Legend: New Text Removed Text Unchanged Text Moved Text Section

Because of the following factors, as well as other factors affecting the Company 21's financial condition and operating results, past financial performance should not be considered to be a reliable indicator of future performance, and investors should not use historical trends to anticipate results or trends in future periods. Summary of our Risk Factors We face numerous risks that could materially affect our business, results of operations or financial condition. The most significant of these risks include the following: - The global supply chain is an issue for many companies in the global business environment, including as well as it is for Alpine 4. These constraints affected the company in 2021-2022 and may affect our ability to deliver our products on time in 2022-2023. – Alpine 4 is an ""emerging growth company, "" and the reduced disclosure requirements applicable to "" emerging growth companies "" could make our Class A common stock less attractive to investors. – Growth and development of operations will depend on the acceptance of Alpine 4 2 s proposed businesses. If Alpine 4 2 s products are not deemed desirable and suitable for purchase and it cannot establish a customer base, it may not be able to generate future revenues, which would result in a failure of the business and a loss of the value of your investment. – If demand for the products Alpine 4 plans to offer slows, then its business would be materially affected, which could result in the loss of your entire investment. - Our revenue growth rate depends primarily on our ability to satisfy relevant channels and end- customer demands, identify suppliers of our necessary ingredients and to coordinate those suppliers, all subject to many unpredictable factors. - If securities or industry analysts do not publish or cease publishing research or reports or publish misleading, inaccurate or unfavorable research about us, our business or our market, our stock price and trading volume could decline. - Alpine 4 stockholders may have difficulty in reselling their shares due to the limited public market or state Blue Sky laws. – The ongoing COVID-19 pandemic has caused severe disruptions in the U. S. and global economies, which has impacted the business, activities, and operations of our customers, as well as our business and operations. Additionally, through 2021-2022, the U. S. and other economies have been impacted by supply chain disruptions, labor shortages and high inflation, all of which may have a negative impact on our business and operations. - Our existing debt levels may adversely affect our financial condition or operational flexibility and prevent us from fulfilling our obligations under our outstanding indebtedness. - Growth and development of operations will depend on the growth in our acquisition model and from organic growth from our subsidiaries' businesses. If we cannot find desirable acquisition candidates, we may not be able to generate growth with future revenues. - We face risks related to COVID-19 which have significantly disrupted our manufacturing, research and development, operations, sales and financial results, and could continue to do so for the foreseeable future. – Should we fail to comply restore compliance with the minimum listing standards applicable to issuers listed on The Nasdaq Capital Market, our common stock may be delisted from The Nasdaq Capital Market. 13Risks -- Risks Associated with Our Business and Operations We are an ""emerging growth company, "" and the reduced disclosure requirements applicable to "" emerging growth companies "" could make our common stock less attractive to investors. We are is an "" emerging growth company, " as defined in the JOBS Act. For as long as we are an emerging growth company, we may take advantage of certain exemptions from various reporting requirements that are applicable to other public companies that are not emerging growth companies, including, but not limited to, not being required to comply with the auditor attestation requirements of Section 404 (b) of the Sarbanes-Oxley Act, reduced disclosure obligations regarding executive compensation in our periodic reports and proxy statements and exemptions from the requirements of holding advisory "-" say- on- pay "-" votes on executive compensation and shareholder advisory votes on golden parachute compensation. We will remain an ""emerging growth company ""until the earliest of (i) the last day of the fiscal year during which we have total annual gross revenues of \$ 1 billion or more; (ii) the last date of the fiscal year following the fifth anniversary of the date of the first sale of common stock under the Company 2.1 s first filed registration statement; (iii) the date on which we have, during the previous three-year period, issued more than \$1 billion in non-convertible debt; and (iv) the date on which we are deemed to be a "" large accelerated filer "" under the Exchange Act. We will be deemed a large accelerated filer on the first day of the fiscal year after the market value of our common equity held by non- affiliates exceeds \$ 700 million, measured on October 31. We cannot predict if investors will find our common stock less attractive to the extent we rely on the exemptions available to emerging growth companies. If some investors find our common stock less attractive as a result, there may be a less active trading market for our common stock and our stock price may be more volatile. In addition, Section 107 of the JOBS Act also provides that an emerging growth company can take advantage of the extended transition period provided in Section 7 (a) (2) (B) of the Securities Act for complying with new or revised accounting standards. An emerging growth company can therefore delay the adoption of certain accounting standards until those standards would otherwise apply to private companies. A Company that elects to be treated as an emerging growth company shall continue to be deemed an emerging growth company until the earliest of (i) the last day of the fiscal year during which it had total annual gross revenues of \$1,070, 000, 000 (as indexed for inflation), (ii) the last day of the fiscal year following the fifth anniversary of the date of the first sale of common stock under the Company's first filed registration statement; (iii) the date on which it has, during the previous 3year period, issued more than \$ 1,000,000,000 in non-convertible debt; or (iv) the date on which is deemed to be a 'large accelerated filer' as defined by the SEC, which would generally occur upon it attaining a public float of at least \$ 700 million. However, we are choosing to "" opt out "" of such extended transition period, and as a result, we will comply with new or revised accounting standards on the relevant dates on which adoption of such standards is required for non-emerging growth companies. Section 107 of the JOBS Act provides that our decision to opt out of the extended transition period for complying with new or revised accounting standards is irrevocable. Significant time and management resources are required to ensure

