

Imugene Limited — Immuno-oncology Innovations Highlighted at ESMO, Financial Position Strengthened, and Clinical Pipeline Advancing

Share Price: A\$0.052

Valuation: A\$0.49

IMUGENE Developing Cancer Immunotherapie

Imugene Ltd. (ASX: IMU)

Key Statistics

52 Week Range	A\$0.039 - A\$0.210
Avg. Volume (3 months)	30.62M
Shares Outstanding	7.16B
Market Capitalization	A\$343.92M
EV/Revenue	N/A
Cash Balance*	A\$163.4M
Analyst Coverage	3

^{*}Cash balance as of September 2023

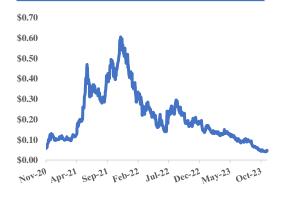
Revenue (in A\$mm)

June - FY	2023A	2024E	2025E
1H	n/a	n/a	n/a
2H	n/a	n/a	n/a
FY	n/a	n/a	n/a

EPS (in **A**\$)

June-FY	2023A	2024E	2025E
1H	(0.00)	(0.00)	(0.00)
2H	(0.00)	(0.00)	(0.00)
FY	(0.01)	(0.01)	(0.01)

Stock Price Chart (in A\$)



Hunter Diamond, CFA research@diamondequityresearch.com

Investment Highlights

- Virotherapy at ESMO Congress 2023 Imugene Limited showcased significant updates on its B-Cell immunotherapy and oncolytic virotherapy platforms at the European Society for Medical Oncology (ESMO) Congress held in Madrid from October 20th to 24th 2023. The HER-Vaxx B cell immunotherapy showed significant survival benefits for advanced gastric cancer patients when compared to standard chemotherapy. Additionally, HER-Vaxx showcased the inhibition of key cancer signaling pathways. Additionally, the oncolytic virotherapy, CF33-hNIS-anti-PD-L1, showcased a favorable safety profile and localized immune activation in patients with metastatic Triple Negative Breast Cancer, underscoring Imugene's improving trajectory in immuno-oncology.
 - The first of the three posters (#1536P) presented at ESMO highlighted the previously announced trial results and discussed additional findings pertaining to the mechanistic elucidation of HER-Vaxx in patients with HER2+ advanced gastric cancer. Imugene, in June 2022, reported the final analysis showcasing statistical significance and notable improvement in overall survival with HER-Vaxx plus standard-of-care chemotherapy, reducing the risk of death by 41.5% compared to chemotherapy alone. The median OS extended to 13.9 months compared to 8.3 months in patients treated with chemotherapy alone, affirming HER-Vaxx's potential efficacy without additional toxicity. Previously announced findings also showcased anti-HER2-IgG and IgG1 antibody responses (p<0.001) that correlated with tumor reduction. Additional findings validating the mechanism of action highlighted that HER-Vaxx vaccination led to induced anti-HER2 antibody responses (p<0.001) with dose-dependent functionality in binding to human HER2-expressing gastric cancer cells. Furthermore, the data demonstrated the intracellular phosphorylation inhibition of the HER2 receptor and the subsequent inhibition of cancer signaling pathways Akt and MAPK, which are crucial in cancer cell proliferation and survival. These additional insights solidify the proof of concept for HER-Vaxx as a first-in-class B cell immunotherapy, providing a deeper understanding of its therapeutic potential and mechanism of action in targeting HER2-overexpressing gastric malignancies.
 - Another poster (#472P) presented at the ESMO discussed the potential of combination therapy targeting HER2 and PD-L1 to prevent metastasis in HER2-expressing tumors, building on the efficacy of HER-Vaxx vaccination. Preclinical (in mouse models) and Phase 1b HERIZON study data revealed that HER-Vaxx vaccination led to PD-L1 upregulation and HER2 downregulation, influencing the final disease progression. A similar phenomenon has also been observed post-trastuzumab treatment and has been found to be associated with resistance and metastasis development. These findings hint at a promising therapeutic strategy, suggesting that a synergistic clinical approach targeting both HER2 and the PD1/PD-L1 axis with an ICI might serve as a potent regimen to treat metastatic HER2+ cancers, potentially preventing new metastasis development and circumventing immune evasion.

Company Description

Imugene Limited is an Australian clinical-stage immuno-oncology company developing a range of immunotherapies to activate the immune system of cancer patients to treat and eradicate tumors. The company is developing six unique assets targeting multiple forms of solid tumors and hematologic malignancies.



