# INVESTMENT RECOMMENDATION

# ADICET BIO

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# **EXECUTIVE SUMMARY**

Adicet Bio is a biotechnology company focused on developing T-cell therapies that target tumors, a branch of cancer research with potential for substantial returns on investment due to its complexity and impact on health. The company's pipeline of products is focused on developing off-the-shelf allogeneic cell therapies that overcome the limitations of autologous cell therapy, which have scalability and manufacturing efficiency issues. Adicet Bio's focus on engineering gamma delta T cells, a less studied subset of T cells, allows them to target a wider range of cancer cells and potentially improve treatment outcomes. Adicet Bio has demonstrated success with its lead therapy ADI-001, a treatment targeting NHL (market of 0.2 per 100 people), which has strong Phase 1 clinical trial results (75% ORR and 69% CR) and no negative effects (GvHD, toxicities, ICANs) on patients at a certain dose level. Adicet Bio is in the preclinical process of treatments ADI-002 (partnered with Regeneron) and ADI-925. ADI-002 targets Hepatocellular Carcinoma (market of 0.1 per 100 people), and ADI-925 targets a general range of solid tumors and hematologic cancers. The company's partnerships with Regeneron Pharmaceuticals, Twist Bioscience, and the National Institute of Health validate its science and pipeline, enable distribution networks for commercialization, and provide capital for their pipeline's continuation. Numerous startups enter the market of cancer research each leveraging specific approaches to their therapies, although Adicet Bio differentiates themselves from current competition on the market due to

- their specific focus on development on gamma delta T-cells over other allogeneic CAR-T cell
- broad range of applicability within solid tumors and hematologic cancer
- antibody-based manufacturing of the cells to improve effectiveness and scalability
- optimal safety profiles
- and reduction of GvHD.

Their current pipeline addresses these points with early clinical readouts. Despite being in the research and development stage of their company, Adicet Bio has managed to maintain an excellent cash balance staying away from high-interest debt. While there are risks associated with investing in Adicet Bio, such as competition, contingencies on partnerships, and the results of clinical trials, the company's innovation, leadership, and direction make it a promising investment opportunity. Overall, the company's ability to differentiate themselves from their competition within the cell therapy for cancer space through a versatile pipeline, specific modifications in gamma delta t-cell therapy to enhance capabilities, promising data from current clinical trials and strong partnerships indicates the potential for substantial return on investments.

# ABOUT ADICET BIO

Adicet Bio is dedicated to developing universal allogeneic, off-the-shelf T-cell therapies that selectively target cancerous tumors. Based on the significant efficiency displayed by alpha beta T-cell products in hematological malignancies, Adicet Bio has developed a cell platform and novel targeting approaches that aims to harness the tumor specific immunity of gamma delta T-

cells. These T-cells have unique features that combine innate and adaptive immunity to specifically target and eliminate tumor cells while sparing healthy cells in the body. The nature of this tumor killing function reduces the risk of causing Graft vs Host Disease and gives them a higher potential to eradicate solid tumors in tissues compared to alpha beta T cells. Thus far, Adicet has displayed the cytotoxicity and anti-tumor activity of gamma delta T cells in vitro and in vivo in mouse models. Adicet has engineered the gamma delta T-cells with chimeric antigen receptors (CARs) and T cell receptors (TCRs) targeting either tumor specific cell surface or intracellular targets to facilitate the precise engagement and killing of tumor cells. Adicet Bio long term plans to develop and generate multiple clinical product candidates for various hematological and solid tumor cancers and other diseases leveraging this cell therapy.

