough therapies by the FDA are also eligible for accelerated approval and priority review. Even if we believe a product candidate we develop 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 Breakthrough Therapy designation for a product candidate may not result in a faster development process, review or approval compared to drugs considered for approval under conventional FDA procedures and does not assure ultimate approval by the

FDA. In addition, even if the product candidates we develop qualify as breakthrough therapies, the FDA may later decide that the drugs no longer meet the conditions for qualification and rescind the designation. We may seek designation for our ADAPTIR and ADAPTIR- FLEX platform technologies as a designated platform technology, but we might not receive such designation, and even if we do, such designation may not lead to a faster development, regulatory review or approval process. We may seek designation for our ADAPTIR and ADAPTIR- FLEX platform technologies as a designated platform technology. Under the FDORA, a platform technology incorporated within or utilized by a biologic is eligible for designation as a designated platform technology if (1) the platform technology is incorporated in, or utilized by, a product approved under a BLA; (2) preliminary evidence submitted by the sponsor of the approved or licensed product, or a sponsor that has been granted a right of reference to data submitted in the application for such product, demonstrates that the platform technology has the potential to be incorporated in, or utilized by, more than one product without an adverse effect on quality, manufacturing, or safety; and (3) data or information submitted by the applicable person indicates that incorporation or utilization of the platform technology has a reasonable likelihood to bring significant efficiencies to the drug development or manufacturing process and to the review process. A sponsor may request the FDA to designate a platform technology as a designated platform technology concurrently with, or at any time after, submission of an IND application for a product that incorporates or utilizes the platform technology that is the subject of the request. If so designated, the FDA may expedite the development and review of any subsequent original BLA for a product that uses or incorporates the platform technology. Even if we believe our platform technology meets the criteria for such designation, the FDA may disagree and instead determine not to grant such designation. In addition, the receipt of such designation for a platform technology does not ensure that a product will be developed more quickly or receive a faster FDA review process or ultimate FDA approval. Moreover, the FDA may revoke a designation if the FDA determines that a designated platform technology no longer meets the criteria for such designation. We have in the past and may in the future conduct clinical trials for our product candidates outside the United States, and the FDA or non-U. S. regulatory authorities may not accept data from such trials in the development or approval of our product candidates in those jurisdictions. We have in the past and may in the future conduct clinical trials outside the U. S. and the FDA and foreign regulatory authorities may not accept those data in support of the further development or approval of our product candidates. The acceptance of trial data from clinical trials conducted outside the United States by the FDA or applicable foreign regulatory authority may be subject to certain conditions. In cases where data from foreign clinical trials are intended to serve as the basis for marketing approval in the United States, the FDA will generally not approve the application on the basis of foreign data alone unless (i) the data are applicable to the United States population and United States medical practice; (ii) the trials were performed by clinical investigators of recognized competence; 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 an inspection to be necessary, the FDA is able to validate the data through an on-site inspection or other appropriate means. Additionally, the FDA's clinical trial requirements, including sufficient size of patient populations and statistical powering, must be met. Many foreign regulatory bodies have similar approval requirements. In addition, such foreign trials will 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 applicable foreign regulatory authority will accept data from trials conducted outside of the United States. If the FDA or any applicable foreign regulatory authority does not accept such data, it would result in the need to conduct additional trials beyond those we have planned, which would be costly and time- consuming and delay aspects of our business plan, and which may result in our product candidates not receiving marketing approval for commercialization in the applicable jurisdiction. Commercialization Risks Our ability to grow revenues and execute on our long-term strategy depends heavily on our ability to discover, develop, and obtain marketing approval for our product candidates. We currently have no products approved for commercial distribution. We have invested a significant portion of our efforts and financial resources in the development of our product candidates. Our business depends on the successful development and commercialization of our product candidates, which will require additional clinical and preclinical development, regulatory approval, commercial manufacturing arrangements, establishment of a commercial organization, significant marketing efforts, and further investment, which may never occur. Our ability to generate revenues is substantially dependent on our ability to develop, obtain regulatory approval for, and then successfully commercialize our product candidates. Except for the revenues from previously sold products, we currently generate no revenues from sales of any products, and we may never be able to develop or commercialize a marketable product. In order for us to achieve our long- term business objectives, we will need to successfully discover and / or develop and commercialize our product candidates. Although we have made, and expect to continue to make, significant investments in research and development, we have had only a limited number of our internally- discovered product candidates reach the clinical development stage. We currently have two clinical-stage candidates, APVO436 and ALG. APV-527, which were built on the ADAPTIR platform. Drug discovery and development is a complex, time- consuming and expensive process that is fraught with risk and a high rate of failure. Our product candidates are susceptible to the risks of failure inherent at any stage of product development, including the appearance of unexpected or unacceptable adverse events or failure to demonstrate efficacy in clinical trials. Failure to successfully discover and / or develop, obtain marketing approval for and commercialize additional products and product candidates would likely have a material adverse effect on our ability to grow revenues and improve our financial condition. If we are required to conduct additional clinical trials or other testing of our product candidates that we develop beyond those that we currently expect, if we are unable to successfully complete clinical trials of our product candidates or other testing, if the results of these trials or tests are not positive or are only modestly positive, or if there are safety concerns, we may be delayed in obtaining marketing approval for our product candidates, not obtain marketing approval at all, obtain approval for limited indications or patient populations, with a label without claims necessary for us to successfully market our products, or with significant labeled warnings. We may also be subject to additional post-marketing testing requirements, surveillance requirements, or REMS. To the extent any of the foregoing should occur, our business may be materially harmed. A key element of our strategy is to expand our product pipeline

of immunotherapeutics <mark>immuno- oncology candidates</mark> based on our ADAPTIR and ADAPTIR- FLEX platform technologies. We plan to select and create product candidates for early development, potentially with other collaborative partners. We expect to continue to develop the platform to address unmet medical needs through directed cytokine delivery via monospecifics and bispecifics in areas including oncology, and multi- specific molecules in oncology and other therapeutic areas. Our goal is to leverage this technology to make targeted investment in monospecific, bispecific, and multi- specific ADAPTIR and ADAPTIR-FLEX therapeutics. Even if we are successful in continuing to build our pipeline, the potential product candidates that we identify may not be suitable for clinical development, including as a result of being shown to have harmful side effects or other characteristics that indicate that they are unlikely to be products that will receive marketing approval and achieve market acceptance. If we do not successfully develop and commercialize product candidates based on our ADAPTIR and ADAPTIR-FLEX platform technologies, our ability to obtain product revenues in future periods may be adversely affected, which likely would result in harm to our financial position and our financial prospects, and adversely affect our stock price. The development and commercialization of new biotechnology products is highly competitive and subject to rapid technological advances. We may face future competition with respect to our current product candidates and any product candidates we may seek to develop or commercialize in the future obtained from other companies and governments, universities, and other non-profit research organizations. Our competitors may develop products that are safer, more effective, more convenient, or less costly than any products that we may develop or market, or may obtain marketing approval for their products from the FDA, or equivalent foreign regulatory bodies more rapidly than we may obtain approval for our product candidates. Our competitors may have greater resources and may devote greater resources to research and develop their products, research and development capabilities, adapt more quickly to new technologies, scientific advances or patient preferences and needs, initiate or withstand substantial price competition or macroeconomic impacts more successfully, or more effectively negotiate third- party licensing and collaborative arrangements. We believe that our most significant competitors in the oncology market include: AbbVie Inc., Affimed, <mark>ALX Oncology Holdings Inc.,</mark> Amgen Inc., AnaptysBio-<mark>Arcellx, AstraZeneca, AvenCell Therapeutics</mark> , Inc., BioNTech Astellas Pharma Inc., Bio- Path Bayer AG, Biogen Idee Inc., Bochringer Ingelheim GmbH, Bristol Myers Squibb, Cellectis, Faron Pharma Chinook Therapeuties, City of Hope-, F-Star star Therapeutics Biotechnology Ltd.