compliance with public company reporting and other obligations. Taking steps to comply with these requirements will increase our costs and require additional management resources, and does not ensure that we will be able to satisfy them. We are a publicly reporting company. As a public company, we are required to comply with applicable provisions of the Sarbanes-Oxley Act of 2002, as well as other federal securities laws, and rules and regulations promulgated by the SEC and the various exchanges and trading facilities where our Class A common stock may trade, which result in significant legal, accounting, administrative and other costs and expenses. These rules and requirements impose certain corporate governance requirements relating to director independence, distributing annual and interim reports, stockholder meetings, approvals and voting, soliciting proxies, conflicts of interest, and codes of conduct, depending on where our shares trade. Our management and other personnel will need to devote a substantial amount of time to ensure that we comply with all applicable requirements. 14As-As we review our internal controls and procedures, we may determine that they are ineffective or have material weaknesses, which could impact the market ''s acceptance of our filings and financial statements. In connection with the preparation of this Annual Report, we conducted a review of our internal control over financial reporting for the purpose of providing the management report required by these rules. During the course of our review and testing, we have identified deficiencies and have been unable to remediate them before we were required to provide the required reports. Furthermore, because we have material weaknesses in our internal control over financial reporting, we may not detect errors on a timely basis and our financial statements may be materially misstated. Even if we are able to remediate the material weaknesses, we may not be able to conclude on an ongoing basis that we have effective internal controls over financial reporting, which could harm our operating results, cause investors to lose confidence in our reported financial information and cause the trading price of our stock to fall. In addition, as a public company we are required to file in a timely manner accurate quarterly and annual reports with the SEC under the Securities Exchange Act of 1934 (the ""Exchange Act ""), as amended. Any failure to report our financial results on an accurate and timely basis could result in sanctions, lawsuits, delisting of our shares from the market or trading facility where our shares may trade, or other adverse consequences that would materially harm our business. Our compliance with the Sarbanes-Oxley Act and SEC rules concerning internal controls may be time consuming, difficult and costly. Alpine 4.1 s executive officers have limited experience being officers of a public company. It may be time consuming, difficult and costly for us to continue to develop, implement, and update the internal controls and reporting procedures required by Sarbanes-Oxley. We may need to hire additional financial reporting, internal controls and other finance staff in order to develop and implement appropriate internal controls and reporting procedures. If we are unable to comply with Sarbanes-Oxley 2 sinternal controls requirements, we may not be able to obtain the independent accountant certifications that Sarbanes-Oxley Act requires publicly traded companies to obtain. Alpine 4 is a growth-based company and has shown a net loss since inception. Ownership of Alpine 4 shares is highly risky and could result in a complete loss of the value of your investment if we are unsuccessful in its business plans. As the Alpine 4's "Driver" classified subsidiaries mature from a start- up phase to an operating phase, the Company expects to stop incurring operating losses at some point in the future. However, new additional subsidiaries may incur significant expenses associated with the growth of those businesses. Further, there is no guarantee that the Company will be successful in realizing future revenues or in achieving or sustaining positive cash flow at any time in the future. Any such failure could result in the possible closure of one of its subsidiaries or force Alpine 4 to seek additional capital through loans or additional sales of its equity securities to continue business operations which would dilute the value of any shares you purchase in connection with this offering. Growth and development of operations will depend on the growth in the Alpine 4 acquisition model and from organic growth from its subsidiaries' businesses. If we cannot find desirable acquisition candidates, it may not be able to generate growth with future revenues. We expect to continue our strategy of acquiring businesses, which management believes will result in significant growth in projected annualized revenue by the end of 2022-2023. However, there is no guarantee that we will be successful in realizing future revenue growth from its acquisition model. As such, we are highly dependent on suitable candidates to acquire, which supply of such candidates cannot be guaranteed and is driven from the market for M & A. If we are unable to locate or identify suitable acquisition candidates, or to enter into transactions with such candidates, or if we are unable to integrate the acquired businesses, we may not be able to grow our revenues to the extent anticipated, or at all. 15We We may make acquisitions which could divert the attention of management and which may not be integrated successfully into our existing business. We may pursue acquisitions to increase our market penetration, enter new geographic markets and expand the scope of services we provide. We cannot guarantee that we will identify suitable acquisition candidates, that acquisitions will be completed on acceptable terms or that we will be able to integrate successfully the operations of any acquired business into our existing business. The acquisitions could be of significant size and involve operations in multiple jurisdictions. The acquisition and integration of another business would divert management attention from other business activities. This diversion, together with other difficulties we may incur in integrating an acquired business, could have a material adverse effect on our business, financial condition and results of operations. In addition, we may borrow money or issue capital stock to finance acquisitions. Such borrowings might not be available on terms as favorable to us as our current borrowing terms and may increase our leverage, and the issuance of capital stock could dilute the interests of our stockholders. As we acquire companies or technologies in the future, they could prove difficult to integrate, disrupt our business, dilute stockholder value and adversely affect our operating results and the value of your investment. As part of our business strategy, we regularly evaluate investments in, or acquisitions of, complementary businesses, joint ventures, services and technologies, and we expect that periodically we will continue to make such investments and acquisitions in the future. Acquisitions and investments involve numerous risks, including: - the potential failure to achieve the expected benefits of the combination or acquisition; - difficulties in and the cost of integrating operations, technologies, services and personnel; - diversion of financial and managerial resources from existing operations; - risk of entering new markets in which we have little or no experience; potential write- offs of acquired assets or investments; - potential loss of key employees; - inability to generate sufficient revenue to offset acquisition or investment costs; - the inability to maintain relationships with customers and partners of the

acquired business; - the difficulty of incorporating acquired technology and rights into our products and services and of maintaining quality standards consistent with our established brand; - potential unknown liabilities associated with the acquired businesses; - unanticipated expenses related to acquired technology and its integration into existing technology; - negative impact to our results of operations because of the depreciation and amortization of amounts related to acquired intangible assets, fixed assets and deferred compensation, and the loss of acquired deferred revenue; – the need to implement controls, procedures and policies appropriate for a public company at companies that prior to the acquisition lacked such controls, procedures and policies; and – challenges caused by distance, language and cultural differences. In addition, if we finance acquisitions by issuing additional convertible debt or equity securities, our existing stockholders may be diluted which could affect the market price of our stock. Further, if we fail to properly evaluate and execute acquisitions or investments, our business and prospects may be seriously harmed, and the value of your investment may decline. 