- The third poster (#4581) highlighted the safety and potential efficacy of the oncolytic virus CF33-hNIS-anti-PD-L1, administered via intratumoral injection, in patients with metastatic Triple Negative Breast Cancer (mTNBC). The treatment was found to be safe and well-tolerated through dose levels 1 to 3, inducing critical immune cell (CD4+ and CD8+ T cells) infiltration into the tumor and upregulating PD-L1, suggesting immune activation by CF33-hNIS-anti-PD-L1. Post-treatment SPECT imaging revealed enhancement at injection lesions in 75% of patients, indicative of local viral replication and hNIS expression, enabling non-invasive tracking of the treatment's activity within the tumor. The ongoing trial aims to further evaluate dose escalation, tumor response, and tumor microenvironment changes at later stages and higher dose levels.
- VAXINIA Clinical Progress and Early Clinical Results Imugene navigated through multiple clinical milestones, advancing its therapeutic candidate through clinical trial. The Phase 1 MAST trial evaluating CF33-hNIS (VAXINIA) has cleared cohort 4 of the intravenous (IV) arm of its Phase 1 monotherapy trial and has completed cohort 2 of the IV arm of the combination study (CF33-hNIS + pembrolizumab). The cohort 5 of the IV monotherapy dose-escalation arm and cohort 3 of the IV combination study are now both active. Additionally, the company had previously announced the completion of cohort 3 of the intratumoral (IT) arm of the monotherapy trial and cohort 1 of the IT arm of the combination study, allowing for the progress toward further cohorts.
 - The company also reported promising early results from the trial showing that the CF33-hNIS, when administered alone or in combination with pembrolizumab, had no adverse safety signals and was well tolerated in 34 patients (16 patients - IT and 18 patients - IV) who have undergone extensive prior treatments. The clinical responses of 25 evaluable patients include one complete response in a patient with bile duct cancer and one partial response in melanoma, along with stable disease in 16 patients. The trial has particularly highlighted positive effects in seven patients with gastrointestinal cancers treated solely with CF33-hNIS, indicating a noteworthy disease control rate of 86%. Observation of pseudoprogression in patients with bile duct cancer suggests a potential meaningful engagement of the immune system, indicating the drug's potential as a potent anti-cancer therapy. With these results, Imugene is moving forward into higher dosing cohorts of the trial, expanding the patient base, and continuing to explore the optimum dosing for maximum therapeutic effect. This progress in the MAST trial underscores the potential of VAXINIA as a viable treatment option for hard-to-treat cancers, especially considering the encouraging safety profile, which is crucial for ongoing dose escalation and indicates a potentially wide therapeutic window.
- Pipeline Progress The company also announced the receipt of positive feedback from the FDA on an improved azer-cel manufacturing process and indicated progress towards the initiation of a pivotal study in 2024. Furthermore, in addition to the previously granted U.S. patent, the Japanese Patent Office granted a new patent to Imugene's PD1-Vaxx, an immunotherapy currently under clinical trial for NSCLC. The Phase 1 PD1-Vaxx trial, either as a monotherapy or in combination with atezolizumab, has seen a significant uptick in recruitment, fueled by heightened interest from new clinical sites. The company also announced the dosing of the first patient and initiation of a Phase 1 clinical trial evaluating its CD19 oncolytic virotherapy drug candidate onCARlytics in adults with advanced or metastatic solid tumors.



- Capital Raises In the past quarter, Imugene successfully completed two rounds of capital raises, further strengthening its financial position. On August 25, the company announced that it had issued 411.2 million fully paid shares at an issue price of A\$0.084, raising approximately A\$35 million. This was followed by the completion of a share purchase plan (SPP) issue in September, raising an additional A\$18.2 million. The company's cash reserves increased by more than A\$50 million, further fortifying its financial stance to accelerate the clinical development of its promising immuno-oncology therapies. Moreover, successful capital raises in this market environment, reflect strong investor confidence in Imugene's innovative approach toward targeting difficult to treat cancers.
- Q1 2024 Cash Flow Update During the first quarter, net cash used in operating activities amounted to A\$22 million, with direct research and development and staff costs accounting for 64% of total costs. Additionally, with multiple rounds of equity issuances during the quarter, the company secured a total of A\$50.5 million in additional financing, taking the total cash and cash equivalents to A\$163.39 million at the end of the quarter ended September 2023.
- Valuation In addition to the above-mentioned updates, the company also announced the
 conclusion of the transaction for exclusive worldwide rights to azer-cel, an allogeneic CAR-T
 candidate. The company also filed the cash flow report for the quarter ended September 2023,
 warranting an update of the valuation model. Rolling over our valuation approach while
 amending the cash balance, accounting for the recent dilution, and re-evaluating the comparable
 company analysis yielded a valuation of A\$0.49 per share, contingent on successful execution
 by the company.