-, Genentech Inc. (a subsidiary of F. Hoffmann- La Roche Ltd.), Genmab A / S, Gilead Sciences, Inc., GlaxoSmithKline plc, Grifols USA LLC, Harpoon Therapeuties, ImmunoGen, Inc., Immunomedies, Inc., Inhibrx Inc., Innate Pharma, Janssen BioTech Inc., Johnson & Johnson, Kyowa Hakko Kirin Pharma, Macrogenics, Inc., Mustang Bio-Menarini Group, Molecular Partners, Novartis, Pieris Pharmaceuticals, Inc., ProMab Biotechnologies Regeneron Pharma, Sanofi- Aventis US LLC, Strike Pharma Shattuck Labs, Takeda Syros Pharmaceuticals U. S. A., Inc., Servier Laboratories University of Pennsylvania, VenCell Therapeuties, Xencor, Inc., Y-mAbs Therapeutics, Inc., and Zymeworks Biopharmaceuticals, Inc. We expect to compete on the basis of product efficacy, safety, ease of administration, price and economic value compared to drugs used in current practice or currently being developed. If we are not successful in demonstrating these attributes, physicians and other key healthcare decision makers may choose other products over any products we successfully develop, switch from our products to new products or choose to use our products only in limited circumstances, which could adversely affect our business, financial condition and results of operations. Any of our product candidates, if approved, may become subject to unfavorable pricing regulations or third- party coverage and reimbursement policies, which would harm our business. The success of our product candidates, if approved, will depend upon, among other things, their acceptance by physicians, patients, third- party payors, and other members of the medical community as a therapeutic and cost- effective alternative to competing products and treatments. If any of our product candidates do not achieve and maintain an adequate level of acceptance, we may not generate material revenues from sales of these products. The degree of market acceptance of our products will depend on a number of factors. including: our ability to provide acceptable evidence of safety and efficacy; the prevalence and severity of any side effects; availability, relative cost and relative efficacy of alternative and competing treatments; the ability to offer our products for sale at competitive prices; our ability to continuously supply the market without interruption; the relative convenience and ease of administration; the willingness of the target patient population to try new products and of physicians to prescribe these products; the strength of marketing and distribution support; publicity concerning our products or competing products and treatments; and the sufficiency of coverage or reimbursement by third parties. Legislative or healthcare reform measures may have a material adverse effect on our business and results of operations. In the United States, there have been and continue to be a number of legislative initiatives to contain healthcare costs. For example, in March 2010, the ACA was enacted, which substantially changed the way health care is financed by both governmental and private insurers, and significantly impacted the U.S. pharmaceutical industry. However, some provisions of the ACA have yet to be fully implemented and certain provisions have been subject to legal and political challenges, as well as efforts to repeal, replace delay, circumvent, or loosen certain aspects of the ACA or mandates required thereby. Additionally, Congress has considered legislation that would repeal or repeal and replace all or part of the ACA. While Congress has not passed comprehensive repeal legislation, it has enacted laws that modify certain provisions of the ACA, such as removing penalties as of January 1, 2019 for not complying with the ACA's individual mandate to carry health insurance, delaying the implementation of certain ACA- mandated fees, and increasing the point- ofsale discount that is owed by pharmaceutical manufacturers who participate in Medicare Part D. On June 17, 2021, the U. S. Supreme Court dismissed the most recent judicial challenge to the ACA brought by several states without specifically ruling on the constitutionality of the ACA. It is unclear how other healthcare reform measures of the Biden administration or other efforts, if any, to challenge, repeal or replace the ACA will impact our business. In addition, other legislative changes have been proposed and adopted in the United States since the ACA was enacted: • On August 2, 2011, the Budget Control Act of 2011 among other things, included aggregate reductions of Medicare payments to providers of 2 % per fiscal year. These reductions went into effect on April 1, 2013 and, due to subsequent legislative amendments to the statute, will remain in effect through 2030, with the exception of a temporary suspension from May 1, 2020 through March 31, 2022 due to the COVID-19

pandemic. Following the temporary suspension, a 1 % payment reduction occurred beginning April 1, 2022 through June 30, 2022, and the 2 % payment reduction will resume <mark>resumed</mark> on July 1, 2022. • On May 30, 2018, the Right to Try Act, was signed into law. The law, among other things, provides a federal framework for certain patients to access certain investigational new drug products that have completed a Phase 1 clinical trial and that are undergoing investigation for FDA approval. Under certain circumstances, eligible patients can seek treatment without enrolling in clinical trials and without obtaining FDA permission under the FDA expanded access program. There is no obligation for a pharmaceutical manufacturer to make its drug products available to eligible patients as a result of the Right to Try Act. In addition, other legislative changes have been proposed and adopted in the United States since the ACA was enacted. On August 2, 2011, the Budget Control Act of 2011 among other things, created measures for spending reductions by Congress. A Joint Select Committee on Deficit Reduction, tasked with recommending a targeted deficit reduction of at least \$ 1.2 trillion for the years 2013 through 2021, was unable to reach required goals, thereby triggering the legislation's automatic reduction to several government programs. This includes aggregate reductions of Medicare payments to providers of 2 percent per fiscal year. These reductions went into effect on April 1, 2013 and, due to subsequent legislative amendments to the statute, will remain in effect through 2030 unless additional Congressional action is taken. Additionally, there has been heightened governmental scrutiny recently over the manner in which manufacturers set prices for their marketed products. For example, there have been several recent Congressional inquiries and proposed and enacted federal and state legislation designed to, among other things, bring more transparency to drug pricing, review the relationship between pricing and manufacturer patient programs, and reform government program reimbursement methodologies for drug products, including by tying reimbursement to the price of products in other developed countries. For example, proposals have been made to increase drug manufacturer competition, increase the negotiating power of certain federal healthcare programs, incentivize manufacturers to lower the list price of their products, and reduce the out- of- pocket costs of drug products paid by consumers. Individual states in the United States have also become increasingly active in passing legislation and implementing regulations designed to control pharmaceutical product pricing, including price or patient reimbursement constraints, discounts, restrictions on certain product access and marketing cost disclosure and transparency measures, and, in some cases, designed to encourage importation from other countries and bulk purchasing. Legislative and regulatory agendas, as they relate to the healthcare and pharmaceutical industries and the economy as a whole, of the Biden administration and the U. S. Congress currently remain uncertain. One example of President Biden's priorities came via an executive order that he issued on July 9, 2021 directing the FDA to, among other things, continue to clarify and improve the approval framework for biosimilars, including the standards for interchangeability of biological products, facilitate the development and approval of biosimilar and interchangeable products, clarify existing requirements and procedures related to the review and submission of BLAs, and identify and address any efforts to impede biosimilar competition. Any new laws and initiatives may result in additional reductions in Medicare and other healthcare funding or impose additional regulatory requirements on drug development or approval, which could have a material adverse effect on our future customers and accordingly, our financial operations. We expect that additional state and federal healthcare reform measures will be adopted in the future, any of which could limit the amounts that federal and state governments will pay for healthcare products and services, which could result in reduced demand for any product candidates we successfully develop or additional pricing pressures. Regulatory and Compliance Risks Our product candidates and the activities associated with their development, including testing, manufacture, recordkeeping, storage, and approval, are subject to comprehensive regulation by the FDA and other regulatory agencies in the United States and by comparable authorities in other countries. Failure to obtain regulatory approval for a product candidate will prevent us from commercializing the product candidate. We have limited resources for use in preparing, filing, and supporting the applications necessary to gain regulatory approvals and expect to rely on third-party contract research organizations and consultants to assist us in this process. The FDA and other comparable regulatory agencies in foreign countries impose substantial and rigorous requirements for the development, production, marketing authorization and commercial introduction of drug products. These requirements include non-clinical, laboratory and clinical testing procedures, sampling activities, clinical trials, and other costly and time- consuming procedures. In addition, regulation is not static, and regulatory authorities, including the FDA evolve in their staff interpretations and practices and may impose more stringent or different requirements than currently in effect, which may adversely affect our planned and ongoing drug development and / or our sales and marketing efforts. In the United States, to obtain approval from the FDA to market any of our future biologic products, we will be required to submit a BLA to the FDA. Ordinarily, the FDA requires a sponsor to support a BLA with substantial evidence of the product's safety, purity, and potency in treating the targeted indication based on data derived from adequate and well- controlled clinical trials, including Phase 3 safety and efficacy trials conducted in patients with the disease or condition being targeted. Developing and obtaining regulatory approval for product candidates is a lengthy process, often taking a number of years, is uncertain and expensive. All of the product candidates that we are developing, or may develop in the future, require research and development, non-clinical studies, non-clinical testing, and clinical trials prior to seeking regulatory approval, and commencing commercial sales. In addition, we may need to address a number of technological challenges in order to complete development of our product candidates. As a result, the development of product candidates may take longer than anticipated or not be successful at all. Our product candidate development costs will also increase if we experience delays in testing or approvals, and we may not have sufficient funding to complete the testing and approval process for any of our product candidates. We may be required to obtain additional funds to complete clinical trials and prepare for possible commercialization of our product candidates. We do not know whether any non-clinical tests or clinical trials above what we currently have planned will be required, will begin as planned, will need to be restructured, or will be completed on schedule, or at all. Significant delays relating to any preclinical or clinical trials also could shorten any periods during which we may have the exclusive right to commercialize our product candidates or allow our competitors to bring products to market before we do. This may prevent us from receiving marketing approvals and impair our ability to successfully commercialize our