16Alpine -- Alpine 4 has limited management resources and will be dependent on key executives. The loss of the services of the current officers and directors could severely impact Alpine 4's business operations and future development, which could result in a loss of revenues and adversely impact the business. Alpine 4 is relying on a small number of key individuals, which the Company has increased during 2021 2022, to implement its business and operations and, in particular, the professional expertise and services of Kent B. Wilson, our President, Chief Executive Officer, and Secretary, Jeff Hail, our Chief Operating Officer, Larry Zic, our Chief Financial Officer, and SaVonnah Osmanski, our VP / Vice President, Corporate Controller. Mr. Wilson serves full time in his capacities with Alpine 4 to work to develop and grow the Company. Nevertheless, Alpine 4 may not have sufficient managerial resources to successfully manage the increased business activity envisioned by its business strategy. In addition, Alpine 4 21 s future success depends in large part on the continued service of Mr. Wilson and the executive team. If Mr. Wilson or any member of the executive team chooses not to serve as an officer or if Mr. Wilson or any member of the executive team is unable to perform his or her duties, this could have an adverse effect on Company business operations, financial condition and operating results, especially if we are unable to replace Mr. Wilson or Mr. Hail with other individuals qualified to develop and market our business. The loss of their services could result in a loss of revenues, which could result in a reduction of the value of any ownership of Alpine 4. Competition that we face is varied and strong. Our subsidiaries' products and industries as a whole are subject to competition. There is no guarantee that we can sustain our market position or expand our business. We compete with a number of entities in providing products to our customers. Such competitor entities include a variety of large nationwide corporations, including but not limited to public entities and companies that have established loyal customer bases over several decades. Many of our current and potential competitors are well established and have significantly greater financial and operational resources, and name recognition than we have. As a result, these competitors may have greater credibility with both existing and potential customers. They also may be able to offer more competitive products and services and more aggressively promote and sell their products. Our competitors may also be able to support more aggressive pricing than we will be able to, which could adversely affect sales, cause us to decrease our prices to remain competitive, or otherwise reduce the overall gross profit earned on our products. Our success in business and operations will depend on general economic conditions. The success of Alpine 4 and its subsidiaries depends, to a large extent, on certain economic factors that are beyond its control. Factors such as general economic conditions, levels of unemployment, interest rates, tax rates at all levels of government, competition and other factors beyond Alpine 4 - s control may have an adverse effect on the ability of our subsidiaries to sell its products, to operate, and to collect sums due and owing to them . Changes in general economic conditions, geopolitical conditions, domestic and foreign trade policies, monetary policies and other factors beyond our control may adversely impact our business and operating results. Our operations and performance may depend on global, regional, economic and geopolitical conditions. Russia' s invasion and military attacks on Ukraine have triggered significant sanctions from North American and European leaders. These events are currently escalating and creating increasingly volatile global economic conditions. Resulting changes in North American trade policy could trigger retaliatory actions by Russia, its allies and other affected countries, including China, resulting in a "trade war." A trade war could result in increased costs for raw materials that we use in our manufacturing and could otherwise limit our ability to sell our products abroad. These increased costs would have a negative effect on our financial condition and profitability. Furthermore, the military conflict between Russia and Ukraine may increase the likelihood of supply interruptions and further hinder our ability to find the materials we need to make our products. If the conflict between Russia and Ukraine continues for a long period of time, or if other countries become further involved in the conflict, we could face significant adverse effects to our business and financial condition. Alpine 4 may not be able to successfully implement its business strategy, which could adversely affect its business, financial condition, results of operations and cash flows. If Alpine 4 cannot successfully implement its business strategy, it could result in the loss of the value of your investment. Successful implementation of our business strategy depends on our being able to acquire additional businesses and grow our existing subsidiaries, as well as on factors specific to the industries in which our subsidiaries operate, and the state of the financial industry and numerous other factors that may be beyond our control. Adverse changes in the following factors could undermine our business strategy and have a material adverse effect on our business, our financial condition, and results of operations and cash flow: - The competitive environment in the industries in which our subsidiaries operate that may force us to reduce prices below the optimal pricing level or increase promotional spending; - Our ability to anticipate changes in consumer preferences and to meet customers 21 needs for our products in a timely cost- effective manner; and - Our ability to establish, maintain and eventually grow market share in these competitive environments. 17We We may not be able to identify and maintain the necessary relationships with suppliers of product and services as planned. Delays or failures in deliveries could materially and adversely affect our growth strategy and expected results. As we supply more customers, our rate of expansion relative to the size of such customer base will decline. In addition, one of our biggest challenges is securing an adequate supply of suitable product. Competition for product is intense, and commodities costs subject to price volatility. Our ability to execute our business plan

```
also depends on other factors, including: - ability to keep satisfied vendor relationships -; hiring and training qualified
personnel in local markets; — managing marketing and development costs at affordable levels; — cost and availability of labor;
-• the availability of, and our ability to obtain, adequate supplies of ingredients that meet our quality standards; and -• securing
required governmental approvals in a timely manner when necessary. Our financial condition and results of operations for fiscal
2022-2023 may continue to be adversely affected by the COVID- 19 pandemic. The impact of the worldwide COVID- 19
pandemic has been and will likely continue to be extensive in many geographies and aspects of society. The pandemic has
resulted in and will likely continue to result in disruptions to the global economy, as well as businesses, supply chains and
capital markets around the world. Impacts to our business have included temporary closures of many of our government and
university customers and our suppliers, disruptions or restrictions on our employees' and customers' ability to travel, and delays
in product installations or shipments to and from affected countries. In an effort to halt the outbreak of COVID-19, a number of
countries, including the United States, implemented and some continue to implement significant restrictions on travel, shelter in
place or stay at home orders, and business closures. While some of these restrictions were loosened in certain jurisdictions, some
markets have returned to restrictions in the face of increases in new COVID-19 cases, particularly as more contagious strains of
the virus emerge. Many of our employees in jurisdictions in which we have significant operations continue to work remotely.