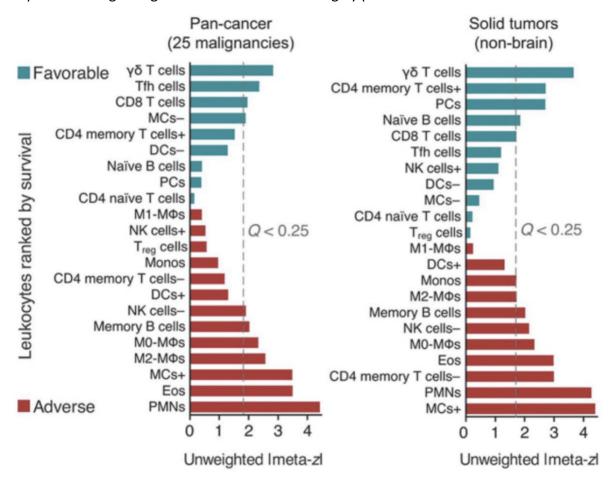
# PIPELINE, PRODUCTS AND PATENTS

#### **PIPELINE**

Adicet Bio's pipeline consists of seven wholly owned programs and one partnership program targeting a wide range of potential therapies for cancer, including but not limited to non-Hodgkin's lymphoma, hepatocellular carcinoma, metastatic castration-resistant prostate cancer, major histocompatibility complex and more. Majority of these programs are in the discovery and preclinical stages but are backed by previous scientific proof-of-concept and high unmet medical needs to increase probability of success.

While current autologous cell therapies available on the market have been revolutionary for cancer treatment, there are still many pitfalls of these therapies. Individualized manufacturing has imposed treatment delays, variability, and failure. Additionally, autologous cell therapies are associated with high cost which limits accessibility for patients, and since each patient requires a custom manufacturing batch, scalability is not efficient. Adicet Bio seeks to improve cell therapy by creating immunotherapies utilizing gamma delta T cells which are advantageous due to their ability to limit GvHD drastically, tumor localization (ability to be activated in environments with low levels of oxygen such as those found in the tumor microenvironment), limited cytokine secretion, ability to recognize and kill tumor cells even in the absence of the CAR-targeted tumor antigen, potential for superior cytotoxic activity, potential for re-dosing and finally, an ability to manufacture much more efficiently and cost-effectively. While gamma delta T cell therapy has shown promise in preclinical and early clinical studies, there are some potential limitations and challenges that need to be addressed to fully realize its potential as a cancer treatment. Gamma delta T cell therapy as an approach to cancer therapy is new, meaning that there is limited understanding of the biology, function and therapeutic applications, limited availability, risk of immune-related toxicities, heterogeneity complicating development of standardized manufacturing processes and protocols, and overall proven efficiency. The figure below represents an analysis of the immune cell composition of tumor

samples revealing that gamma delta T cells were highly predictive of overall survival.



Their top three furthest along programs are ADI-001, ADI-002, and ADI-925.



#### ADI-001

ADI-001 is Adicet Bio's lead product candidate which involves investigational allogeneic gamma delta CAR T cell therapy as a treatment for relapsed or refractory B-cell Non-Hodgkin Lymphoma. In 2023, about 0.22% of people in the United States will be diagnosed with Non-Hodgkin Lymphoma. NHL accounts for about 4% of cancer diagnoses. According to the cancer.net website maintained by the American Society for Clinical Oncology (ASCO), approximately 90% of NHL patients in western countries have B-cell lymphomas of various types and DLBCL is the most common and aggressive type of NHL, accounting for 30% of NHL. Currently, first-line therapy for patients with aggressive B-cell NHLs is chemotherapy combined with Rituximab, an antibody which targets CD20. Rituximab results in approximately 10-15% increase rates of survival in one year compared to chemotherapy alone, although according to the journal Bone Marrow Transplantation in 2007, up to 50% of patients relapse. Approximately 60% of these patients become resistant to Rituximab upon relapse, limiting efficiency and possibilities of other candidates for treatments. Four other CD19-targeting CAR T-cell therapies have been approved by the FDA for the treatment of B-cell lymphomas, but have drawbacks including lower response rates, significant relapse rates, or high rates of adverse neurologic events. For example, the label for Kymriah states approximately 35% of patients treated with anti-CD19 CAR T-cell therapies relapse within one year. ADI-001 provides an effective solution to the issues within current treatments for B-cell NHL. Not only do CD20-targeted CAR T cells recognize malignant cells despite scenarios where antigen expression is low, but also do not have negative side effects that correspond with chemotherapy and do not damage healthy cells. According to Adicet Bio's 10-Q SEC Report, ADI-001 enrolled 80 late-stage NHL patients in Q1 of 2021 in Phase 1 of the clinical trial, which showed promise in safety, tolerability, and both complete responses and durability of responses. In April 2022, ADI-001 was granted Fast Track Designation by the US FDA for the potential treatment of relapsed or refractory B-cell NHL. Results of Phase 1 of ADI-001 clinical trial reveal that the therapy has demonstrated a 75% overall response rate (ORR) and 69% CR rate across all dose levels. An 86% CR rate (6/7) was observed in LBCL patients across DL3 and above. In five Large B-Cell Lymphoma patients that had previously received anti-CD19 CAR T therapy, treatment with ADI-001 showcased 100% ORR and a CR rate of (5/5). Overall, ADI-001 is well-tolerated thus far, exhibiting no occurrences of dose-limiting toxicities, GvHD, or Grade 3 or higher Cytokine Release Syndrome (CRS) or immune effector cell-associated neurotoxicity syndrome (ICANS) in the study to date. According to historical stock price data, Adicet Bio's stock price initially rose by approximately 25% in response to the positive clinical trial results for ADI-001.