product candidates and may harm our business and results of operations. In addition, many of the factors that cause, or lead to, delays in clinical trials may ultimately lead to the denial of marketing approval of any of our product candidates. If any of this occurs, our business, financial condition, results of operations, and prospects will be materially harmed. Generally, no product can receive FDA approval, marketing authorization from the European Commission or the competent authorities of the EU Member States, or approval from comparable regulatory agencies in foreign countries unless data generated in human clinical trials demonstrates both safety and efficacy for each target indication in accordance with such authority's standards. The large majority of product candidates that begin human clinical trials fail to demonstrate the required safety and efficacy characteristics necessary for marketing approval. Failure to demonstrate the safety and efficacy of any of our product candidates for each target indication in clinical trials would prevent us from obtaining required approvals from regulatory authorities, which would prevent us from commercializing those product candidates. Negative or inconclusive results from the clinical trials or adverse medical events during the trials could lead to requirements that trials be repeated or extended, or that additional trials be conducted, any of which may not be clinically feasible or financially practicable, that the conduct of trials be suspended, or that a program be terminated. Any regulatory approval we ultimately obtain may limit the indicated uses for the product or subject the product to restrictions or post-approval commitments that render the product commercially non-viable. Securing regulatory approval requires the submission of extensive non-clinical and clinical data, information about product manufacturing processes and inspection of facilities and supporting information to the regulatory authorities for each therapeutic indication to establish the product's safety and efficacy. If we are unable to submit the necessary data and information, for example, because the results of clinical trials are not favorable, or if the applicable regulatory authority delays reviewing or does not approve our applications, we will be unable to obtain regulatory approval. Delays in obtaining or failure to obtain regulatory approvals may delay or prevent the successful commercialization of any of the products or product candidates in the jurisdiction for which approval is sought; diminish our competitive advantage; and defer or decrease our receipt of revenue. Some of our product candidates previously in development experienced regulatory and / or clinical setbacks. Clinical development has been discontinued for product candidates otlertuzumab, APVO414, and APVO210. Both APVO414 and APVO210 were discontinued after patients developed ADA. Most recently, in 2019, we elected to discontinue the APVO210 development program following the review of data from the Phase 1 multiple ascending dose (MAD) clinical study of APVO210 in healthy volunteers that suggests that APVO210 would not meet the desired target product profile for future commercialization. Specifically, the clinical data showed evidence of increasing titers of ADA with repeated doses of APVO210, which had varying impact on APVO210 drug levels in subjects' blood. The cause of the ADA is uncertain; however, we believe that appearance of ADA is related to the mechanism of action of APVO210, and not due to the structure, or sequences characteristic of the ADAPTIR platform. Although we have re- designed certain components of the ADAPTIR platform based on what we have learned in prior clinical trials, there is no guarantee that the occurrence of ADA or other clinical setbacks will not occur in the development of our existing and future ADAPTIR product candidates. The procedures to obtain marketing approvals vary among countries and can involve additional clinical trials or other pre-filing requirements. The time required to obtain foreign regulatory approval may differ from that required to obtain FDA approval. The foreign regulatory approval process may include all the risks associated with obtaining FDA approval, or different or additional risks. Regulatory agencies may have varying interpretations of the same data, and approval by one regulatory authority does not ensure approval by regulatory authorities in other jurisdictions. Accordingly, approval by the FDA does not ensure approval by the regulatory authorities in other countries, and approval by one foreign regulatory authority does not ensure approval by the FDA or regulatory authorities in other foreign countries. Failure to obtain regulatory approval in one jurisdiction, however, may impact the decision of other jurisdictions. We may not be able to file for regulatory approvals and may not receive necessary approvals to commercialize our products and products in development in any market on a timely basis, if at all. Inadequate funding for the FDA, the SEC and other government agencies, including from government shutdowns, or other disruptions to these agencies' operations, 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 business 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, the ability to hire and retain key personnel and accept the payment of user fees, and statutory, regulatory and policy changes. 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 product candidates to be reviewed and / or approved by necessary government agencies, which would adversely affect our business. 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. Our product candidates are and will continue to be subject to ongoing obligations and continued regulatory review, which may result in significant additional expense. We may be subject to penalties if we fail to comply with regulatory requirements or experience unanticipated problems with our products. We and our product candidates are subject to extensive and ongoing requirements of and review by the FDA and other regulatory authorities, including requirements related to the conduct of clinical and non-clinical studies, manufacturing processes, post-approval clinical data, labeling, packaging, distribution, adverse event reporting, storage, recordkeeping, export, import, advertising, marketing, and promotional activities for such products. These requirements further include submissions of safety and other post-marketing information, including manufacturing deviations and reports, registration and listing requirements, the payment of annual fees, continued compliance with GMP- requirements relating to manufacturing, quality control, quality assurance, and corresponding maintenance of records

and documents, and requirements regarding the distribution of samples to physicians. Manufacturers and manufacturers' facilities are required to comply with extensive FDA, and comparable foreign regulatory authority requirements, including ensuring that quality control and manufacturing procedures conform to GMP requirements and applicable product tracking and tracing requirements. FDA and comparable foreign regulatory authorities will continue to closely monitor the safety profile of any product even after approval. If the FDA or comparable foreign regulatory authorities become aware of new safety information after approval of any of our product candidates, they may, among other actions, withdraw approval, require labeling changes or establishment of a REMS or similar strategy, impose significant restrictions on a product's indicated uses or marketing, or impose ongoing requirements for potentially costly post- approval studies or post- market surveillance. Any such restrictions could limit sales of the product. We and any of our collaborators could be subject to periodic unannounced inspections by the FDA to monitor and ensure compliance with GMPs and other FDA regulatory requirements. Application holders must further notify the FDA, and depending on the nature of the change, obtain FDA pre-approval for product and manufacturing changes. In addition, later discovery of previously unknown adverse events or that the product is less effective than previously thought or other problems with our products, manufacturers or manufacturing processes, or failure to comply with regulatory requirements both before and after approval, may yield various results, including: • restrictions on manufacturing or distribution, or marketing of such products; • modifications to promotional pieces and product labels; • issuance of corrective information; • requirements to conduct post-marketing studies or other clinical trials; • clinical holds or termination of clinical trials; • requirements to establish or modify a REMS or a similar strategy; • changes to the way the product is administered; • liability for harm caused to patients or subjects; • reputational harm; • the product becoming less competitive; • warning, untitled, or cyber letters; • suspension of marketing or withdrawal of the products from the market; • regulatory authority issuance of safety alerts, Dear Healthcare Provider letters, press releases, or other communications containing warnings or other safety information about the product; • refusal to approve pending applications or supplements to approved applications that we submit; • recalls of products; • fines, restitution or disgorgement of profits or revenues; • suspension or withdrawal of marketing approvals; • refusal to permit the import or export of our products; • product seizure or detention; • FDA debarment, suspension and debarment from government contracts, and refusal of orders under existing government contracts, exclusion from federal healthcare programs, consent decrees, or corporate integrity agreements; or • injunctions or the imposition of civil or criminal penalties, including imprisonment. Any of these events could prevent us from achieving or maintaining product approval and market acceptance of the particular product candidate, if approved, or could substantially increase the costs and expenses of developing and commercializing such product, which in turn could delay or prevent us from generating significant revenues from its sale. Any of these events could further have other material and adverse effects on our operations and business and could adversely impact our stock price and could significantly harm our business, financial condition, results of operations, and prospects. The FDA's policies may change and additional government laws and regulations may be enacted that could prevent, limit, or delay regulatory approval of our product candidates, that could limit the marketability of our product candidates, or that could impose additional regulatory obligations on us. For example, the current administration may implement new or revised laws, regulatory requirements, and associated compliance obligations, as well as postponed or frozen regulatory requirements. Changes in medical practice and standard of care may also impact the marketability of our product candidates. If we are slow or unable to adapt to changes in existing requirements, standards of care, or the adoption of new requirements or policies, or if we are not able to maintain regulatory compliance, we may lose any marketing approval that we may have obtained and be subject to regulatory enforcement action. Should any of the above actions take place, they could adversely affect our ability to achieve or sustain profitability. Further, the cost of compliance with postapproval regulations may have a negative effect on our operating results and financial condition. If we fail to comply with foreign, federal, state, and local healthcare laws, including fraud and abuse and health information privacy and security laws, we could face substantial penalties and our business, results of operations, financial condition and prospects could be adversely affected. As a biotechnology company, even though we do not provide healthcare services or receive payments directly from or bill directly to Medicare, Medicaid, or other third- party payors for our products, certain federal, state, local and foreign healthcare laws and regulations pertaining to fraud and abuse and patients' rights are applicable to our business. We are subject to healthcare fraud and abuse and patient privacy regulation by both the federal government and the states in which we conduct our business. The laws that may affect our ability to operate include: • the federal Anti- Kickback Statute makes it illegal for any person or entity, including a prescription drug manufacturer (or a party acting on its behalf) to knowingly and willfully solicit, receive, offer or pay remuneration, directly or indirectly, overtly or covertly, to induce, or in return for, either the referral of an individual, or the purchase, lease, prescribing or recommendation of an item, good, facility or service reimbursable by a federally funded healthcare program, such as the Medicare or Medicaid program. The term "remuneration" has been interpreted broadly and may constrain our marketing practices, educational programs, pricing policies and relationships with healthcare providers or other entities, among other activities; • federal civil and criminal false claims, including the federal False Claims Act, and false statement laws and civil monetary penalty laws, which impose criminal and civil penalties, including through civil whistleblower or qui tam actions, on individuals or entities for, among other things, knowingly presenting, or causing to be presented, claims for payment or approval from Medicare, Medicaid or other federal health care programs that are false or fraudulent or knowingly making any materially false statement in connection with the delivery or payment for healthcare benefits, items or services; • the U. S. federal Health Insurance Portability and Accountability Act of 1996, as amended, or HIPAA, which imposes criminal and civil liability for, among other things, knowingly and willfully executing, or attempting to execute, a scheme to defraud any healthcare benefit program or obtain, by means of false or fraudulent pretenses, representations, or promises, any of the money or property owned by, or under the custody or control of, any healthcare benefit program, regardless of the payor (e.g., public or private) and knowingly and willfully falsifying, concealing or covering up by any trick or device a material fact or making any materially false statement, in connection with the delivery of, or payment for,