Much of the commercial activity in sales and marketing, and customer demonstrations and applications training, is still either
being conducted remotely or postponed. Even where customers have re-opened their sites, some still operate at productivity
levels that are below pre- pandemic levels in an effort to accommodate safety protocols and as a result of pandemic-related
supply chain disruptions. Any resurgence of the virus or the emergence of new strains of the virus, particularly any new strains
which are more easily transmitted or which are resistant to existing vaccines, may require us or our customers to close or
partially close operations once again. These travel restrictions, business closures and operating reductions at Alpine 4, our
customers, our distributors, and / or our suppliers have in the past adversely impacted and may continue to adversely impact our
operations, including our ability to manufacture, sell or distribute our products, as well as cause temporary closures of our
distributors, or the facilities of suppliers or customers. Further, global supply chains continue to be disrupted, causing shortages,
which has impacted our ability to manufacture and supply our products. We could also experience increased compensation
expenses associated with employee recruiting and employee retention to the extent employment opportunities continue to
multiply post- pandemic, causing the search for and retention of talent to become more competitive. This disruption of our
employees, distributors, suppliers and customers has historically impacted and may continue to impact our global sales and
future operating results. 18We We are continuing to monitor and assess the ongoing effects of the COVID- 19 pandemic on our
commercial operations in 2022-2023 and going forward. However, we cannot at this time accurately predict what effects these
conditions will ultimately have on our operations due to uncertainties relating to the severity of the disease, including the impact
of any resurgence of the virus, the continued emergence of new strains of the virus, the effectiveness and availability of
vaccines, the willingness of individuals to receive vaccines, (including to protect against any new strains of the virus), and the
length or severity of travel restrictions, business closures, and other safety and precautionary measures imposed by the
governments of impacted countries. The pandemic has also adversely affected the economies and financial markets of many
countries, which has affected and may continue to affect demand for our products and our operating results. In addition, there is
a risk that one or more of our current service providers, manufacturers and other partners may not survive such difficult
economic times, which could directly affect our ability to attain our operating goals on schedule and on budget. Any of the
foregoing could harm our business and we cannot anticipate all of the ways in which the current economic climate and financial
market conditions could adversely impact our business. Furthermore, our stock price may decline due in part to the volatility of
the stock market and any general economic downturn. The preparation of the consolidated financial statements requires us to
make estimates, judgments and assumptions that may affect the reported amounts of assets, liabilities, equity, revenues and
expenses and related disclosure of contingent assets and liabilities. We evaluate estimates, judgments and methodologies on an
ongoing basis. Changes in estimates are recorded in the period in which they become known. We base estimates on historical
experience and on various other assumptions that we believe are reasonable, the results of which form the basis for making
judgments about the carrying values of assets, liabilities and equity and the amount of revenues and expenses. The full extent to
which the COVID- 19 pandemic will directly or indirectly impact future business, results of operations and financial condition,
including sales, expenses, reserves and allowances, manufacturing, research and development costs and employee-related
amounts, will depend on future developments that are highly uncertain, including as a result of new information that may
emerge concerning COVID- 19, the continued emergence of new strains of the virus, the effectiveness and availability of
vaccines, the willingness of individuals to receive vaccines (including to protect against any new strains of the virus), and the
actions taken to contain or treat the virus, as well as the economic impact on local, regional, national and international customers
and markets. We have made estimates of the impact of COVID-19 within the consolidated financial statements and there may
be changes to those estimates in future periods. Actual results may differ from management's estimates if these results differ
from historical experience. As of December 31, <del>2021-<mark>2022</del> ,</del> we had total debt of approximately $ <del>61-</del>22 million. This level of</del></mark>
debt or any increase in our debt level could have adverse consequences for our business, financial condition, operating results
and operational flexibility, including the following: (i) the debt level may cause us to have difficulty borrowing money in the
future for working capital, capital expenditures, acquisitions or other purposes; (ii) our debt level may limit operational
flexibility and our ability to pursue business opportunities and implement certain business strategies; and (iii) we have a higher
level of debt than some of our competitors or potential competitors, which may cause a competitive disadvantage and may
reduce flexibility in responding to changing business and economic conditions, including increased competition and
vulnerability to general adverse economic and industry conditions. Additionally, there are two lines of credit set to mature in
2023 that have used approximately $ 7.5 million of the $ 8 million total capacity, and will be due unless there is an
```

extension and / or amendment to the current agreements. If we fail to satisfy our obligations under our outstanding debt, an

event of default could result that could cause some or all of our debt to become due and payable . We are an early stage company with a history of losses and there is substantial doubt as to our going concern. We have incurred net loss of \$ 12. 8 million and \$ 19. 5 million for the years ended December 31, 2022 and 2021, respectively, and have an accumulated deficit of approximately \$ 71, 7 million. We believe that we will continue to incur operating and net losses each quarter until at least the time we begin to generate significant revenue and margin improvements from our subsidiaries, which may not happen. We have determined under our ASC 205-40 analysis, there is substantial doubt that we will have sufficient funds to satisfy our obligations through the next twelve months from the date of issuance of this Annual Report on Form 10- K. Our ability to continue as a going concern is dependent on our ability to obtain the necessary financing and margin improvements to meet our obligations and repay our liabilities arising from the ordinary course of business operations when they become due. The outcome of these matters cannot be predicted with any certainty at this time. If we are unable to raise sufficient capital when needed, our business, financial condition and results of operations will be materially and adversely affected, and we will need to significantly modify or terminate our operations and our planned business activities. We face risks and uncertainties related to litigation. We are subject to, and are and may in the future become a party to, a variety of litigation, other claims, suits. The results of litigation and other legal proceedings, including the other claims described under Legal Proceedings in Note 11, Commitments and Contingencies, to the consolidated financial statements included elsewhere in this Annual Report on Form 10- K and incorporated by reference herein, are inherently uncertain and adverse judgments or settlements in some or all of these legal disputes may result in materially adverse monetary damages or injunctive relief against us. The litigation and other legal proceedings described under Note 11 are subject to future developments and management's view of these matters may change in the future. Cybersecurity risks and cyber incidents, including cyber- attacks, could adversely affect our business by causing a disruption to our operations, a compromise or corruption of our confidential information and confidential information in our possession and damage to our business relationships, any of which could negatively impact our business, financial condition and operating results. There has been an increase in the frequency and sophistication of the cyber and security threats we face, with attacks ranging from those common to businesses generally to those that are more advanced and persistent, which may target us due to our substantial reliance on information technology or otherwise. Cyber- attacks and other security threats could originate from a wide variety of sources, including cyber criminals, nation state hackers, hacktivists and other outside parties. As a result of the generally increasing frequency and sophistication of cyber- attacks, and our substantial reliance on technology, we may face a heightened risk of a security breach or disruption with respect to sensitive information resulting from an attack by computer hackers, foreign governments or cyber terrorists. 