	DL1 N=3		DL2 N=3		DL3 N=3		DL3 (2X) (Day 1 & 7) N=1		DL4 N=6		Total N=16	
	Any Grade N (%)	Gr≥3	Any Grade N (%)	Gr≥3	Any Grade N (%)	Gr≥3	Any Grade N (%)	Gr ≥3	Any Grade N (%)	Gr ≥3	Any Grade N (%)	Gr≥3
CRS	2 (67)	0	0	0	0	0	1 (100)	0	3 (50)	0	6 (38)	0
ICANS	0	0	1 (33)	0	0	0	0	0	1 (17)	0	2 (13)	0
GvHD	0	0	0	0	0	0	0	0	0	0	0	0
DLTs	0	0	0	0	0	0	0	0	0	0	0	0
Infection	1 (33)	0	0	0	1 (33)	1 (33)	0	0	0	0	2 (13)	1 (6)
SAE - TEAE	1 (33)	1 (33)	2 (67)	2 (67)	2 (67)	2 (67)	0	0	1 (17)	0	6 (38)	5 (31)

- Safety assessment was performed using CTCAE (v5)
   No Grade ≥ 3 CRS or ICANS

  - · No DLTs or GvHD
- 2 patients administered sLD; 14 patients eLD

#### ADI-002

Adicet Bio and Regeneron are in partnership in developing ADI-002, gamma delta CAR T-cell therapy product candidate expressing a GPC3-targeted CAR and a cell intrinsic soluble form of interleukin-15 (IL-15), for the treatment of solid tumors, specifically Hepatocellular Carcinoma (HCC). In 2023, about 0.11% of people in the United States will be diagnosed with HCC. Currently there are no other T-Cell therapies on the market for HCC approved by the FDA. Current treatments for HCC are extremely invasive and are associated with many risks, hence the engineered T-cell with GPC-3 CAR and sIL-15 represent a promising approach for safe and effective off-the-shelf treatment according to the Journal for ImmunoTherapy of Cancer. The several available treatments for hepatocellular carcinoma (HCC) are surgical resection, liver transplantation, ablation therapy, transarterial chemoembolization (TACE), targeted therapy, and immunotherapy, which can be selected based on the stage of the cancer, the patient's overall health, and other factors. These current therapies, namely target therapy sorafenib, are shown to have limited impact by only lengthening survival by a couple months, or treatments like chemotherapy and radiotherapy are generally ineffective (National Library of Medicine). Immune checkpoint inhibitors (ICIs) are also a current immunotherapy for HCC which are attractive for their potential to slow tumor growth and induce regression, although their major drawbacks include the apparent absence of curative potential (only 15-60% of patients respond), the need for ongoing treatment to maintain effect which comes with large costs and health implications and the risk of immune mediated adverse effects. As ADI-002 is still in the preclinical stage of development, it has not yet been tested in humans and its safety and efficacy have not yet been established. While the therapy has shown promising results in preclinical studies, it is too early to determine whether it will be a strong competitor in the market. Further research and clinical trials will be necessary to assess its potential as a viable treatment option for solid tumors.