healthcare benefits, items or services. Similar to the U. S. federal Anti- Kickback Statute, a person or entity does not need to have actual knowledge of the statute or specific intent to violate it in order to have committed a violation; • HIPAA, as amended by the Health Information Technology for Economic and Clinical Health, or HITECH, and their respective implementing regulations mandates, among other things, the adoption of uniform standards for the electronic exchange of information in common healthcare transactions, as well as standards relating to the privacy, security and transmission of individually identifiable health information, which require the adoption of administrative, physical and technical safeguards to protect such information. Among other things, HITECH makes HIPAA's security standards directly applicable to business associates, or independent contractors or agents of covered entities that create, receive or obtain protected health information in connection with providing a service for or on behalf of a covered entity; • the Physician Payments Sunshine Act and its implementing regulations, which requires certain manufacturers of drugs, biologics, medical devices and medical supplies for which payment is available under Medicare, Medicaid or the CMS, certain payments and transfers of value made to physicians and teaching hospitals, and ownership or investment interests held by physicians and their immediate family members. Effective January 1, 2022, applicable manufacturers are required to report information regarding payments and transfers of value provided to physician assistants, nurse practitioners, clinical nurse specialists, certified nurse anesthetists, and certified nurse-midwives; and, • state law equivalents of each of the above federal laws, such as anti-kickback and false claims laws, which may apply to items or services reimbursed by any third- party payor, including commercial insurers; state and foreign 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, thus complicating compliance efforts; state, local and foreign laws that require pharmaceutical companies to comply with the pharmaceutical industry's voluntary compliance guidelines and the relevant compliance guidance promulgated by the federal government, obtain pharmaceutical agent licensure, and / or otherwise restrict payments that may be made to healthcare providers and entities; and state, local and foreign laws and industry codes that require drug manufacturers to report information related to payments and other transfers of value to healthcare providers or entities, or marketing expenditures. Because of the breadth of these laws and the narrowness of the statutory exceptions and safe harbors available under the U. S. federal Anti- Kickback Statute, it is possible that some of our business activities could be subject to challenge under one or more of such laws. Moreover, recent health care reform legislation has strengthened these laws. For example, the ACA, among other things, amends the intent requirement of the federal Anti-Kickback Statute and criminal health care fraud statutes, so that a person or entity no longer needs to have actual knowledge of the statute or specific intent to violate it. In addition, the ACA provides that the government may assert that a claim including items or services resulting from a violation of the federal Anti- Kickback Statute constitutes a false or fraudulent claim for purposes of the False Claims Act. Recently, several pharmaceutical and other healthcare companies have been prosecuted under the federal false claims laws for allegedly inflating drug prices they report to pricing services, which in turn are used by the government to set Medicare and Medicaid reimbursement rates, and for allegedly providing free product to customers with the expectation that the customers would bill federal programs for the product. In addition, certain marketing practices, including off- label promotion, interactions with specialty pharmacies, and patient assistance programs may also violate fraud and abuse laws. To the extent that any product we make is sold in a foreign country, we may be subject to similar foreign laws and regulations. In addition, certain state and local laws mandate that we comply with a state code of conduct, adopt a company code of conduct under state criteria, disclose marketing payments made to health care professionals and entities, disclose drug pricing information and / or report compliance information to the state authorities. The shifting compliance environment and the need to build and maintain robust and expandable systems to comply in multiple jurisdictions with different compliance and reporting requirements increase the possibility that a pharmaceutical company may violate one or more of the requirements. Any failure to comply with these reporting requirements could result in significant fines and penalties. The risks of complying with these laws cannot be entirely eliminated. The risk of violation of such laws is also increased because many of them have not been fully interpreted by the regulatory authorities or the courts, and their provisions are open to a variety of interpretations. 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 management's attention from the operation of our business. Moreover, achieving and sustaining compliance with applicable federal, state, local and foreign privacy, security, fraud and transparency laws may prove costly. If our past or present operations, or those of our distributors are found to be in violation of any of the laws described above or any other governmental regulations that apply to us, we may be subject to sanctions, including civil and administrative penalties, criminal fines, damages, disgorgement, exclusion from participation in U. S. federal or state health care programs, individual imprisonment, integrity obligations, and the curtailment or restructuring of our operations, any of which could materially adversely affect our ability to operate our business and our financial results. Similarly, if healthcare providers, distributors or other entities with whom we do business are found to be out of compliance with applicable laws and regulations, they may be subject to sanctions, which could also have a negative impact on us. Our employees, independent contractors, consultants, commercial partners, principal investigators, or CROs may engage in misconduct or other improper activities, including noncompliance with regulatory standards and requirements, which could have a material adverse effect on our business. We are exposed to the risk of employee fraud or other misconduct. Misconduct by employees, independent contractors, consultants, commercial partners, manufacturers, investigators, or CROs could include intentional, reckless, negligent, or unintentional failures to comply with FDA regulations or applicable fraud and abuse laws, provide accurate information to the FDA, properly calculate pricing information required by federal programs, comply with federal procurement rules or contract terms, report financial information or data accurately or disclose unauthorized activities to us. This misconduct could also involve the improper use or misrepresentation of information obtained in the course of clinical trials, which could result in regulatory sanctions and serious harm to our reputation. It is not always possible to identify and deter this type of misconduct, 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 be in compliance with such laws or regulations. Moreover, it is possible for a whistleblower to pursue a False Claims Act case against us even if the government considers the claim unmeritorious and declines to intervene, which could require us to incur costs defending against such a claim. Further, due to the risk that a judgment in a False Claims Act case could result in exclusion from federal health programs or debarment from government contracts, whistleblower cases often result in large settlements. If any such actions are instituted against us, and we are not successful in defending ourselves or asserting our rights, those actions could have a significant impact on our business, financial condition, and results of operations, including the imposition of significant fines or other sanctions. Our operations, including our use of hazardous materials, chemicals, bacteria, and viruses, require us to comply with regulatory requirements and expose us to significant potential liabilities. Our operations involve the use of hazardous materials, including chemicals, and may produce dangerous waste products. Accordingly, we, along with the third parties that conduct clinical trials and manufacture our products and product candidates on our behalf, are subject to federal, state, local and foreign laws and regulations that govern the use, manufacture, distribution, storage, handling, exposure, disposal and recordkeeping with respect to these materials. We are also subject to a variety of environmental and occupational health and safety laws. Compliance with current or future laws and regulations can require significant costs and we could be subject to substantial fines and penalties in the event of noncompliance. In addition, the risk of contamination or injury from these materials cannot be completely eliminated. In such event, we could be held liable for substantial civil damages or costs associated with the cleanup of hazardous materials. Our failure to comply with data protection laws and regulations could lead to government enforcement actions and significant penalties against us, and adversely impact our operating results. EU Member States, Switzerland and other countries have adopted data protection laws and regulations, which impose significant compliance obligations. For example, European Union, or EU, member states and other foreign jurisdictions, including Switzerland, have adopted data protection laws and regulations which impose significant compliance obligations. Moreover, the collection and use of personal health data in the EU is now governed under the EU General Data Protection Regulation, or the GDPR, effective in May 2018. The GDPR, which is wide- ranging in scope, imposed several requirements relating to the consent of the individuals to whom the personal data relates, the information provided to the individuals, the security and confidentiality of the personal data, data breach notification and the use of third- party processors in connection with the processing of personal data. The GDPR also imposes strict rules on the transfer of personal data out of the EU to the U.S., provides an enforcement authority and imposes large penalties for noncompliance, including the potential for fines of up to € 20 million or 4 % of the annual global revenues of the noncompliant company, whichever is greater. The GDPR requirements apply not only to third- party transactions, but also to transfers of information between us and our subsidiaries, including employee information. The GDPR increases our responsibility and liability in relation to personal data that we process, including in clinical trials, and we may be required to put in place additional mechanisms to ensure compliance with the GDPR, which could divert management's attention and increase our cost of doing business. In addition, new regulation or legislative actions regarding data privacy and security (together with applicable industry standards) may increase our costs of doing business. However, despite our ongoing efforts, we may not be successful either due to various factors within our control, such as limited financial or human resources, or other factors outside our control. It is also possible that local data protection authorities may have different interpretations of the GDPR, leading to potential inconsistencies amongst various EU member states. Any failure or alleged failure (including as a result of deficiencies in our policies, procedures, or measures relating to privacy, data security, marketing, or communications) by us to comply with laws, regulations, policies, legal or contractual obligations, industry standards, or regulatory guidance relating to privacy or data security, may result in governmental investigations and enforcement