19The operation of our business is dependent on computer hardware and software systems, as well as data processing systems and the secure processing, storage and transmission of information, which are vulnerable to security breaches and cyber incidents. A cyber incident is considered to be any adverse event that threatens the confidentiality, integrity or availability of our information resources. These incidents may be an intentional attack or an unintentional event and could involve gaining unauthorized access to our information systems for purposes of misappropriating assets, stealing confidential information, corrupting data or causing operational disruption. In addition, we and our employees may be the target of fraudulent emails or other targeted attempts to gain unauthorized access to proprietary or other sensitive information. The result of these incidents may include disrupted operations, misstated or unreliable financial data, fraudulent transfers or requests for transfers of money, liability for stolen information, increased cybersecurity protection and insurance costs, litigation and damage to our business relationships, causing our business and results of operations to suffer. Our reliance on information technology is substantial, and accordingly the risks posed to our information systems, both internal and those provided by third-party service providers are critical. We have implemented processes, procedures and internal controls designed to mitigate cybersecurity risks and cyber intrusions and rely on industry accepted security measures and technology to securely maintain confidential and proprietary information maintained on our information systems; however, these measures, as well as our increased awareness of the nature and extent of a risk of a cyberincident, do not guarantee that a cyber-incident will not occur and / or that our financial results, operations or confidential information will not be negatively impacted by such an incident, especially because the cyber- incident techniques change frequently or are not recognized until launched and because cyber- incidents can originate from a wide variety of sources. Those risks are exacerbated by the rapidly increasing volume of highly sensitive data, including our and our customers' proprietary business information and intellectual property, and personally identifiable information of our employees and customers, that we collect and store in our data centers and on our networks. The secure processing, maintenance and transmission of this information are critical to our operations. A significant actual or potential theft, loss, corruption, exposure, fraudulent use or misuse of employee, customer or other personally identifiable or our or our customers' proprietary business data, whether by third parties or as a result of employee malfeasance (or the negligence or malfeasance of third party service providers that have access to such confidential information) or otherwise, non-compliance with our contractual or other legal obligations regarding such data or intellectual property or a violation of our privacy and security policies with respect to such data could result in significant remediation and other costs, fines, litigation or regulatory actions against us and significant reputational harm. Failure to maintain the security of our information and technology networks or data security breaches could harm our reputation and have a material adverse effect on our results of operations, financial condition and cash flow. We rely on the reasonably secure processing, storage and transmission of confidential and other sensitive information in our computer systems and networks, and those of our service providers and their vendors. We are subject to various risks and costs associated with the collection, handling, storage and transmission of personally identifiable information and other sensitive information, including those related to compliance with U. S. and foreign data collection and privacy laws and other contractual obligations, as well as those associated with the compromise of our systems processing such information. In the ordinary course of our business, we collect, store a range of data, including our proprietary business information and intellectual property, and personally identifiable

information of our employees, our fund investors and other third parties, in our cloud applications and on our networks, as well as our services providers' systems. The secure processing, maintenance and transmission of this information are critical to our operations. We, our service providers and their vendors face various security threats on a regular basis, including ongoing cybersecurity threats to and attacks on our and their information technology infrastructure that are intended to gain access to our proprietary information, destroy data or disable, degrade or sabotage our systems. Cyber- incident techniques change frequently, may not immediately be recognized and can originate from a wide variety of sources. There has been an increase in the frequency, sophistication and ingenuity of the data security threats we and our service providers face, with attacks ranging from those common to businesses generally to those that are more advanced and persistent. Although we and our services providers take protective measures and endeavor to modify them as circumstances warrant, our computer systems, software and networks may be vulnerable to unauthorized access, theft, misuse, computer viruses or other malicious code, including malware, and other events that could have a security impact. We may be the target of more advanced and persistent attacks because, as an alternative asset manager, we hold a significant amount of confidential and sensitive information about, among other things, our fund investors, portfolio companies and potential investments. We may also be exposed to a more significant risk if these acts are taken by state actors. Any of the above cybersecurity threats, fraudulent activities or security breaches suffered by our service providers and their vendors could also put our confidential and sensitive information at risk or cause the shutdown of a service provider on which we rely. We and our employees have been and expect to continue to be the target of fraudulent calls and emails, the subject of impersonations and fraudulent requests for money, including attempts to redirect material payment amounts in a transaction to a fraudulent bank account, and other forms of spam attacks, phishing or other social engineering, ransomware or other events. Cyber- criminals may attempt to redirect payments made at the closings of our investments to unauthorized accounts, which we or our services providers we retain, such as paying agents and escrow agents, may be unable to detect or protect against. The COVID- 19 pandemic has exacerbated these risks due to heavier reliance on online communication and the remote working environment, which may be less secure, and there has been a significant increase in hacking attempts by cyber- criminals. The costs related to cyber or other security threats or disruptions may not be fully insured or indemnified by others, including by our service providers. If successful, such attacks and criminal activity could harm our reputation, disrupt our business, cause liability for stolen assets or information and have a material adverse effect on our results of operations, financial condition and cash flow. 20We We rely heavily on our back office informational technology infrastructure, including our data processing systems, communication lines, and networks. Although we have back- up systems and business- continuation plan in place, our back- up procedures and capabilities in the event of a failure or interruption may not be adequate. Any interruption or failure of our informational technology infrastructure could result in our inability to provide services to our clients, other disruptions of our business, corruption or modifications to our data and fraudulent transfers or requests for transfers of money. Further consequences could include liability for stolen assets or information, increased cybersecurity protection and insurance costs and litigation. We expect that we will need to continue to upgrade and expand our back- up and procedures and capabilities in the future to avoid disruption of, or constraints on, our operations. We may incur significant costs to further upgrade our data processing systems and other operating technology in the future. Our technology, data and intellectual property and the technology, data and intellectual property of our funds' portfolio companies are also subject to a heightened risk of theft or compromise to the extent that we and our funds' portfolio companies engage in operations outside the United States, particularly in those jurisdictions that do not have comparable levels of protection of proprietary information and assets, such as intellectual property, trademarks, trade secrets, know-how and customer information and records. In addition, we and our funds' portfolio companies may be required to forgo protections or rights to technology, data and intellectual property in order to operate in or access markets in a foreign jurisdiction. Any such direct or indirect loss of rights in these assets could negatively impact us, our funds and their investments. A significant actual or potential theft, loss, corruption, exposure or fraudulent, unauthorized or accidental use or misuse of investor, employee or other personally identifiable or proprietary business data could occur, as a result of third- party actions, employee malfeasance or otherwise, non- compliance with our contractual or other legal obligations regarding such data or intellectual property or a violation of our privacy and security policies with respect to such data. If such a theft, loss, corruption, use or misuse of data were to occur, it could result in significant remediation and other costs, fines, litigation and regulatory actions against us by (i) the U. S. federal and state governments, (ii) the EU or other jurisdictions, (iii) various regulatory organizations or exchanges and (iv) affected