Company Overview

Imugene Limited (ASX: IMU) is an Australia-based clinical-stage biotechnology company focusing on developing immunotherapies for the treatment of various cancers. The company has a diversified pipeline of 5 unique assets developed on a strong research base of 3 platform technologies. The company is targeting ten disease areas with high unmet needs and low survival rates. Imugene's initial focus has been to advance its B-cell peptide vaccines technology, which stimulates the body's immune system to produce antibodies against the normal self-proteins, such as HER2 and PD-1. The two lead therapies within the company's pipeline include HER-Vaxx and PD1-Vaxx, aimed at treating Gastric and Non-Small Cell Lung Cancer, respectively. Expanding its purview, the company acquired the exclusive license to the CF33 Oncolytic Virus technology developed by Professor Yuman Fong at the City of Hope (COH) Cancer Centre in Los Angeles. CF33 is a novel, genetically engineered chimeric orthopoxvirus and has shown promising efficacy in a range of mouse models. Clinical development of CF33 oncolytic virus is being studied in two different constructs, CHECKvacc (CF33+hNIS+anti-PD-LI) and VAXINIA (CF33+hNIS). Both constructs are currently being pursued under phase 1 clinical trial. In addition to B-cell immunotherapy and CF33, Imugene, in May 2021, obtained the worldwide exclusive licenses to the patents covering CF33-CD19, also known as on CARlytics. The CF33-CD19 agent aid CD19directed CAR T by labeling cancer cells for CAR T cell destruction. CD19 CAR T as a monotherapy faces key challenges in solid tumors largely due to a lack of selectively and highly expressed surface antigens.

Imugene Limited
(ASX: IMU) is an
Australia-based
clinical-stage
biotechnology
company focusing
on developing
immunotherapies for
the treatment of
various cancers



Exhibit 1: Imugene's Immunotherapy Pipeline Assets. Source: Imugene Limited

Imugene's platform technology IP is protected by a set of patents, with a majority of the patent expiration starting post-2035. In order to advance its pipeline through different clinical stages and commercialization, the company has engaged in scientific collaboration with Celularity Inc. (NASDAQ: CELU), Eureka Therapeutics, Inc., and Arovella Therapeutics Ltd. (ASX: ALA). The company has also signed a clinical trial supply agreement with pharmaceutical giants Roche (SWX: ROG), and Merck KGaA (ETR: MRK), adding further validation to its pipeline candidates. The company's pipeline indication represents a multi-billion-dollar market opportunity targeting the highly valuable market of cancer immunotherapy.

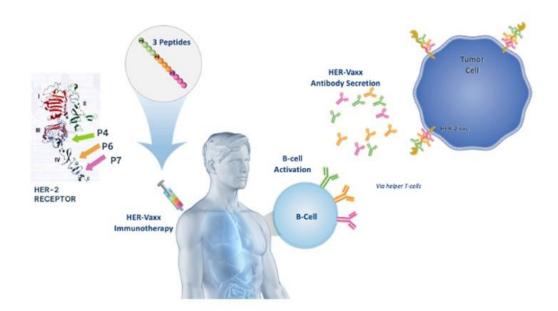


B-Cell Peptide Cancer Vaccines - An Effective Active Immunization Approach

In the past decade, there have been considerable advancements in cancer treatment, with targeted therapies and immunotherapies showing great promise for multiple types of cancer. Passive immunization, such as the use of humanized monoclonal antibodies, is proven to have promising therapeutic applications in the treatment of different forms of malignancies but comes with several caveats that limit the usage of these therapies in numerous cases. Toxicity problems and resistance, high costs, sophisticated therapeutic regimen, and long half-life are a few of the significant shortcomings that have raised the need for an efficacious and long-lasting active immunization approach. One such approach that Imugene believes can cause a paradigm shift in cancer research is the advancement of B-cell epitope vaccines. Cancer vaccines based on B-cell peptides are generally composed of an adjuvant and an immunogenic protein containing a B-cell epitope peptide that can induce B cells to create polyclonal antibodies that bind to different parts of the vaccine antigens. The resulting construct of polyclonal antibodies yields a powerful antitumor effect that is long-lasting and inhibits tumor recurrence. Even though humanized mAbs have a somewhat similar mechanism of action, the use of synthetic bodies to treat cancer has been fraught with several concerns. Poor penetration across tissues, large quantities of hmAbs resulting in toxicity, expensive treatment (average cost: US\$150,000 per year), and long and frequent infusions. Despite these challenges, hmAbs therapy has become a multi-billion-dollar business.