actions, litigation, fines and penalties or adverse publicity. In addition, we expect that there will continue to be new proposed laws, regulations and industry standards relating to privacy and data protection in the United States, the EU and other jurisdictions, such as the California Consumer Privacy Act of 2018, which has been characterized as the first "GDPR-like" privacy statute to be enacted in the United States, and we cannot determine the impact such future laws, regulations and standards may have on our business. If we experience a significant disruption in our information technology systems or breaches of data security, including due to a eyber- security cybersecurity incident, our business could be adversely affected. We rely on information technology systems to keep financial records, capture laboratory data, maintain clinical trial data and corporate records, communicate with staff and external parties and operate other critical functions.Our information technology systems are potentially vulnerable to disruption due to breakdown, malicious intrusion and computer viruses or other disruptive events including but not limited to natural disaster. The impact of the ongoing COVID-19 pandemic also poses an increased security risk, due to the remote working environment. We also face the challenge of promptly detecting and remediating any cyber- security <mark>cybersecurity</mark> breaches.Our information technology systems security measures are focused on the prevention, detection and remediation of damage from computer viruses, unauthorized access, cyber- attack and other similar disruptions. However, our information technology systems protection measures may not be successful in preventing unauthorized access, intrusion and damage. Threats to our systems can derive from human error, fraud or malice on the part of employees or third parties, including computer hackers, encryption by ransomware, or may result from technological failure. If we were to experience a prolonged system disruption in our information technology systems or those of certain of our vendors, it could delay or negatively impact our development and commercialization of our product candidates, which could adversely impact our business. If operations at our facilities were disrupted, it may cause a material disruption in our business if we are not capable of restoring function on an acceptable timeframe. In addition, as discussed above, our information technology systems are potentially vulnerable to data security breaches — whether by employees or others, intentionally or unintentionally which may expose sensitive or personal data to unauthorized persons. Such data security breaches could lead to the loss of trade secrets or other intellectual property, or could lead to the public exposure of personal information (including sensitive personal information) of our employees, customers and others, any of which could have a material adverse effect on our business, financial condition and results of operations. Moreover, a security breach or privacy violation that leads to

destruction,loss,alteration,unauthorized use or access,disclosure or modification of,personally identifiable information or personal data, could harm our reputation, compel us to comply with federal, state and / or international breach notification laws, subject us to mandatory corrective or regulatory action, require us to verify the correctness of database contents and otherwise subject us to liability under laws and regulations that protect personal data, including the GDPR and the California Consumer Privacy Act of 2018, which could disrupt our business, result in increased costs or loss, and / or result in significant legal and financial exposure. In addition, a data security breach could result in loss of clinical trial data or damage to the integrity of that data. If we are unable to implement and maintain adequate organizational and technical measures to prevent such security breaches or privacy violations or to respond adequately in the event of a breach, our operations could be disrupted and we may suffer loss of reputation, problems with regulatory authorities, financial loss and other negative consequences. In addition, these breaches and other inappropriate access can be difficult to detect, and any delay in identifying them may lead to increased harm of the type described above. If a breach of our information technology systems or those of our key third- party vendors occurs, we may incur additional costs related to repairing or rebuilding our internal systems, complying with breach notification laws, defending legal claims or proceedings, responding to regulatory actions, incurring penalties, and paying damages. Moreover, it may be determined that as a result of such a breach there was a material weakness or significant deficiency in our internal controls or other failure of our control environment. If such a breach occurs, it may have a material adverse effect on our business results of operations, and financial condition, and it may also negatively impact our reputation. Intellectual Property Risks Our commercial success will depend, in large part, on our ability to obtain and maintain protection in the United States and other countries for the intellectual property covering or incorporated into our technology, products and product candidates. Obtaining and maintaining this protection is very costly. The patentability of technology in the biotechnology field generally is highly uncertain and involves complex legal and scientific questions. We cannot be certain that our patents and patent applications, including our own and those that we have rights through licenses from third parties, will adequately protect our intellectual property. Our success in protecting our intellectual property depends significantly on our ability to: • obtain and maintain U. S. and foreign patents, that are meaningful to our products, including defending those patents against adverse claims; • secure patent term extension for the patents covering our approved products; • protect trade secrets; • operate without infringing the proprietary rights of others; and, • prevent others from infringing our proprietary rights. We may not be able to obtain issued patents relating to our technology or product candidates. Even if issued, patents may inadvertently lapse or be challenged, narrowed, invalidated, or circumvented, which could limit our ability to stop competitors from marketing similar products or limit the duration of patent protection we may have for our product candidates. Further, patents may lapse prior to the regulatory approval of the underlying product in one or more territories. In the past, we have abandoned the prosecution and or maintenance of patent applications related to patent families in the ordinary course of business. In the future, we may choose to abandon such prosecution and / or maintenance in a similar fashion. If these patent rights are later determined to be valuable or necessary to our business, our competitive position may be adversely affected. Changes in patent laws or administrative patent office rules or changes in interpretations of patent laws in the United States and in other countries may diminish the value of our intellectual property or narrow the scope of our patent protection, or result in costly defensive measures. Patent and other intellectual property laws outside the United States are even more uncertain than in the United States and are continually undergoing review and revisions in many countries. Further, the laws of some foreign countries may not protect our intellectual property rights to the same extent as the laws of the United States. For example, certain countries do not grant patent claims that are directed to business methods and processes. In addition, we may have to participate in additional opposition proceedings, like the proceedings described above, to determine the validity of our foreign patents or our competitors' foreign patents, which could result in substantial costs and diversion of our efforts. Our collaborative partners and licensors may not adequately protect our intellectual property rights. These third parties may have the first right to maintain or defend intellectual property rights in which we have an interest and, although we may have the right to assume the maintenance and defense of such intellectual property rights if these third parties do not do so, our ability to maintain and defend such intellectual property rights may be compromised by the acts or omissions of these third parties. The cost of litigation to uphold the validity of patents, once obtained, to prevent infringement or to otherwise protect or enforce our proprietary rights could be substantial and, from time to time, our patents are subject to patent office proceedings. Some of our competitors may be better able to sustain the costs of complex patent litigation because they may have substantially greater financial resources. Intellectual property lawsuits are expensive and unpredictable and would consume management's time and attention and other resources, even if the outcome were successful. In addition, there is a risk that a court would decide that our patents are not valid and that we do not have the right to stop the other party from using the inventions covered by or incorporating them. There is also a risk that, even if the validity of a patent were upheld, a court would refuse to stop the other party from using the invention (s), including on the grounds that its activities do not infringe the patent. If any of these events were to occur, our business, financial condition and operating results could be materially and adversely affected. In addition to patent litigation, we may be a party to adversarial proceedings before the Patent Trial and Appeal Board (PTAB) of the USPTO, or the Opposition Division Divisions of the European Patent Office (EPO). Potential proceedings before the PTAB include inter parties review proceedings, postgrant review proceedings and interference proceedings. Depending on our level of success at the PTAB and Opposition Division **Divisions** of the EPO, these proceedings could adversely impact our intellectual property rights with respect to our products and technology. In addition, the U. S. Supreme Court has ruled on several patent cases in recent years, either narrowing the scope of patent protection available in certain circumstances or weakening the rights of patent owners in certain situations. This combination of events has created uncertainty with respect to the value of patents, once obtained, and with regard to our ability to obtain patents in the future. Depending on decisions by the U.S. Congress, the federal courts, and the USPTO, the laws and regulations governing patents could change in unpredictable ways that would weaken our ability to obtain new patents or to enforce our existing patents and patents that we might obtain in the future. Patent and intellectual property laws outside of the