#### **ADI-925**

ADI-925, Adicet Bio's lead preclinical program, is a type of gamma delta CAR T-cell therapy developed at Adicet (in-house development called CAd) which enhances the targeting of tumor stress antigen (MICA, MICB, ULBP 1, 2, 3, 4, 5, 6) utilizing naturally present innate and adaptive tumor surveillance mechanisms, with significantly enhanced antitumor function. ADI-925 has the potential to treat a wide range of solid tumor types and hematologic cancer, including patients who are currently resistant to other current therapies. Currently, solid tumors account for about 90% of cancer in the United States. There is a plethora of available targeted therapies out on the market for solid tumor and hematologic cancer, but these therapies run the risk of cancer cells developing resistance. Competition in terms of cell therapies that are targeting solid tumors include Yescarta manufactured by Kite Pharma targeting large B-cell lymphoma and Kymriah manufactured by Novartis targeting relapsed or refractory follicular lymphoma, which are currently out on the market. Adicet Bio's CAd ADI-925 sets itself apart from the rest of current therapies on the market or in preclinical development due to the modification of the signaling adaptor called DAP10, which conveys the recognition of the stress antigen to the T-cell. Adicet is modifying the DAP10 so that the adaptor boosts the natural targeting of the receptor and significantly enhances the level of tumor killing achieved through the activation pathways. The IND-application is expected to be submitted in H2 of 2023.

The rest of their products are in the discovery and preclinical stage. For the rest of these programs, there are peer-reviewed sources to back up the science, show potential and support drug safety and effectiveness.

#### **PATENTS**

Adicet Bio currently has patents on ADI-001 and ADI-002 which are expected to expire between 2035 and 2037, and also has protection on its other research stage candidates. The company's TCRL platform is set to expire in 2021, but other patents covering their technologies remain in place, so the company predicts that this will not falter any operations or financial positions.

# **BUSINESS**

### **BUSINESS STRATEGY**

The key elements of Adicet Bio's strategy for commercial success are to continue to advance the clinical development of ADI-001, to leverage the potential for outpatient administration of their therapies, to continue to their gamma delta T-Cell therapeutic platform and pipeline, and to expand and protect their intellectual property (patents).

# PARTNERSHIPS AND GRANTS

Adicet Bio is currently in partnerships with two biotechnology companies Regeneron Pharmaceuticals and Twist Bioscience and has received a grant to conduct research for the National Institute of Health. Adicet Bio's agreement with Regeneron involves the production of therapy ADI-002, and the agreement consists of two main parts: research collaboration and rights to research target. Under the research collaboration agreement, Adicet Bio is primarily responsible for generating, validating, and optimizing gamma delta immune cells therapies

(ICPs), developing processes for manufacture of ICPs, and certain preclinical/clinical manufacturing activities for ICPs. Whereas Regeneron is primarily responsible for generating, validating, and optimizing chimeric antigen receptors (CARs) and T cell receptors (TCRs) that bind to the applicable target of interest. Under the rights to research target agreement, Regeneron Pharmaceuticals and Adicet Bio have entered a five-year research collaboration in which parties will conduct research on mutually agreed upon targets. As of September 30, 2022, Regeneron is responsible for all the development, manufacturing, and commercialization of ADI-002 and is required to pay Adicet Bio royalties as a percentage of net sales of ADI-002 for a period after the first commercial sale until either the expiration of the patent rights or after a low double-digit number of years. With Twist Biosciences, Adicet has entered an Antibody Discovery Agreement to have Twist utilize its proprietary platform to assist Adicet with discovering novel antibodies related to target antigens chosen by Adicet. Adicet has paid Twist an upfront sum as a project initiation fee and technology access fee, and a separate project fee for each project entered under the agreement. Lastly, Adicet Bio has been granted up to \$1.5 million from the National Institute of Health to study RTB101 and the regulation of antiviral immunity in the elderly.

The collaboration between Adicet Bio and Regeneron to develop next-generation gamma delta T-cell therapies is an important step forward for Adicet Bio's business, as it combines expertise in T-cell engineering with Regeneron's experience in developing novel biologics to potentially deliver effective treatments for cancer patients.