individuals, as well as significant reputational harm. Cybersecurity has become a top priority for regulators around the world. Many jurisdictions in which we operate have laws and regulations relating to data privacy, cybersecurity and protection of personal information and other sensitive information, including, without limitation the General Data Protection Regulation (Regulation (EU) 2016 / 679) (the "GDPR") in the EU and the Data Protection Act 2018 in the U. K. (the "U. K. Data Protection Act"), comprehensive privacy laws enacted in California, Colorado and Virginia, the Hong Kong Personal Data (Privacy) Ordinance, the Korean Personal Information Protection Act and related legislation, regulations and orders and the Australian Privacy Act. China and other countries have also passed cybersecurity laws that may impose data sovereignty restrictions and require the localization of certain information. We believe that additional similar laws will be adopted in these and other jurisdictions in the future, further expanding the regulation of data privacy and cybersecurity. Such laws and regulations strengthen the rights of individuals (data subjects), mandate stricter controls over the processing of personal data by both controllers and processors of personal data and impose stricter sanctions with substantial administrative fines and potential claims for damages from data subjects for breach of their rights, among other requirements. Some jurisdictions, including each of the U.S. states as well as the EU through the GDPR and the U. K. through the U. K. Data Protection Act, have also enacted laws requiring companies to notify individuals of data security breaches involving certain types of personal data, which would require heightened escalation and notification processes with associated response plans. We expect to devote resources to comply with evolving cybersecurity and data privacy regulations and to continually monitor and enhance our information security and data privacy procedures and controls as

necessary. We or our fund's portfolio companies may incur substantial costs to comply with changes in such laws and regulations and may be unable to adapt to such changes in the necessary timeframe and / or at reasonable cost. Furthermore, if we experience a cybersecurity incident and fail to comply with the applicable laws and regulations, it could result in regulatory investigations and penalties, which could lead to negative publicity and may cause our fund investors and clients to lose confidence in the effectiveness of our security and privacy measures. 21The materialization of one or more of these risks could impair the quality of our operations, harm our reputation, negatively impact our businesses and limit our ability to grow. We rely significantly on the use of information technology, as well as those of our third-party service providers. Our failure or the failure of third- party service providers to protect our website, networks, and systems against cybersecurity incidents, or otherwise to protect our confidential information, could damage our reputation and brand and substantially harm our business, financial condition, and results of operations. To the extent that our services are web-based, we collect, process, transmit and store large amounts of data about our customers, employees, vendors and others, including credit card information and personally identifiable information, as well as other confidential and proprietary information. We also employ third-party service providers for a variety of reasons, including storing, processing and transmitting proprietary, personal and confidential information on our behalf. While we rely on tokenization solutions licensed from third parties in an effort to securely transmit confidential and sensitive information, including credit card numbers, advances in computer capabilities, new technological discoveries or other developments may result in the whole or partial failure of this technology to protect this data from being breached or compromised. Similarly, our security measures, and those of our third- party service providers, may not detect or prevent all attempts to hack our systems or those of our third- party service providers. DDoS attacks, viruses, malicious software, break- ins, phishing attacks, social engineering, security breaches or other cybersecurity incidents and similar disruptions that may jeopardize the security of information stored in or transmitted by our website, networks and systems or that we or our third- party service providers otherwise maintain, including payment card systems, may subject us to fines or higher transaction fees or limit or terminate our access to certain payment methods. We and our service providers may not anticipate or prevent all types of attacks until after they have already been launched, and techniques used to obtain unauthorized access to or sabotage systems change frequently and may not be known until launched against us or our third- party service providers, and we may be unable to implement adequate preventative measures. We may also experience security breaches that may remain undetected for an extended period. In addition, cybersecurity incidents can also occur as a result of non-technical issues, including intentional or inadvertent breaches by our employees or by persons with whom we have commercial relationships. Breaches of our security measures or those of our third- party service providers or any cybersecurity incident could result in unauthorized access to our website, networks and systems; unauthorized access to and misappropriation of customer and / or employee information, including personally identifiable information, or other confidential or proprietary information of ourselves or third parties; viruses, worms, spyware or other malware being served from our website, networks or systems; deletion or modification of content or the display of unauthorized content on our website; interruption, disruption or malfunction of operations; costs relating to cybersecurity incident remediation, deployment of additional personnel and protection technologies, response to governmental investigations and media inquiries and coverage; engagement of third party experts and consultants; litigation, regulatory action and other potential liabilities. If any of these cybersecurity incidents occur, or there is a public perception that we, or our third- party service providers, have suffered such a breach, our reputation and brand could also be damaged and we could be required to expend significant capital and other resources to alleviate problems caused by such cybersecurity incidents. As a consequence, our business could be materially and adversely affected and we could also be exposed to litigation and regulatory action and possible liability. In addition, any party who is able to illicitly obtain a customer' s password could access the customer's transaction data or personal information. Any compromise or breach of our security measures, or those of our third-party service providers, could violate applicable privacy, data security and other laws, and cause significant legal and financial exposure, adverse publicity and a loss of confidence in our security measures, which could have an material adverse effect on our business, financial condition, and results of operations. This risk is heightened as governmental authorities throughout the U. S. and around the world devote increasing attention to data privacy and security issues. 22While--While we maintain privacy, data breach and network security liability insurance, we cannot be certain that our coverage will be adequate for liabilities actually incurred or that insurance will continue to be available to us on economically reasonable terms, or at all. Additionally, even though we continue to devote resources to monitor and update our systems and implement information security measures to protect our systems, there can be No-no assurance that any controls and procedures we have in place will be sufficient to protect us from future cybersecurity incidents. Failure by us or our vendors to comply with data security requirements, including (if applicable) the California Consumer Privacy Act's ("CCPA") new "reasonable security" requirement in light of the private right of action, or rectify a security issue may result in class action litigation, fines and the imposition of restrictions on our ability to accept payment cards, which could adversely affect our operations. As cyber threats are continually evolving, our controls and procedures may become inadequate and we may be required to devote additional resources to modify or enhance our systems in the future. As a result, we may face interruptions to our systems, reputational damage, claims under privacy and data protection laws and regulations, customer dissatisfaction, legal liability, enforcement actions or additional costs, any and all of which could adversely affect our business, financial condition, and results of operations. In addition, although we seek to detect and investigate data security incidents, security breaches and other incidents of unauthorized access to our information technology systems and data can be difficult to detect and any delay in identifying such breaches or incidents may lead to increased harm and legal exposure of the type described above. Environmental, social and governance matters may impact our business and reputation. Increasingly, in addition to the importance of their financial performance, companies are being judged by their performance on a variety of environmental, social and governance ("ESG") matters, which are considered to contribute to the long- term sustainability of companies' performance. A variety of organizations measure the performance of companies on ESG topics, and the results of these assessments are widely publicized.