United States may also change and be uncertain. Our patents, once obtained, also may not afford us protection against competitors with similar technology. Because patent applications in the United States and many foreign jurisdictions are typically not published until eighteen months after filing, or in some cases not at all, and because publications of discoveries in the scientific literature often lag behind actual discoveries, neither we nor our licensors can be certain that others have not filed or maintained patent applications for technology used by us or covered by our pending patent applications without our being aware of these applications. We also will rely on current and future trademarks to establish and maintain recognized brands, including APTEVO THERAPEUTICS, APTEVO BIOTHERAPEUTICS, APTEVO RESEARCH AND DEVELOPMENT, the Aptevo logo, ADAPTIR, and ADAPTIR- FLEX in relevant jurisdictions. If we fail to acquire and protect such trademarks, our ability to market and sell our products, if approved for marketing, will be harmed. In addition, our current and future trademarks may be challenged, infringed, circumvented, declared generic, lapsed or determined to be infringing on or dilutive of other marks and we may not be able to protect our rights in these trademarks, which we need in order to build name recognition. Any of the foregoing could have a material and adverse effect on our business, financial condition and operating results. If approved, our products regulated as biologics may face competition from biosimilars approved through an abbreviated regulatory pathway. The Patient Protection and Affordable Care Act, as amended by the Health Care and Education Reconciliation Act of 2010, or collectively the ACA, includes a subtitle called the Biologics Price Competition and Innovation Act of 2009, or BPCIA, which created an abbreviated approval pathway for biological products that are biosimilar to or interchangeable with an FDA- licensed reference biological product. Under the BPCIA, an application for a biosimilar product may not be submitted to the FDA until four years following the date that the reference product was first licensed by the FDA. In addition, the approval of a biosimilar product may not be made effective by the FDA until 12 years from the date on which the reference product was first licensed. During this 12- year period of exclusivity, another company may still market a competing version of the reference product if the FDA approves a BLA for the competing product containing the sponsor's own preclinical data and data from adequate and well- controlled clinical trials to demonstrate the safety, purity, and potency of the other company's product. The law is complex and is still being interpreted and implemented by the FDA. As a result, its ultimate impact, implementation, and meaning are subject to uncertainty. We believe that any of our product candidates approved as a biological product under a BLA should qualify for the 12- year period of exclusivity. However, there is a risk that this exclusivity could be shortened due to congressional action or otherwise, or that the FDA will not consider our investigational medicines to be reference products for competing products, potentially creating the opportunity for generic competition sooner than anticipated. Other aspects of the BPCIA, some of which may impact the BPCIA exclusivity provisions, have also been the subject of recent litigation. There is a similar abbreviated pathway for the approval of biosimilar products in the EU. Reference products in the EU benefit from an eight - year data exclusivity period during which the data included in the dossier for the reference product may not be referenced for the purposes of an abbreviated biosimilar application. Following the expiration of the data exclusivity period, there is an additional two - year period of market exclusivity during which a biosimilar marketing authorization application can be submitted, and the innovator's data may be referenced, but no product can be placed on the market until the expiration of such period. The overall 10- year period can be extended to a maximum of 11 years in certain circumstances. As in the U. S., there is no guarantee that a product will qualify for the prescribed period of exclusivity and, even if a product does qualify, another company may market a competing version of the reference product if such company obtained a marketing authorization with a complete independent data package of pharmaceutical tests, preclinical tests and clinical trials. Moreover, the extent to which a biosimilar, once licensed, will be substituted for any one of our reference products in a way that is similar to traditional generic substitution for non-biological products, and will depend on a number of marketplace and regulatory factors that are still developing. If competitors are able to obtain marketing approval for biosimilars referencing any of our products, if approved, our products may become subject to competition from such biosimilars, which would impair our ability to successfully commercialize and generate revenues from sales of such products. Third parties may choose to file patent infringement claims against us. Our development and commercialization activities, as well as any product candidates or products resulting from these activities, may infringe or be claimed to infringe patents and other intellectual property rights of third parties under which we do not hold sufficient licenses or other rights. Third parties may be successful in obtaining patent protection for technologies that cover development and commercialization activities in which we are already engaged. These third parties may have substantially greater financial resources than us and could bring claims against us that could cause us to incur substantial expenses to defend against these claims and, if successful against us, could cause us to pay substantial damages. If a patent infringement or other similar suit were brought against us, we could be forced to stop or delay development, manufacturing or sales of the product or product candidate that is the subject of the suit. Intellectual property litigation in the biotechnology industry is common, and we expect this trend to continue. As a result of patent infringement or other similar claims, or to avoid potential claims, we may choose or be required to seek a license from the third - party and be required to pay license fees or royalties or both. These licenses may not be available on acceptable terms, or at all. Even if we were able to obtain a license, the rights may be non- exclusive, which could result in our competitors gaining access to the same intellectual property. Ultimately, we could be prevented from commercializing a product, or be forced to cease some aspect of our business operations, if, as a result of actual or threatened patent infringement claims, we are unable to enter into licenses on acceptable terms, if at all, or if an injunction is granted against us, which could harm our business significantly. There has been substantial litigation and other proceedings regarding patent and other intellectual property rights in the pharmaceutical and biotechnology industries. In addition to infringement claims against us, we may become a party to other patent litigation and other adversarial proceedings such as proceedings before the Patent Trial Appeals Board and opposition proceedings in the European Patent Office, regarding intellectual property rights that could impact our products and technology. Patent litigation and other proceedings may also absorb significant management time. The cost to us of any patent litigation or other proceeding, even if resolved in our favor, could be substantial. Some of our competitors may be able to sustain the costs of such litigation or proceedings more effectively

than we can because of their substantially greater financial resources. Uncertainties resulting from the initiation and continuation of patent litigation or other proceedings could have a material adverse effect on our ability to compete in the marketplace. Patent litigation and other proceedings may also absorb significant management time. Our Aptevo trademarks may be opposed which could have a material and adverse effect on our business. We have an application pending that covers the APTEVO THERAPEUTICS trademark and received a notice of allowance in September 2022 from the USPTO for the APTEVO BIOTHERAPEUTICS and APTEVO RESEARCH AND DEVELOPMENT trademarks in August 2022. We refer to these trademarks as our house marks. If a third - party opposes any of these house marks and we are unable to reach settlement prior to the commencement of an opposition proceeding, we may incur significant expense in the course of participating in the opposition process, which can be expensive and lengthy. Any settlement with a third - party may result in our agreeing to be subject to restrictions on our use of the relevant house mark. In addition, if we are unsuccessful in an opposition against a house mark, we would lose the ability to obtain trademark registration for one or more uses of the relevant mark both in the United States and in other territories which could have a material and adverse effect on our business. We may be subject to claims that our employees have wrongfully used or disclosed alleged trade secrets of their former employers. As is common in the biotechnology and pharmaceutical industry, we employ individuals who were previously employed at other biotechnology or pharmaceutical companies, including our competitors or potential competitors. We may be subject to claims that these employees or we have inadvertently or otherwise used or disclosed trade secrets or other proprietary information of their former employers. Litigation may be necessary to defend against these claims. Even if we are successful in defending against these claims, litigation could result in substantial costs and be a distraction to management. Failure to comply with our obligations in our intellectual property licenses with third parties, could result in loss of license rights or other damages. We are a party to a number of license agreements and expect to enter into additional license agreements in the future. Our existing licenses impose, and we expect future licenses will impose, various diligence, milestone payment, royalty, insurance, and other obligations on us. If we fail to comply with these obligations, the licensor may have the right to terminate the license in whole or in part, terminate the exclusive nature of the license and / or sue us for breach, which could cause us to not be able to market any product that is covered by the licensed patents and may be subject to damages. If we are unable to protect the confidentiality of our proprietary information and know- how, the value of our technology and product candidates could be adversely affected. In addition to patented technology, we rely upon unpatented proprietary technology, information processes and know- how. These types of trade secrets can be difficult to protect. We seek to protect this confidential information, in part, through agreements with our employees, consultants and third parties as well as confidentiality policies and audits, although these may not be successful in protecting our trade secrets and confidential information. These agreements may be breached, and we may not have adequate remedies for any such breach. In addition, our trade secrets may otherwise become known, including through a potential cyber security breach, or may be independently developed by competitors. If we are unable to protect the confidentiality of our proprietary information and know- how, competitors may be able to use this information to develop products that compete with our products, which could adversely impact our business. Risks Related to Collaborations and Other Transactions We may not be successful in establishing and maintaining collaborations and entering into other transactions that leverage our capabilities in pursuit of developing and commercializing our product candidates and any such collaborations and transactions, if any, could result in financial results that differ from market expectations. For each of our product candidates we plan to evaluate the merits of entering into collaboration arrangements with third parties, including leading biotechnology companies or non-governmental organizations. In July 2017, we entered into a collaboration agreement with Alligator pursuant to which Aptevo R & D and Alligator have been collaboratively developing ALG. APV- 527, a lead bispecific antibody candidate simultaneously targeting 4-1BB (CD137), a member of the TNFR superfamily of a co-stimulatory receptor found on activated T - cells, and 5T4, a tumor antigen widely overexpressed in a number of different types of cancer. We intend to pursue collaboration arrangements with third parties that have particular technology, expertise or resources for the development or commercialization of our product candidates or for accessing particular markets. We face, and will continue to face, significant competition in seeking appropriate partners for our product candidates. If we are unable to identify partners whose capabilities complement and integrate well with ours and reach collaboration arrangements with such partners on a timely basis, on acceptable terms or at all, or if the arrangements we establish are unproductive for us, we may fail to meet our business objectives for the particular product candidate. Our ability to enter into such arrangements with respect to products in development that are subject to licenses may be limited by the terms of those licenses. Our collaboration agreement with Alligator, or any collaboration agreement we may consider entering into, may not be successful and the success of our collaboration arrangements will depend heavily on the efforts and activities of our collaborative partners. It is likely that our collaborative partners will have significant discretion in determining the efforts and resources that they will apply to these collaborations. The risks that we are subject to in any of our collaborations include, among others: • our collaborative partners may not commit adequate resources to the development, marketing and distribution of any collaboration products, limiting our potential revenues from these products; • our collaborative partners may experience financial difficulties and may therefore be unable to meet their commitments to us; • our collaborative partners may pursue a competing product candidate developed either independently or in collaboration with others, including our competitors; and, • our collaborative partners may terminate our relationship. The failure of any of our current or future collaboration partners to perform as expected could place us at a competitive disadvantage and adversely affect us financially, including delay and increased costs of development, loss of market opportunities, lower than expected revenues and impairment of the value of the related product candidate. A loss of our collaboration agreement with Alligator would result in a burden of locating a replacement partner under potentially less favorable terms at an additional cost. Collaborations are a critical part of our business strategy, and any inability on our part to establish and successfully maintain such arrangements on terms favorable to us or to work successfully with our collaborative partners could have an adverse effect on our operations and financial performance. Due to the ongoing COVID-19 pandemic and macroeconomic factors, we may experience delays in