- Research and development expertise: Regeneron is a leading biotech company with
  extensive experience in developing innovative therapies for a wide range of diseases.
  Through this partnership, Adicet Bio can leverage Regeneron's research and
  development expertise to accelerate the development of its gamma delta T cell
  therapies.
- Financial resources: Regeneron has a strong financial position, which allows it to provide significant funding to support Adicet Bio's research and development efforts. This financial support can help Adicet Bio advance its pipeline of therapies quickly and efficiently without falling into debt.
- Commercialization capabilities: Regeneron has a well-established commercialization infrastructure and expertise in bringing innovative therapies to market.
- Validation of technology: The partnership with Regeneron is a strong validation of Adicet Bio's gamma delta T cell therapy platform. The fact that Regeneron has chosen to collaborate with Adicet Bio suggests that the company's technology has significant potential and could be an important tool in the development of new therapies for a variety of diseases.

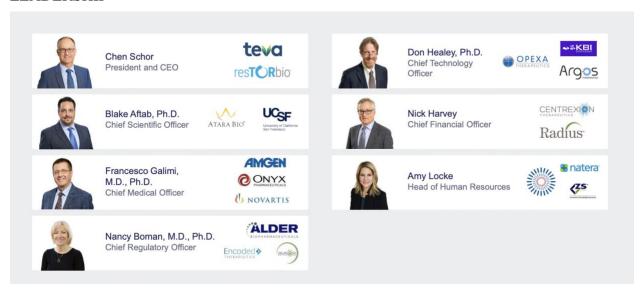
Overall, the partnership between Adicet Bio and Regeneron can provide Adicet Bio with access to important resources, expertise, and validation that could help accelerate the development and commercialization of its gamma delta T cell therapies.

#### **INVESTORS**

Adicet Bio is backed by top investors OrbiMed Advisors LLC, RTW Investments LP, EcoR1 Capital LLC, Cowen Inc, BlackRock Inc, State Street Global Advisors, Abingworth LLP, Vanguard Group, Morgan Stanley, Polar Capital Holdings.

# **EXECUTIVE TEAM**

#### LEADERSHIP



Adicet Bio's leadership are all extremely educated and seasoned in the biotechnology, business, and scientific fields. Much of their team has previously worked and led various biotechnology companies to success financially. Their current CEO, President, and Director Chen Schor has been with Adicet Bio since September 2020 and has leadership experience in fields involving biotechnology, medical devices, business development and private equity. His portfolio companies include Synta Pharmaceuticals Corp. (acquired by Madrigal Pharmaceuticals), Novalere FP (acquired by Innovus Pharmaceuticals), and Sesen Bio. Schor has led biotechnology companies across all stages, from formation and early-stage discovery to leading a publicly traded multi-product company with significant external partnerships. Adicet Bio's Founder and Independent Director Aya Jakobovitis has a background as President and Chief Executive at Kite Pharmaceuticals and Agensys and as Director cCAM Therapeutics and Abgenix. Chief scientific Officer Blake Aftab, Ph.D. joined Adicet Bio in 2021 with almost 20 years of experience in academia, biotech and pharmaceutical industries developing multiple therapeutic modalities. In his previous role at Atara Biotherapeutics, Inc., he contributed to the company's initial transition to cell therapy and led the focus on developing Allo-CAR T cell capabilities.

Lastly, Chief Financial Officer Brian Nicholas Harvey has been with Adicet Bio since September 2020 and has financial experience with Centrexion Therapeutics, Radius Health Inc, and Transfusion Technologies Corporations.

#### **BOARD OF DIRECTORS**

Adicet Bio's Board of Directors consists of Jeffrey A. Chodakewitz, M.D., Steve Dubin, Carl L. Gordon, Ph.D., Aya Jakobovits, Ph.D., Michael G. Kauffman M.D., Ph.D., Michael G. Kauffman M.D., Ph.D., Bastiano Sanna, Ph.D., Chen Schor, Andrew Sinclair, Ph.D.

#### SCIENTIFIC ADVISORY BOARD

Adicet Bio's Scientific Advisory Board (SAB) consists of six board members: Alice Bertaina, M.D., Ph.D., Marco Davila, M.D., Ph.D., Constantine Mitsiades, M.D., Ph.D, Michael Kalos, Ph.D., Lloyd Klickstein, M.D., Ph.D., and Saul Priceman, Ph.D.