In addition, investment in funds that specialize in companies that perform well in such assessments are increasingly popular, and major institutional investors have publicly emphasized the importance of ESG measures to their investment decisions. Topics taken into account in such assessments include, among others, companies' efforts and impacts on climate change and human rights, ethics and compliance with law, diversity and the role of companies' board of directors in supervising various sustainability issues. ESG goals and values are embedded in our core mission and vision, and we actively take into consideration their expected impact on the sustainability of our business over time and the potential impact of our business on society and the environment, including offsetting or reducing carbon emissions and sound pollution from launches. However, in light of investors' increased focus on ESG matters, there can be no certainty that we will manage such issues successfully, or that we will successfully meet society's expectations as to our proper role. This could lead to risk of litigation or reputational damage relating to our ESG policies or performance. Further, our emphasis on ESG issues may not maximize short-term financial results and may yield financial results that conflict with the market's expectations. We have and may in the future make business decisions that may reduce our short-term financial results if we believe that the decisions are consistent with our ESG goals, which we believe will improve our financial results over the long- term. These decisions may not be consistent with the short- term expectations of our stockholders and may not produce the long- term benefits that we expect, in which case our business, financial condition, and operating results could be harmed. 23Risks -- Risks Related to Our Class A Common Stock We may, in the future, issue additional securities, which would reduce our stockholders '-' percent of ownership and may dilute our share value. Our Certificate of Incorporation, as amended to date, authorizes us to issue 295, 000, 000 shares of Class A common stock, and 10, 000, 000 shares of Class B common stock and 15, 000, 000 Class C stock. As of the date of this Report, we had 162 **180** , 210 <mark>037 , 355-350 shares of Class A common stock outstanding; 8 <mark>7 , 548 <mark>248</mark> , 088 shares of Class B</mark></mark> common stock issued and outstanding; and 12, 500-256, 200-816 shares of Class C common stock issued and outstanding. The future issuance of additional shares of Class A common stock will result in additional dilution in the percentage of our Class A common stock held by our then existing stockholders. We may value any Class A common stock issued in the future on an arbitrary basis including for services or acquisitions or other corporate actions that may have the effect of diluting the value of the shares held by our stockholders, and might have an adverse effect on any trading market for our Class A common stock. Additionally, our board of directors may designate the rights terms and preferences of one or more series of preferred stock at its discretion including conversion and voting preferences without prior notice to our stockholders. Any of these events could have a dilutive effect on the ownership of our shareholders, and the value of shares owned. Raising additional capital or purchasing businesses through the issuance of common stock will cause dilution to our existing stockholders. We may seek additional capital through a combination of private and public equity offerings, debt financings, collaborations, and strategic and licensing arrangements, as well as issuing stock to make additional business or asset acquisitions. To the extent that we raise additional capital through the sale of common stock or securities convertible or exchangeable into common stock or through the issuance of equity for purchases of businesses or assets, your ownership interest in Alpine 4 will be diluted. Future sales of substantial amounts of our Class A common stock into the public and the issuance of the shares upon conversion of the outstanding convertible notes will be dilutive to our existing stockholders and could result in a decrease in our stock price. Raising additional capital may restrict our operations or require us to relinquish rights. We may seek additional capital through a combination of private and public equity offerings, debt financings, collaborations, and strategic and licensing arrangements. To the extent that we raise additional capital through the sale of common stock or securities convertible or exchangeable into common stock, the terms of any such securities may include liquidation or other preferences that materially adversely affect your rights as a stockholder. Debt financing, if available, would increase our fixed payment obligations and may involve agreements that include covenants limiting or restricting our ability to take specific actions, such as incurring additional debt, making capital expenditures or declaring dividends. If we raise additional funds through collaboration, strategic partnerships and licensing arrangements with third parties, we may have to relinquish valuable rights to our intellectual property, future revenue streams or grant licenses on terms that are not favorable to us. Market volatility may affect our stock price and the value of your shares. The market price for our Class A common stock is likely to be volatile, in part because of the volume of trades of our Class A common stock. In addition, the market price of our Class A common stock may fluctuate significantly in response to a number of factors, most of which we cannot control, including, among others: — announcements of new products, brands, commercial relationships, acquisitions or other events by us or our competitors; - • regulatory or legal developments in the United States and other countries; • 24 - fluctuations in stock market prices and trading volumes of similar companies; --• general market conditions and overall fluctuations in U. S. equity markets; -- social and economic impacts resulting from the global COVID- 19 pandemic; — variations in our quarterly operating results; — changes in our financial guidance or securities analysts - estimates of our financial performance; - changes in accounting principles; - our ability to raise additional capital and the terms on which we can raise it; - sales of large blocks of our common stock, including sales by our executive officers, directors and significant stockholders; -• additions or departures of key personnel; -• discussion of us or our stock price by the press and by online investor communities; and -- other risks and uncertainties described in these risk factors. The trading market for our Class A common stock will be influenced by the research and reports that securities or industry analysts may publish about us, our business, our market or our competitors. We currently have limited coverage and may never obtain increased research coverage by securities and industry analysts. If no or few securities or industry analysts cover our company, the trading price and volume of our stock would likely be negatively impacted. If we obtain securities or industry analyst coverage and if one or more of the analysts who covers us downgrades our stock or publishes inaccurate or unfavorable research about our business, or provides more favorable relative recommendations about our competitors, our stock price would likely decline. If one or more of these analysts ceases coverage of us or fails to publish reports on us regularly, demand for our stock could decrease, which could cause our stock price or trading volume to decline. Future sales of our Class A common stock may cause our stock price to decline. Sales of a substantial number of shares of our Class A common stock in the public market or

the perception that these sales might occur could significantly reduce the market price of our Class A common stock and impair our ability to raise adequate capital through the sale of additional equity securities. Alpine 4 may issue Preferred Stock with voting and conversion rights that could adversely affect the voting power of the holders of Class A Common Stock. Pursuant to our Certificate of Incorporation, our Board of Directors may issue Preferred Stock with voting and conversion rights that could adversely affect the voting power of the holders of Class A Common Stock. In the fourth quarter of 2019, we issued shares of a newly designated Series B Preferred Stock to members of our Board of Directors. The outstanding shares of Series B Preferred Stock have voting rights in the aggregate equal to 200 % of the total voting power of our other outstanding securities, giving our Board of Directors control over any matters submitted to the vote of the shareholders of Alpine 4. Any such provision may be deemed to have a potential anti-takeover effect, and the issuance of Preferred Stock in accordance with such provision may delay or prevent a change of control of Alpine 4. The Board of Directors also may declare a dividend on any outstanding shares of Preferred Stock. Our 25If we are unable to continue to meet the required listing standards of The Nasdaq Capital Market, our Class A common stock may will be subject to potential delisting if we do not maintain the listing requirements of the Nasdag, which would adversely affect the liquidity of our Class A common stock and our ability to raise additional capital or enter into strategic transactions. Our failure to maintain our listing and our Class A common