The use of B-cell immunotherapies to stimulate the patient's immune system to produce polyclonal antibodies may have advantages over synthetic antibodies

HER-Vaxx Active Immunization



In addition to HER2 and PD-1 cancer vaccines, Imugene has also licensed a number of other Bcell cancer vaccines targeting PDL-1, LAG-3, EGFR, VEGF, and CTLA-4

Exhibit 2: B-Cell Epitope Peptide Vaccine Mechanism of Action. Source: Imugene Limited

HER-Vaxx – Cancer Vaccine for Gastric Cancer

HER-Vaxx is B-cell immunotherapy that is designed to treat cancers that overexpresses HER2 protein. Different types of solid tumors such as breast cancer, gastric cancer, ovary, endometrium, bladder, head, and neck cancer have been found with over-expression of the HER2 protein. The amplification/over-expression is often associated with poor prognosis and low survival rates. HER-Vaxx is a B-cell peptide vaccine composed of 3 fused epitopes (p467) derived from the



extracellular domain of HER2/neu coupled to CRM197 and adjuvanted with Montanide. The resultant vaccine formulation induces a potent polyclonal antibody response that targets cells with overexpressing HER-2 receptors on their surface. Pre-clinical studies have shown strong antitumor activity in-vitro and in-vivo and better growth inhibition of breast cancer cells or HER2 signaling pathway compared with single-agent mAb trastuzumab.

The current vaccine formulation is an enhanced version that replaces virosomes used in previous formulations of HER-Vaxx. The company had previously examined the virosomal formulation in phase 1 clinical trial in end-stage breast cancer patients. While the study showed good immunogenicity as well as an excellent safety profile, several drawbacks of the virosomal formulations, including solubility and limited stability after coupling all the single peptides together to virosomes, were the reasons to reconstruct and improve the multi-peptide vaccine with respect to specificity and clinical applicability. The enhanced formulation has been shown to have a faster production of antibodies and a more rapid immune response.

HER-Vaxx has been shown to stimulate a potent polyclonal anti-body response to HER-2/neu, a well-known and validated cancer target

Competitive Overview

Imugene's lead drug candidate HER-Vaxx faces competition from already approved HER2-directed gastric cancer mAbs and PD-1 binding immune checkpoint inhibitors. Multiple targeted therapies and immunotherapies are currently under clinical trial for advanced or metastatic gastric cancer, indicating fierce competition in this particular disease area. Trastuzumab (Herceptin) and fam-trastuzumab deruxtecan-nxki (Enhertu) are major HER-2-directed therapeutics that are FDA-approved. Even though HER-Vaxx exhibited robust efficacy and safety in the early stages of clinical development, the company's ability to fend off competition depends on its superior safety and comparative efficacy profile at a reasonable cost.

Drug	Patent expiry	Annual Revenue (2021)	Pricing	
Trastuzumab	off-patent	\$2,694 million	\$76,500	
nivolumab	2028	\$7,523 million	\$187,728	
fam-trastuzumab deruxtecan-nxki	2024	\$426 million	\$164,000	

Exhibit 3: Major FDA-approved Gastric Cancer Drugs. Source: Diamond Equity Research, Company Filings

PD1 – Vaxx – Therapeutic Vaccine for NSCLC

Immune Checkpoint Inhibitors as potent immunotherapy has already reached consensus, with numerous FDA approvals for several cancer types recording billions of dollars in sales worldwide. Thousands of immunotherapies are currently being tested in clinical trials for different types of malignancies. Even though PD-1/PD-L1 signaling inhibitors have shown great clinical success, the development of primary and secondary resistance has contributed to just a small subset of patients (10–15%) responding to the monotherapy.²

PD-1 Vaxx is potentially a cost-effective, potent, and novel approach toward inhibiting the PD1/PD-L1 signaling pathway, thus triggering anti-cancer effects similar to those observed in ICI mAbs such as Keytruda[®] and Opdivo[®]. Based on the B-cell epitope peptide vaccine platform technology, PD-1 B-cell peptide epitope vaccine (PD-1 Vaxx) is derived from extracellular amino