# COMPETITORS

There are numerous cancer research companies worldwide, each with their own unique approaches and specialties, working to develop new and innovative treatments to improve patient outcomes and ultimately find a cure for cancer. Adicet Bio thus has hundreds of well-established and startups to compete with for market share.

Well established biotechnology and biopharmaceutical companies like Pfizer, Novartis, Merck & Co, Roche, Johnson & Johnson, Sanofi, AstraZeneca, AbbVie, and Bristol Myers Squibb have access to significant financial resources, established research and development programs, and strong portfolios of marketed products, which can make it difficult for startups to compete.

Startup companies have the potential to compete against big pharmaceutical companies by focusing on a unique, innovative product or technology and leveraging their flexibility to adapt to the shifting market dynamics. Namely, Adicet Bio has honed in on their platform for cancer therapies leveraging the innate and adaptive capabilities of gamma delta T-cell therapies.

Competitors in the cancer therapeutics space include Curis Inc., Perspective Therapeutics, aTyr Pharma Inc., and Calithera. Currently, Curis has one approved drug (Erivedge) for Basal Cell Carcinoma and has three drugs in the clinical trial activities phase targeted towards Heme Malignancies. Erivedge is effective, but side effects of the drug often result in patients discontinuing their treatment. Perspective Therapeutics has Radioisotope technology that treats tumors on a cellular level in early stages of cancer that has been utilized for over ten years, although pitfalls of this therapy are radiation exposure which also kills healthy cells and limited targeting.

Given the promising results and increasing research in the field, CAR T cell therapy is expected to become an increasingly popular and valuable tool in the fight against cancer, providing a

potentially curative treatment option for patients with certain hematological malignancies. CAR T cell therapy's potential to revolutionize cancer treatment and its growing popularity among patients and clinicians make it an attractive area for biotechnology and pharmaceutical companies to invest in and pursue further research, development, and commercialization. Although, Adicet Bio has focused development on gamma delta T-cells over other allogeneic CAR-T cells due to its ability to retain healthy cells. Specifically,

- gamma delta T-cells do not rely on genetic manipulations to inactivate the alpha beta TCR;
- display properties of both adaptive and innate immune systems and are capable of killing cells even if their specifically targeted CAR antigen is expressed at low levels or not present;
- may not be prone to exhaustion and are likely to persist longer;
- may maintain the capacity to home to tissues and tumors rather than predominantly residing in circulation;
- may be less likely to induce cytokine release syndrome due to more limited endogenous IL-6 secretion by activated cells

Startup and well-established competitors in the cell therapy space include Acepodia, Takeda, CytoMed Therapeutics, GT Biopharma, In8Bio, Lava Therapeutics, and TC Biopharm.

Specifically, Acepodia is developing their lead product candidate ACE1831 which is in Phase 1 for CD20 Expressing Hematological Malignancies. This product is close match in relation to Adicet Bio's lead candidate ADI-001 but differs in the use of gamma delta T-cells and the fact that Adicet Bio is further along in the pipeline of getting product to market. TC BioPharm currently has a gamma delta T-cell therapy OmnImmune® which targets Acute Myeloid Leukemia and solid and hematological indications and has completed Phase 1 of clinical trials. Takeda is a global biopharmaceutical company that acquired GammaDelta Therapeutics and now has access to their gamma delta t-cell therapy research and platform.

Adicet Bio's anticipated differentiation from other gamma delta T-cell competitors is primarily due to their antibody-based manufacturing of the cells and focus on V $\delta$ 1 cells which display significant advantages over V $\delta$ 2 or V $\delta$ 3 cells. Specifically, Adicet Bio states their advantages are due to

- their robust and practical proprietary antibody-based manufacturing method for gamma delta T cells;
- large-scale expansion of blood-derived gamma delta T cells;
- ability to selectively expand multiple gamma delta T cell subpopulations including highly potent Vδ1 cells;
- no potentially cytokine responses in our Vδ1 subpopulation
- in-house CAR target identification and verification process;
- and ability to effectively target tumor-specific intracellular protein-derived peptides using proprietary T cell receptor-like (TCRL) antibodies.