stock being delisted from The Nasdaq Capital Market, which could would negatively impact make it more difficult for stockholders to dispose of the their price shares of our Class A common stock and our ability more difficult to access the capital markets. Our <mark>obtain accurate price quotations on our Class A</mark> common stock is currently listed <mark>. For example, on June 2, 2022, the</mark> Company received a letter from the Listing Qualifications Department (the "Staff") of the Nasdaq Stock Market (" Nasdaq") notifying the Company that, for the preceding 30 consecutive business days, the closing bid price for the Company's Class A Common Stock (the "Common Stock") was below the minimum \$ 1.00 per share requirement for continued inclusion on The Nasdaq Capital Market pursuant to Nasdaq Listing Rule 5550 (a) (2) (the " Bid Price Requirement "). On April 18, 2023, we held our 2022 Annual Meeting of shareholders (the "Annual Meeting"). At the Annual Meeting, one of the matters voted on was a proposal to authorize the Board of Directors, at the discretion of the Board and if necessary to meet the Nasdaq Bid Price Requirement, but prior to the one-year anniversary of the date on which the Reverse Split Amendment is approved by the Company's shareholders, to file an Amendment to the Company's Certificate of Incorporation, as amended to date, to authorize a reverse stock split of the Company's Class A, Class B, and Class C Common Stock (the "Reverse Stock Split Amendment") with a ratio in the range between and including 1- for- 1, 5 shares and 1- for- 10 shares. The goals listing standards of the Reverse Stock Split Amendment include regaining compliance with the Bid Price Requirement, although there can be no guarantee that the market price of our shares will continue to trade above the Bid Price Requirement. The Reverse Stock Split Amendment Nasdaq Capital Market require that a company maintain stockholders' equity of at least \$ 2.5 million and a minimum bid price subject to specific requirements of \$ 1,00 per share. Should we fail to comply with the minimum listing standards applicable to issuers listed on The Nasdaq Capital Market, our if implemented, will not change the par value of the common stock may be delisted from The Nasdaq Capital Market. If our or the authorized number of shares of common stock is delisted. All outstanding options, restricted it could reduce the price of our common stock awards and the levels of liquidity available to our stockholders. In addition, warrants the delisting of our common stock could materially adversely affect our access to the eapital markets, and any limitation on liquidity or reduction in the price of our common stock could materially adversely affect our ability to raise capital on terms acceptable to us or at all. Delisting from The Nasdaq Capital Market could also result in other securities entitling negative implications, including the their holders to purchase potential loss of confidence by suppliers, customers and employees, the loss of institutional investor interest and fewer business development opportunities. The trading market for- or otherwise receive shares of our common stock will be influenced adjusted as a result of the Reverse Stock Split Amendment, as required by the research and reports terms of each security. The number of shares available to be awarded under the 2019 Equity Plan will also be appropriately adjusted. This proposal was approved by the shareholders. There are many factors that securities may adversely affect or our minimum bid industry analysts may publish about us, our business, our market or our competitors. We currently have limited coverage and may never obtain increased research coverage by securities and industry analysts. If no or few securities or industry analysts cover our company, the trading price and volume. Many of these factors are outside of our control. As a result, we may not be able to sustain compliance with Rule 5550 (a) (2) in the long term. Any potential delisting of our Class A common stock from the Nasdaq would likely <mark>result in decreased liquidity and increased volatility be negatively impacted. If we obtain sceurities or for</mark> industry analyst coverage and if one or our Class A common more of the analysts who covers us downgrades our stock and or publishes inaccurate or unfavorable research about our business, or provides more favorable relative recommendations about our competitors, our stock price would adversely affect likely decline. If one or our ability more of these analysts ceases coverage of us or fails to raise additional capital publish reports on us regularly, demand for or our stock could decrease to enter into strategic transactions , which in addition to adversely impacting the perception of our financial condition and could cause our stock price reputational harm to investors and parties conducting business with us. Any potential delisting of or our Class A trading volume to decline. Future sales of our common stock may cause from the Nasdaq would also make it more <mark>difficult for</mark> our <mark>stockholders stock price to <mark>sell decline. Sales of a substantial number of shares of</mark> our <mark>Class A</mark> common stock</mark> in the public market or the perception that these sales might occur could significantly reduce the market price of our common stock and impair our ability to raise adequate capital through the sale of additional equity securities. 26We We will have broad discretion in how we use the net proceeds of future capital raising transactions. We may not use these proceeds effectively, which could affect our results of operations and cause our stock price to decline. We will have considerable discretion in the application of the net proceeds of any future capital raising transactions. We intend to use the net proceeds from future capital raising transactions to fund development of our products and working capital and other general corporate purposes. As a result,

investors will be relying upon management's judgment with only limited information about our specific intentions for the use of the balance of the net proceeds of such capital raising transactions. We may use the net proceeds for purposes that do not yield a significant return or any return at all for our stockholders. In addition, pending their use, we may invest the net proceeds from that offering in a manner that does not produce income or that loses value. The market price for our common stock may be volatile, and an investment in our common stock could decline in value. The stock market in general has experienced extreme price and volume fluctuations. The market prices of the securities of biotechnology and specialty pharmaceutical companies, particularly companies like ours without product revenues and earnings, have been highly volatile and may continue to be highly volatile in the future. This volatility has often been unrelated to the operating performance of particular companies. The following factors, in addition to other risk factors described in this section, may have a significant impact on the market price of our common stock: - announcements of technological innovations or new products by us or our competitors; - developments or disputes concerning patents or proprietary rights, including announcements of infringement, interference or other litigation against us or our potential licensees; - developments involving our efforts to commercialize our products, including developments impacting the timing of commercialization; – actual or anticipated fluctuations in our operating results; – changes in financial estimates or recommendations by securities analysts; - developments involving corporate collaborators, if any; changes in accounting principles; and – the loss of any of our key management personnel. In the past, securities class action litigation has often been brought against companies that experience volatility in the market price of their securities. Whether or not meritorious, litigation brought against us could result in substantial costs and a diversion of management's attention and resources, which could adversely affect our business, operating results and financial condition. We do not anticipate paying dividends on our common stock and, accordingly, stockholders must rely on stock appreciation for any return on their investment. We have never declared or paid cash dividends on our common stock and do not expect to do so in the foreseeable future. The declaration of dividends is subject to the discretion of our board of directors and limitations under applicable law, and will depend on various factors, including our operating results, financial condition, future prospects and any other factors deemed relevant by our board of directors. You should not rely on an investment in our company if you require dividend income from your investment in our company. The success of your investment will likely depend entirely upon any future appreciation of the market price of our common stock, which is uncertain and unpredictable. There is no guarantee that our common stock will appreciate in value. 27We We expect that our quarterly results of operations will fluctuate, and this fluctuation could cause our stock price to decline. Our quarterly operating results are likely to fluctuate in the future. These fluctuations could cause our stock price to decline. The nature of our business involves variable factors, such as the timing of the research, development and regulatory pathways of our product candidates, which could cause our operating results to fluctuate.