Constructed from a single B cell epitope derived from extracellular domain of PD-1, PD-1 Vaxx has shown great potential in preclinical and early-stage clinical trials

¹ Future Oncology 2020 16:23, 1767-1791

² British Journal of Cancer (2021) 125:152–154



acids 92-110 of PD-1 linked to a measles virus fusion peptide (MVF) amino acid 288-302 via a four amino acid residue (GPSL). The resulting formulation, when injected, elicits a B-cell antibody response, inducing the body to produce polyclonal antibodies. These antibodies block the PD-1 signaling pathway that is crucial for tumor growth and simultaneously promotes T-cell recognition of cancer cell leading to targeted killing. Activation of both T-cell and B-cell functioning encourages immunological response providing a formidable cancer immunotherapy candidate.

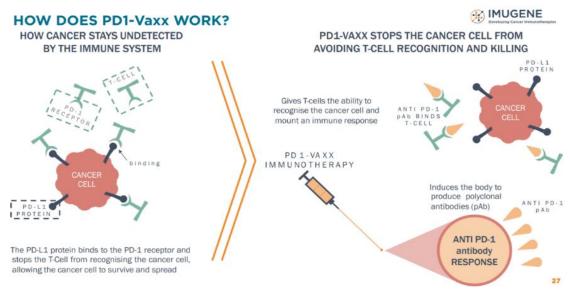


Exhibit 4: PD-1 Vaxx Mechanism of Action. Source: Imugene Limited

Competitive Overview

EGFR inhibitors and ICI mAbs have cornered a large portion of the NSCLC market in dollar terms. Erlotinib (Tarceva), Osimertinib (Tagrisso), Atezolizumab (Tecentriq), Nivolumab (Opdivo), and Pembrolizumab (Keytruda) are a few of the major approved therapeutics for NSCLC. Additionally, thousands of clinical trials are currently underway utilizing different therapeutic approaches for the treatment of NSCLC. By the time PD-1 Vaxx gets FDA approval and is commercialized (estimated: 2028), most of the above-stated drugs would have lost their exclusivity or would be on the verge of losing their exclusivity, leading to the entrance of low-cost biosimilars. A clearer insight into Imugene's competitive positioning within the NSCLC market would be based on its progress in clinical trials, thus providing an idea of its efficacy and safety when compared to other therapeutics in the market. The pricing of PD-1 Vaxx will also play a major role in its ability to capture increased market share.

HER-Vaxx and PD-1 Vaxx have been evaluated as monotherapy in pre-clinical and clinical settings exhibiting anti-tumor properties with tolerable safety profiles. Historically cancer vaccines and immune checkpoint blockades have been limited by low clinical efficacy and development of resistance, respectively. The company's approach to using both in a combination therapy setting in further clinical trials could be a way to improve overall therapeutic outcomes (enhancing the immune response by overcoming the immunosuppressive tumor microenvironment with limited toxicity and resistance). Both these therapies are targeting a sizeable yet competitive market.



Oncolytic Virus - An Emerging Frontier in Cancer Immunotherapy

A virus is an infectious agent that utilizes the host's genetic material to replicate itself, thereby spreading to healthy cells. One such substrate of naturally occurring or genetically modified viruses that act as a potent therapeutic agent and have the ability to infect and kill cancer cells are commonly called Oncolytic viruses. Cancer cells have impaired anti-viral defenses and are susceptible to infections. Modification in Oncolytic viruses through genetic engineering enhances their ability to deliver therapeutic payload and diminishes the possibility of widespread resistance.

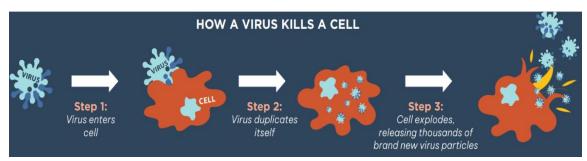


Exhibit 5: Oncolytic Virus Mechanism of Action. Source: Imugene Limited

Although oncolytic viruses are potentially powerful therapeutic agents for cancer treatment, a single type of oncolytic virus is not enough to destroy all the cancer cells due to the heterogeneity of cancer tissues and the complexity of cancer cells. Determining the virus and delivery method are two of the most challenging and crucial parts of the underlying therapy.