# **FINANCE**

#### FINANCIAL SUMMARY

The 10-Q SEC Report provides information on Adicet Bio's financial statements and risks as of September 30, 2022. The numbers below are in thousands.

As of September 2022, the cash and cash equivalents reported by Adicet Bio are \$282,679 with an increase from December 2021 at \$277,544. The net loss decreased from 2021 at \$(46,186) to 2022 at \$(39, 915). According to the balance sheet, the company has no long-term liabilities, as they have financed operations primarily through a collaboration and licensing arrangement, public and private placements of equity securities and debt, and cash received in the merger with resTORbio. The total current assets are \$285,737 as of September 2022. The total current liabilities of the company are \$17,221, as of September 2022. From December 2021 to September 2022, Adicet Bio increased expenses towards Research and Development from \$34,285 to \$46,231. As of September 2022, Adicet Bio claims to be well-financed into the first half of 2025.

#### FINANCIAL ANALYSIS

While many startup biotechnology companies find themselves in a position of high debt to support their research and development, Adicet Bio is not levered in this way and has been able to maintain a position of little to no long-term liabilities by funding their research and development and general and administrative expenses through equity. Without the stress of paying back high-interest debt, Adicet Bio will be able to focus on funding essential facets to their business plan, specifically continuing the research and development of upcoming technologies and supporting clinical trials for their further along therapies. According to their 10-Q SEC Report, Adicet Bio predicts that they will be able to maintain a good cash position into 2025, and their current financials support this claim. An excellent quantitative metric to analyze is their working capital ratio (total current assets / total current liabilities) which is 16.6 as of September 2022. Compared to the average working capital ratio for biotechnology companies at about 2.5 as of the fourth quarter of 2022, Adicet Bio clearly exceeds this ratio displaying a high likelihood at being able to pay back short-term obligations within this coming year. With respect to the fact that very little startup biotechnologies bring in revenue from their technologies (since majority are in development), Adicet Bio has set themselves up in a good position, with the contingency that they will start generating revenue on their closest-tomarket products within the near future.

# RISK ASSESSMENT

#### **GENERAL RISK**

Early-stage biopharmaceutical companies, such as Adicet Bio, display a high potential on returnon-investment contingent on their platform of technologies' successes. Although, investment in this product development is highly speculative because it entails substantial upfront capital expenditures and significant risk that any potential product candidate may not demonstrate its intended effects or safety, may not gain regulatory approval, or may not become commercially viable. Under the event that their clinical trials fail to demonstrate safety and efficiency of any of their product candidates, this would cause a prevention or delay in regulatory approval and commercialization. Investigational New Drug applications required to commence clinical trials may not be filed on time or ever, resulting in an inability to proceed as per the FDA. Substantial delays in clinical trials may occur and can significantly hurt timelines.

Recently, a sharp reversal in the stock market has left startup biotechnology companies looking for cash. Many biotechnology companies are cutting extra costs to focus on experimental drugs with the highest potential for return. The shift in landscape has significantly altered the way biotechnologies go about their financing strategies and focus, spending more time detailing their cash and cash equivalents to present to investors that they have high potential for success. Given this new climate, some biotechnology companies are getting coerced into unfavorable deals with pharmaceutical giants to remain afloat and to maintain the research and development of their pipeline. The Inflation Reduction Act of 2022 includes provisions that will curb drug prices for people with Medicare and will reduce drug spending by the government. This inherently has the potential to hurt revenues, thus large pharmaceutical and biotechnology companies are reevaluating what is reasonable compensation for these deals.

#### COMPANY SPECIFIC RISK

Adicet Bio has incurred net losses since their inception and anticipate that they will continue to incur substantial net losses into the future. Currently, Adicet Bio has no products available on the market to generate revenue from product sales and will continue to incur net losses into the foreseeable future due to costs of research and development and other expenses related to ongoing operations. As of September 2022, Adicet Bio has an accumulated deficit of \$208.2 million. In the event of success of commercializing ADI-001 and ADI-002, Adicet Bio will likely still experience net-losses due to the expenses of developing the rest of their T-cell therapy pipeline. Their future net losses are dependent on the rate of future growth of expenses, unforeseen expenses, difficulties, complications, and delays. Adicet Bio's business operations depend on their collaboration with Regeneron, and if Regeneron breaches its obligations thereunder, their business, prospects, operating results, and financial condition would be harmed. Lastly, their market opportunities for their product candidates may be more limited than expected to patients who are ineligible or have failed prior treatments.