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opportunities to develop our product candidates, due to financial and other impacts on potential partners. In addition, in the
normal course of business, the Company engages in discussions with third parties regarding possible strategic alliances, joint
ventures, acquisitions, divestitures and business combinations to further develop or commercialize our product candidates. As a
result of such transactions, our financial results may differ from our own or the investment community's expectations in a given
fiscal quarter or over the long term. Furthermore, efforts to engage in such transactions require varying levels of management
resources, which may divert the Company's attention from other business operations. Any transactions we engage in could
result in our financial results differing materially from market expectations. In connection with our separation from Emergent,
we and Emergent agreed to indemnify the other party for certain liabilities. The Emergent indemnity may not be sufficient to
hold us harmless from the full amount of liabilities for which Emergent will be allocated responsibility, and Emergent may not
be able to satisfy its indemnification obligations in the future. Pursuant to the separation agreement and certain other agreements
with Emergent, Emergent has agreed to indemnify us for certain liabilities, and we agreed to indemnify Emergent for certain
liabilities. Indemnities that we may be required to provide Emergent are not subject to any cap, may be significant and could
negatively impact our business, particularly indemnities relating to our actions that could impact the tax- free nature of the
distribution. Third parties could also seek to hold us responsible for any of the liabilities that Emergent has agreed to retain. Any
amounts we are required to pay pursuant to these indemnification obligations and other liabilities could require us to divert eash
that would otherwise have been used in furtherance of our operating business. Further, the indemnity from Emergent may not be
sufficient to protect us against the full amount of such liabilities, and Emergent may not be able to fully satisfy its
indemnification obligations. Moreover, even if we ultimately succeed in recovering from Emergent any amounts for which we
are held liable, we may be temporarily required to bear these losses ourselves. Each of these risks could negatively affect our
business, results of operations and financial condition. Risks Related to Our Common Stock and General Risks Our stock price
has fluctuated in the past and is likely to be volatile in the future. Between August 1, 2016 and December 31, 2022-2023, the
reported closing price of our common stock has fluctuated between $ 2-0 . 00-172 and $ 83. 16 per share (as adjusted to reflect
our 1- for- 14 reverse stock split of our outstanding common stock that was effective on March 26, 2020). The stock market in
general, and the market for biotechnology companies in particular, have experienced extreme volatility that has often been
unrelated to the operating performance of particular companies. In particular, the stock market has experienced extreme
volatility in recent months as a result of the geopolitical climate, including the war in Ukraine and the rising conflict in the
Middle East, and macroeconomic conditions, including rising and fluctuating inflation and interest rates and reduced consumer
confidence. The market price of our common stock may fluctuate significantly due to a number of factors, some of which may
be beyond our control or unrelated to our operations, including, among others: • changes in carnings estimated by securities
analysts or management, or our ability to meet those estimates; • investor perceptions or negative announcements by our
competitors, suppliers, or partners regarding their own performance; • the success of competitive products or technologies; • the
timing, expenses, and results of clinical and preclinical trials of our product candidates; • announcements regarding clinical trial
results and product introductions by us or our competitors; • announcements of acquisitions, collaborations, financings or other
transactions by us or our competitors; • public concern as to the safety of our product candidates; • termination or delay of a
development program; • the recruitment or departure of key personnel; • estimated or actual sales of IXINITY by Medexus; •
actual or anticipated variations in our cash flows or results of operations; • the operating and stock price performance of
comparable companies; • the impact of the ongoing COVID-19 pandemic or similar global health challenges; • general industry
and macroeconomic conditions and, including domestic and global financial, economic, and geopolitical instability; and
changes in earnings estimated by securities analysts or management, or our ability to meet those estimates; • our ability
to continue as a going concern; and • the other factors described in this "Risk Factors" section. Biotechnology company
stock prices have declined significantly in certain instances where companies have failed to obtain FDA or foreign regulatory
authority approval of a product candidate or if the timing of FDA or foreign regulatory authority approval is delayed. If the
FDA's or any foreign regulatory authority's response to any application for approval is delayed or not favorable for any of our
product candidates, our stock price could decline significantly. In addition, when the market price of a company's common
stock drops significantly, stockholders often institute securities class action lawsuits against the company. A lawsuit against us
could cause us to incur substantial costs and could divert the time and attention of our management and other resources. In the
event that coverage under our directors' and officers' liability insurance is reduced or terminated as a result of an ownership
change or otherwise, our indemnification obligations and limitations of our directors' and officers' liability insurance may have a
material adverse effect on our financial condition, results of operations and cash flows. Under Delaware law, our certificate of
incorporation, and our by- laws and certain indemnification agreements to which we are a party, we have an obligation to
indemnify, or we have otherwise agreed to indemnify, certain of our current and former directors and officers with respect to
past, current, and future investigations and litigation. In order to reduce the risk of expense of these obligations, we maintain
directors' and officers' liability insurance. A significant change in the Company's risk profile ; such as the Tang Ownership
Change, could increase the cost to us of our directors' and officers' liability insurance coverage or the coverage thereunder may
be reduced or terminated in full. In the event that the coverage under our directors' and officers' liability insurance is reduced or
terminated, we will be required to pay the expenses of indemnifying our current and former directors and officers in their
defense of current and future investigations and litigation, which expenses may be significant. The increased costs to us of our
directors' and officers' liability insurance coverage, or our indemnification obligations if our directors' and officers' liability
insurance coverage is reduced or terminated, could result in the diversion of our financial resources, and may have a material
adverse effect on our financial condition, results of operations and cash flows. If we do not maintain effective internal controls,
we may not be able to accurately report our financial results and our business could be harmed. The Sarbanes-Oxley Act
requires, among other things, that we assess the effectiveness of our internal control over financial reporting annually and the
effectiveness of our disclosure controls and procedures quarterly. In particular, Section 404 of the Sarbanes-Oxley Act, or
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Section 404, requires us to perform system and process evaluation and testing of our internal control over financial reporting to allow management to report on, and our independent registered public accounting firm potentially to attest to, the effectiveness of our internal control over financial reporting. In the past, we were an emerging growth company and we currently are a nonaccelerated filer and have availed ourselves of the exemption from the requirement that our independent registered public accounting firm attest to the effectiveness of our internal control over financial reporting under Section 404. If we cease to be a non-accelerated filer and our independent registered public accounting firm is required to undertake an assessment of our internal control over financial reporting, the cost of our compliance with Section 404 will correspondingly increase. Our compliance with applicable provisions of Section 404 will require that we incur substantial accounting expense and expend significant management time on compliance-related issues as we implement additional corporate governance practices and comply with reporting requirements. Moreover, if we are not able to comply with the requirements of Section 404 applicable to us in a timely manner, or if we or our independent registered public accounting firm identifies deficiencies in our internal control over financial reporting that are deemed to be material weaknesses, the market price of our stock could decline and we could be subject to sanctions or investigations by the SEC or other regulatory authorities, which would require additional financial and management resources. Investor perceptions of our company may suffer if material weaknesses are found, and this could cause a decline in the market price of our common stock. Irrespective of compliance with Section 404, any failure of our internal control over financial reporting could harm our operating results and reputation. If we are unable to implement these requirements effectively or efficiently, it could harm our operations, financial reporting, or financial results and could result in an adverse opinion on our internal controls from our independent registered public accounting firm. The public announcement of data from clinical trials or news of any developments related to our product pipeline may cause significant volatility in our stock price. The announcement of data from clinical trials by us or our collaborative partners or news of any developments related to our key pipeline product candidates has in the past caused and may in the future cause significant volatility in our stock price. Furthermore, the announcement of any negative or unexpected data or the discontinuation of development of any of our key pipeline product candidates, or any delay in our anticipated timelines for filing for regulatory approval, could cause our stock price to decline significantly. There can be no assurance that data from clinical trials will support a filing for regulatory approval or even if approved, that any of our key pipeline products will become commercially successful. Our common stock is currently