Developed at the City of Hope Cancer Center in Los Angeles, California, CF33 is a chimeric vaccinia virus derived from genomic sequencing of multiple strains of vaccinia virus, thus generating a safer and more potent virus that is also immunostimulatory. Nine different "parental" virus strains of orthopoxvirus (cowpox virus, rabbitpox virus, raccoon pox virus) were introduced, grown, and titered in CV-1 cell lines leading to the creation of 100 chimeric orthopoxviruses. These "daughter" virus strains contained different combinations of genes from the parental virus, which were then tested for potency by screening them against the NCI-60 panel. CF33 proved to be the most potent and is chosen further for in vivo and clinical development.

VAXINIA (CF33 + hNIS)

CF33 with Human Sodium-Iodide Symporter (hNIS) gene is currently being evaluated in the phase 1 Mixed Advanced Solid Tumors (MAST) study. Encoding of hNIS gene enables reliable non-imaging of viral replication using positron emission tomography mediating targeted radiotherapy. CF33 encoded hNIS gene has been previously studied in colon cancer xenograft mouse model, demonstrating the synergy of oncolytic viral therapy with radioablation in vivo. The cancer cell lines induced xenografts were implanted into athymic nude female mice and were administered with either intratumoral PBS or CF33-hNIS injections. CF33-hNIS-induced tumor growth abrogation and regression were observed in animals with HCT116-derived xenografts. Abrogation and regression of tumor growth were also observed in HT29-derived tumors in some mice, but the results were not statistically significant. Additionally, the treatment was found synergistic with I-131 Radioisotope, exhibiting an effective and sustained tumor growth inhibition when compared to monotherapy treatment with PBS, CF33-hNIS, or I-131. The use of a more targeted approach (CF33 + hNIS + I-131) would decrease toxicity and enhance efficacy at a lower dosage and cost.



Oncolytic Virus Market and Competitive Overview

Oncolytic virus as a treatment modality has gained a lot of attention after positive results from many clinical trials. The ability to infect cancer cells selectively while allowing for additional genetic modification and stimulating the innate immune system to fight cancer cells offers a novel approach to cancer immunotherapy. The most notable shift in the OV field has been from its application as a direct lytic agent to its development as a multimodal agent involving cell lysis, immune stimulation, and gene therapy, which further established OV as a strong candidate for cancer therapy.³

There are 162 Oncolytic virus therapy currently under active development as of June 2022, of which only four have successfully navigated through clinical development and received regulatory approval. 63% or 103 therapies are in the early stages and haven't even progressed through clinical trials. Of the four OV therapies that have been approved, Imlygic (talimogene laherparepvec) is the most noteworthy, being studied across 50 clinical trials. It was approved for the treatment of melanoma in 2015 by the FDA and EMA. Other OV therapy approval relates to comparatively smaller pharmaceutical markets.

onCARlytics - 'Mark and Kill' Approach

Expanding the Immuno-oncology portfolio, the company licensed the CD19 Oncolytic virus from City of Hope, enabling CD19 CAR-T against solid tumors. CD19-directed CAR T as monotherapy has shown remarkable success in hematological malignancies, but its applicability in solid tumors is accompanied by various challenges which have led to poor outcomes in pre-clinical and clinical studies. Antigen escape, toxicity related to CAR-T cells, antigen heterogeneity, the trafficking of CAR-T cells and tumor infiltration, poor stability, and immunosuppressive microenvironment are among the limitations that impede the ability of CAR-T cell therapy to produce sustained response in patients with solid malignancies (accounts for 90% of all cancer cases worldwide).

Higher generation CAR-T therapy has been shown to have superior ant-tumor activity when compared to first and second generations therapies. However, even with the use of a high later generation of CAR T-cells products, objective responses for trials in solid tumors have been mostly disappointing. Many studies are focusing on enhancing the applicability and usefulness of CAR-T therapies by combining it with other adjuvant therapies. One such combination therapy where Imugene believes that the combination can yield promising results is the use of Oncolytic virotherapy with CD19-directed CAR-T therapy. OVs' ability to selectively replicate themselves while developing adaptive anti-tumor immunity has gained a lot of attention since the FDA approval of T-VEC. OVs can also be engineered in such a way that forces the expression of certain genes in the tumor milieu, that is, activating the targeted transgenic delivery potential, thus augmenting the oncolytic viral treatment.