# CONCLUSION AND FINAL RECOMMENDATION

Adicet Bio, startup biotechnology company founded in November 2014 by Aya Jakobovits, is currently focused on developing a platform of T-cell therapies that target tumors, a branch of cancer research which has demonstrated a considerable potential for generating substantial returns on investment, owing to its inherent complexity and the significant impact that breakthroughs in this area can have on the health and well-being of individuals and

societies at large. After almost 9 years in business, the company is almost out of a nascent space by getting their lead therapy ADI-001 through clinical trial, approved, and out on the market. Their success as a company is dependent on this, as the revenue generated by this therapy will fuel the research and development for the rest of their pipeline. Their pipeline of products is specifically focused on a direction of innovation with gamma delta T-Cell therapies but has the potential to serve a wide variety of patients with cancer or other diseases, a significantly large market. Adicet Bio addresses the current gaps in T cell therapy in an effective way by developing off-the-shelf allogeneic cell therapies that are designed to overcome some of the limitations of autologous cell therapy. By using donor cells that are engineered to evade the recipient's immune system, Adicet Bio's cell therapies can be produced in large quantities and stored for on-demand use, which can help address the issues of scalability and manufacturing efficiency that are often associated with autologous cell therapy. Moreover, Adicet Bio's focus on engineering gamma delta T cells, which are a less studied subset of T cells, allows them to target a wider range of cancer cells and potentially improve treatment outcomes for patients. By taking a novel approach to T cell therapy, Adicet Bio is contributing to the development of next-generation cell therapies that could provide a more effective and accessible treatment option for patients with cancer. Their top three therapies exhibit significant potential in the market due to the innate and adaptive immunity to specifically target and eliminate tumor cells while sparing healthy cells in the body. ADI-001 has exhibited strong results based on Phase 1 clinical trial data (75% ORR and 69% CR rate across all dose levels), and no patients exhibited negative effects of GvHD disease or immune effector cellassociated neurotoxicity syndrome (ICANS) in Grade 3 or higher.

In addition to a robust pipeline and innovative focus, Adicet Bio offers promising partnerships with Regeneron Pharmaceuticals, Twist Bioscience, and the National Institute of Health. These connections will serve purpose when commercializing their wholly owned and partnership therapies as their science and pipeline will be validated scientifically through these various partnerships. Due to the ever-expanding costs of drug development, these partnerships and grants will ultimately help to fund their research, discovery, and clinical trials. These partnerships will provide distribution networks to support commercialization. Being able to generate these funds, partnerships and grants thus far indicates that Adicet Bio has been successful in presenting their work towards cancer therapies to these organizations and has the potential to continue backing their scientific research, work and long-term goals to future investors and partners.

While the company is not generating revenue from commercializing products, they have been able to generate cash through financing through equity and creating little to no debt. While they are spending their cash on research and development of their therapies to get them out to market, Adicet Bio will not be weighed down by increasing interest rates since they currently have no long-term liabilities, whereas other startup biotechnology companies may find themselves in a worse position. In addition to a *relatively* strong financial position, Adicet Bio displays strong leadership and guidance in their executives, Scientific Advisory Board, intellectual property, and partnerships. Some factors that may be of risk in terms of an investment in Adicet Bio are their competitors, contingencies on their partnership with Regeneron, results of clinical trials, approval of IND applications and market opportunities may be smaller than expected. Taking all these factors into account, I would recommend an

investment in Adicet Bio as the current adolescent stage of their company forecasts growth in a direction towards a successful pipeline that will generate revenues with strong leadership, partnerships, and guidance. Their products address the needs of a cancer market that do not have completely viable treatments available yet. Adicet Bio is competing with many biotechnology companies in this space, but concluding my research, Adicet Bio has displayed innovation that addresses problems found in current therapies and has a driven and specific approach to their pipeline, which differs from the big pharma companies that represent their largest competition.