listed on the Nasdaq Capital Market LLC (Nasdaq). Nasdaq has minimum requirements that a company must meet in order to remain listed on Nasdaq, including corporate governance standards and a requirement that we maintain a minimum closing bid price of \$ 1,00 per share. On April 1 September 13, 2022-2023, the Company received a letter from Nasdaq indicating notifying the Company that it was not in compliance with, for the last 30 consecutive business days, the bid price of the Company's common stock had closed below \$ 1,00 per share, the minimum closing bid price required by the continued listing requirements of Nasdaq Listing Rule 5550 (b a) (2) (the" Bid Price Requirement"). Nasdaq' s letter has no immediate impact on the listing of the Company' s common stock, which will continue to be listed and traded on Nasdaq subject to the Company's compliance with the other continued listing requirements. Nasdaq's letter provides the Company 180 calendar days, or until March 11, 2024 (the" Compliance Date"), to regain compliance with the Bid Price Requirement. To regain compliance with the Bid Price Requirement, the closing bid price of the Company's common stock must be at least \$ 1,00 per share for a minimum of ten consecutive business days before the Compliance Date. The Company may be eligible for an additional 180- day period to regain compliance if the Company meets all other listing standards of Nasdaq, with the exception of the bid price requirement, and provides written notice to Nasdaq of its intention to cure the deficiency during the second compliance period, by effecting a reverse stock split, if necessary. In the event the Company fails to regain compliance, the Company would have the right to a hearing before the Nasdaq Listing Qualifications Panel (the" Panel"). There can be no assurance that, which requires companies if the Company receives a delisting notice and appeals the delisting determination by the Panel, such appeal would be successful. The Company intends to take reasonable measures to regain compliance under the Nasdaq Listing Rules and remain listed on Nasdaq to maintain a minimum of \$2, including by effecting 500, 000 in stockholders' equity for continued listing. On its annual report for the year ended December 31, 2021, the Company reported stockholders' equity of \$1, 216, 000, and, as a reverse stock split result, did not satisfy Listing Rule 5550 (b) (1). In the second quarter of 2022, the Company regained compliance with the Nasdaq Listing Rule. In the future, if we fail to maintain such minimum requirements and a final determination is made by Nasdaq that our common stock must be delisted, the liquidity of our common stock would be adversely affected and the market price of our common stock could decrease. In addition, if delisted, we would no longer be subject to Nasdaq rules, including rules requiring us to have a certain number of independent directors and to meet other corporate governance standards. Our failure to be listed on Nasdaq or another established securities market would have a material adverse effect on the value of your investment in us. If our common stock is not listed on Nasdaq or another national exchange, the trading price of our common stock is below \$ 5.00 per share and we have net tangible assets of \$ 6,000,000 or less, the open-market trading of our common stock will be subject to the "penny stock" rules promulgated under the Securities Exchange Act of 1934, as amended. If our shares become subject to the "penny stock" rules, broker-dealers may find it difficult to effectuate customer transactions and trading activity in our securities may be adversely affected. Your percentage of ownership in Aptevo may be diluted in the future. In the future, your percentage ownership in Aptevo may be diluted because of equity issuances or securities convertible into equity for acquisitions, capital market transactions or otherwise, including, but not limited to, equity issuances under our existing Purchase Agreement with Lincoln Park, under our Equity Distribution Agreement with Piper Sandler, under our Rights Plan with Broadridge Corporate Issuer Solutions, Inc., upon the exercise of warrants issued in connection with our March 2019 and August 2023 public offering offerings and November 2023 Warrant Inducement **Agreement**, and equity awards to our directors, officers and employees. Our employees have options to purchase shares of our common stock and from time to time, we expect to issue additional options, restricted stock units, or other stock-based awards

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to our employees under our employee benefits plans. In addition, our restated certificate of incorporation authorizes us to issue,
without the approval of our stockholders, one or more classes or series of preferred stock having such designation, powers,
preferences and relative, participating, optional and other special rights, including preferences over our common stock
respecting dividends and distributions, as our board of directors generally may determine. The terms of one or more classes or
series of preferred stock could dilute the voting power or reduce the value of our common stock. For example, we could grant
the holders of preferred stock the right to elect some number of our directors in all events or on the happening of specified
events or the right to veto specified transactions. Similarly, the repurchase or redemption rights or liquidation preferences we
could assign to holders of preferred stock could affect the residual value of the common stock. Provisions under Delaware law
and in our restated certificate of incorporation, amended and restated by- laws and rights agreement may discourage acquisition
proposals, delay a change in control or prevent transactions that stockholders may consider favorable. Certain provisions in our
restated certificate of incorporation and amended and restated by- laws, and under Delaware law, may discourage, delay, or
prevent a merger, acquisition or other changes in control that stockholders may consider favorable, including transactions in
which stockholders might otherwise receive a premium for their shares. These provisions may also prevent or frustrate attempts
by our stockholders to replace or remove our incumbent directors and management. These provisions include: • the
classification of our directors; • limitations on the removal of directors; • limitations on filling vacancies on the board; • advance
notice requirements for stockholder nominations of candidates for election to the Board of Directors and other proposals; • the
inability of stockholders to act by written consent; • the inability of stockholders to call special meetings; and, • the ability of our
Board of Directors to designate the terms of and issue a new series of preferred stock without stockholder approval. The
affirmative vote of holders of our capital stock representing at least 75 % of the voting power of all outstanding stock entitled to
vote is required to amend or repeal the above provisions of our certificate of incorporation. The affirmative vote of either a
majority of the directors present at a meeting of our Board of Directors or holders of our capital stock representing at least 75 %
of the voting power of all outstanding stock entitled to vote is required to amend or repeal our by- laws. In addition, Section 203
of the General Corporation Law of Delaware prohibits a corporation from engaging in a business combination with an interested
stockholder, generally a person which, together with its affiliates, owns or within the last three years has owned 15 % or more of
the corporation's voting stock, for a period of three years after the date of the transaction in which the person became an
interested stockholder, unless the business combination is approved in a prescribed manner. Accordingly, Section 203 may
discourage, delay or prevent a change in control of us. Tang is an interested stockholder for purposes of Section 203. Moreover,
we currently have a short- term stockholder <del>rights-Rights Agreement in effect. On November 2, 2023, we entered into</del></del>
Amendment No. 3 to the Rights Agreement and extended the expiration of such agreement to in effect. This rights
agreement was amended on November 4, 2021 2024 to extend the expiration date of such agreement from November 8, 2021 to
November 5, 2022 and further amended on November 4, 2022 to extend the expiration of such agreement to November 4, 2023
. This <del>rights <mark>Rights agreement Agreement c</del>ould render more difficult, or discourage a merger, tender offer, or assumption of</del></mark>
control of the Company that is not approved by our Board that some stockholders may consider favorable. The rights Rights
agreement Agreement, however, should not interfere with any merger, tender or exchange offer or other business combination
approved by our Board. Nor does the rights agreement prevent our Board from considering any offer that it considers to be in
the best interest of our stockholders. Our by- laws include a forum selection clause, which may impact your ability to bring
actions against us. Subject to certain limitations, our bylaws provide that, unless we consent in writing to the selection of an
alternative forum, the Court of Chancery in the State of Delaware will be the sole and exclusive forum for any stockholder
(including a beneficial owner) to bring; (a) any derivative action or proceeding brought on our behalf; (b) any action asserting a
claim of breach of fiduciary duty owed by any of our directors, officers or other employees or our stockholders; (c) any action
asserting a claim arising pursuant to any provision of the DGCL or our certificate of incorporation or by-laws; or (d) any action
asserting a claim governed by the internal affairs doctrine. In addition, our bylaws provide that unless we consent in writing to
the selection of an alternative forum, the federal district courts of the United States will be the exclusive forum for resolving any
complaint asserting a cause of action arising under the federal securities laws of the United States against us, our officers,
directors, employees or underwriters. These limitations on the forum in which stockholders may initiate action against us could
create costs, inconvenience or otherwise adversely affect your ability to seek legal redress. Section 22 of the Securities Act
creates concurrent jurisdiction for federal and state courts over all suits brought to enforce any duty or liability created by the
Securities Act or the rules and regulations thereunder. As a result, a court may decline to enforce these exclusive forum
provisions with respect to suits brought to enforce any duty or liability created by the Securities Act or any other claim for which
the federal and state courts have concurrent jurisdiction, and our stockholders may not be deemed to have waived our
compliance with the federal securities laws and the rules and regulations thereunder. If a court were to find the exclusive forum
provisions to be inapplicable or unenforceable in an action, we may incur additional costs associated with resolving such action
in other jurisdictions. From time to time, we may be called upon to defend ourselves against lawsuits relating to our business.
Any litigation, regardless of its merits, could result in substantial costs and a diversion of management's attention and resources
that are needed to successfully run our business. Due to the inherent uncertainties of litigation, we cannot accurately predict the
ultimate outcome of any such proceedings. An unfavorable outcome in any such proceedings could have an adverse impact on
our business, financial condition and results of operations. If our stock price is volatile, we may become involved in securities
class action lawsuits in the future. Our failure to comply with data protection..... may also negatively impact our reputation. A
significant portion of our shares may be sold into the market at any time which could depress our stock price. If our stockholders
sell a substantial number of shares of our common stock in the public market, our market price could decline. In connection with
the transaction with Lincoln Park, we registered under the Securities Act of 1933, as amended, the resale of shares of common
stock that have been and may be issued under the Purchase Agreement with Lincoln Park. Any such sales or perception that
such sales may occur, whether under the Lincoln Park Purchase Agreement or otherwise, could decrease the market price of our
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