The company is leveraging the transgenic delivery mechanism of Oncolytic Viruses such as CF33 to infect cancer cells and encourage the selective expression of a CAR-targetable tumor antigen, a truncated non-signalling variant of CD19 (CD19t). These underlying mechanisms of OVs allow endogenous production of T-cells and CAR T-cell infiltration into tumors, eventually exhibiting cancer-killing activities. Imugene obtained the worldwide licenses of the patents covering the cell therapy technology, which includes CF33-CD19, known as onCARlyticsTM, developed at City of Hope.

³ Cancers 2021, 13(21), 5452; https://doi.org/10.3390/cancers13215452



Strategic Partnerships

To further the progress of onCARlytics, the company entered into research collaboration agreements with Eureka Therapeutics Inc., Celularity Inc and Arovella Therapeutics Ltd. These partnerships would employ the clinical development expertise of the respective parties in the agreement benefiting Imugene to fast-track the clinical development of onCARlytics. The company has received U.S. FDA IND clearance to initiate a Phase 1 clinical study for the onCARlytics platform in patients with solid tumors.

The collaboration will explore the use case of Imugene's onCARlytics (CF33-CD19) in combination with Eureka's anti-CD19 ARTEMIS® autologous T-cell therapy, Celularity's allogeneic CAR T-cell therapy (CyCART-19) and Arovella's CAR19-iNKT (ALA-101) cell therapy. The readout from the preclinical studies performed in collaboration with Arovella is expected in H2 2023. These partnerships will allow Imugene to evaluate onCARlytics in both allogeneic and autologous therapeutic settings targeting solid tumors. The agreement yields highly complementary oncology therapies that have the ability to force CD19 expression on the surface of tumor cells leading to CAR-T recognition and killing of cancer cells.

The company's recent acquisition of Precision Biosciences' allogeneic CAR T cell therapy, azercel is another major addition to its pipeline that complements Imugene's onCARlytics program. While azer-cel continues to progress for r/r NHL patients in clinical trials, the acquisition allows Imugene to develop its own combination solution in multiple hard-to-treat solid tumor indications. This enables the company to streamline R&D, manufacturing, marketing, and distribution processes, eliminating reliance on third parties, potentially leading to significant cost saving to market.



Key Risks

- Clinical Development Risk Imugene's market value is tied to its therapeutic products
 currently in clinical trials. Failure to deliver satisfactory efficacy and safety profile or
 statistically significant results could negatively impact the company's value.
- Regulatory Risk Post successful completion of clinical trials, the company is required
 to gain regulatory approval from foreign and or domestic regulatory bodies. Failure to
 obtain regulatory approval in any of the targeted geographies could negatively impact the
 company's addressable market and, therefore, the overall value of the company.
- **Foreign Exchange Risk** The company is exposed to foreign exchange risk, given that clinical trials and other research activities are carried out in foreign geographies. Wide fluctuations in foreign currency could impact the company's cost profile and cash burn.
- **Financing and Dilution Risk** Imugene is a pre-revenue biotechnology company and relies on external sources of financing to progress its pipeline. Failure or delays in obtaining the required capital would hinder the company's operating and research activities, leading to deferment in expected clinical and approval timelines. Financing capital by issuing further equity will dilute the shareholding of existing shareholders.
- Competitive Risk The cancer Immunotherapy market has expanded in the past decade
 with multiple approvals and thousands of therapeutic products currently in clinical trials.
 Imugene faces competition from many of the therapeutic products being evaluated in
 clinical trials, which might affect the company's ability to position and gain market share
 in its targeted geographies.

These risk factors are not comprehensive. For a full list of risk factors, please read Imagene's latest prospectus and/or annual filings.



Appendix

Income Statement	FY2022 A	FY2023 A	FY2024 E	FY2025 E	FY2026 E
Net sales	-	-	-	-	87,567,258.3
Cost of sales	-	-	-	-	(17,513,451.7)
Gross profit	-	-	-	-	70,053,806.6
Operating expenses					
General and Administrative Expenses	(14,061,251.0)	(20,428,456.0)	(25,475,665.4)	(31,304,956.2)	(41,464,017.9)
Marketing Expense	-	-	-	-	-
Research and Development	(36,611,892.0)	(30,864,770.0)	(36,849,000.0)	(44,468,800.0)	(42,585,182.8)
Operating Loss	(50,673,143.0)	(51,293,226.0)	(62,324,665.4)	(75,773,756.2)	(13,995,394.1)
Other income/ (expense)					
Research and development tax incentive	12,614,130.0	11,741,527.0	12,565,047.9	15,255,486.0	6,173,491.7
Other grants	-	-	-	-	-
Other gains/(losses) - net	117,914.0	(215,540.0)	-	-	-
Finance income	192,249.0	1,879,802.0	1,531,506.6	848,551.0	603,079.3
Finance expense	(120,324.0)	(27,453.0)	-	-	-
Profit before exceptional items, extraordinary items and tax	(37,869,174.0)	(37,914,890.0)	(48,228,110.9)	(59,669,719.2)	(7,218,823.0)
Exchange loss (net)	-	-	-	-	-
Employee seperation cost	-	-	-	-	-
Profit before tax from continuing operations	(37,869,174.0)	(37,914,890.0)	(48,228,110.9)	(59,669,719.2)	(7,218,823.0)
Income tax (expense) benefit	-	-	-	-	-
Net earnings including noncontrolling interests	(37,869,174.0)	(37,914,890.0)	(48,228,110.9)	(59,669,719.2)	(7,218,823.0)

Exhibit 6: Income Statement (in A\$). Source: Diamond Equity Research



Disclosures

Diamond Equity Research, LLC has created and distributed this report. This report is based on information we consider reliable, including the subject of the report. This report does not explicitly or implicitly affirm that the information contained within this document is accurate and/or comprehensive, and as such should not be relied on in such a capacity. All information contained within this report is subject to change without any formal or other notice provided. Diamond Equity Research, LLC is not a FINRA registered broker/dealer or investment adviser and does not provide investment banking services and follows customary internal trading procedures pending the release of the report found on disclosure page.

This document is not produced in conjunction with a security offering and is not an offering to purchase securities. This report does not consider individual circumstances and does not take into consideration individual investor preferences. Recipients of this report should consult professionals around their personal situation, including taxation. Statements within this report may constitute forward-looking statements, these statements involve many risk factors and general uncertainties around the business, industry, and macroeconomic environment. Investors need to be aware of the high degree of risk in micro capitalization equities.

Diamond Equity Research LLC is being compensated by Imugene Limited for producing research materials regarding Imugene Limited and its securities, which is meant to subsidize the high cost of creating the report and monitoring the security, however the views in the report reflect that of Diamond Equity Research. All payments are received upfront and are billed for an annual or semi-annual research engagement. As of 11/06/23 the issuer had paid us \$66,980 for our research services, which commenced 08/19/22 and is billed annually consisting of \$33,000 in first year and \$33,980 in second year. Diamond Equity Research LLC may be compensated for non-research related services, including presenting at Diamond Equity Research investment conferences, press releases and other additional services. The non-research related service cost is dependent on the company, but usually do not exceed \$5,000. The issuer has not paid us for non-research related services as of 11/06/23. Issuers are not required to engage us for these additional services. Diamond Equity Research LLC is being compensated by Arovella Therapeutics Limited for producing research materials regarding Arovella Therapeutics Limited and its securities, which is meant to subsidize the high cost of creating the report and monitoring the security, however the views in the report reflect that of Diamond Equity Research. All payments are received upfront and are billed for research engagement. As of 11/06/2023 the issuer had paid us \$68,000 for our research services, which commenced 11/11/2021, consisting of \$33,000 for the first year of coverage upfront and \$35,000 for the following year of research coverage in installments of \$17,500 for consecutive six months of research coverage, upfront in each period. Diamond Equity Research LLC may be compensated for non-research related services, including presenting at Diamond Equity Research investment conferences, press releases and other additional services. The non-research related service cost is dependent on the company, but usually do not exceed \$5,000. The issuer has paid us \$2,500 for non-research related services as of 11/06/2023 for presenting at an investment conference. Issuers are not required to engage us for these additional services. Additional fees may have accrued since then.

Diamond Equity Research, LLC is not a registered broker dealer and does not conduct investment banking or receive commission sharing revenue arrangements related to the subject company of the report. The price per share and trading volume of subject company and companies referenced in this report may fluctuate and Diamond Equity Research, LLC is not liable for these inherent market fluctuations. The past performance of this investment is not indicative of the future performance, no returns are guaranteed, and a loss of capital may occur. Certain transactions, such as those involving futures, options, and other derivatives, can result in substantial risk and are not suitable for all investors.

Photocopying, duplicating, or otherwise altering or distributing Diamond Equity Research, LLC reports is prohibited without explicit written permission. This report is disseminated primarily electronically and is made available to all recipients. Additional information is available upon request. For further questions, please contact research@diamondequityresearch.com