Imugene Limited

Commentary Note

Advancing as a pure play in cancer immunotherapy

Pharma and Biotech

25 October 2018

Imugene Ltd (IMU) is a clinical stage, immuno-oncology focused biotechnology company developing B-cell vaccines to treat cancer. It has three lead products: HER-Vaxx, a B-cell peptide vaccine designed to stimulate a patient's own immune system to produce polyclonal antibodies against a cancer target; KEY-Vaxx, which aims to replicate the efficacy of immune checkpoint inhibitors (ICI) monoclonal antibodies that are amongst the current methods used to treat a range of cancers and B-Vaxx, a HER2 B-cell vaccine designed to block the oncoprotein HER2 on the surface of the cancer cells. In June 2018, Imugene secured KEY-Vaxx and B-Vaxx through a licencing programme with Ohio State University and Mayo Clinic. KEY-Vaxx is being progressed to clinical trials in calendar 2019. If these trials are successful, there is likely to be keen interest from major pharma players in advancing the planned Phase 1 study. Imugene held net cash of $7.8m at June 30 and has subsequently raised gross proceeds of $20.1m through an institutional share placement and non-renounceable rights issue at $0.027 per share. Management believes this should be enough to take the company through to the end of current planned trials.

KEY POINTS

Pure play in cancer immunotherapy — Imugene is a pure play in cancer immunotherapy, developing B-cells to produce antibodies against cancer targets. The company's lead product, HER-Vaxx, is a proprietary HER2 positive cancer vaccine that stimulates a polyclonal antibody response against the HER2/neu receptors prevalent in 15-25% of breast and gastric cancers. The company has successfully completed a Phase 1 clinical trial in patients with metastatic breast cancer and is now embarking on a Phase 1b gastric cancer study testing three different doses of the HER-Vaxx vaccine with up to 18 patients in combination with chemotherapy across eight trial sites. This trial completed recruitment in September 2018. Its in-licenced program-death 1 (PD1) B-cell vaccine, KEY-Vaxx, will enter a Phase 1 study in 2019 and is seeking to produce an anti-cancer effect like existing immune checkpoint inhibitors (ICI) monoclonal antibodies Keytruda and Opdivo.

Supported by leading international cancer experts – Imugene is led by a management team with deep experience in drug development. The company also has attracted some of the world's leading oncology and immunology experts to its Scientific Advisory Board.

In-licence deal with Ohio State University/Mayo Clinic is transformative — Imugene has in-licenced a pipeline of B-cell vaccines from Ohio State University and Mayo Clinic which has enabled it to accelerate the key PD-1 and PD-1/HER2 combination programs by 24 months, compared to its original pipeline.

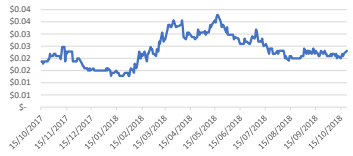
Well-funded following recent placement/NRU —Imugene completed a $20.1m capital raise in July 2018, comprising a $12.0m placement with institutional investors at $0.027 per share, and a one for 9.5 non-renounceable rights issue, raising $8.1m. This is in addition to the $7.8m the company held in cash at June 30.

Phase II deal is the target — Success in the current trial pipeline could potentially attract interest from big pharma companies. Analysis of comparable Phase I/II licencing deals from 2011-2016 reveal an average upfront payment of US$32m as part of a total deal arrangement of ~US$280m. As an early stage drug developer, Imugene's value creation for shareholders will depend on the success of its current R&D pipeline and future potential partnership arrangements.

Company Summary

Share price (22 Oct 18)	$0.023
Shares on issue	3.6BN
Market Cap	$82.8M
Net Cash post raise	~$27.0M
Enterprise Value	$55.8M
Trading Platforms	PrimaryMarkets.com/ ASX

Share price performance (12 mths)



Upside Case

- A pure-play cancer opportunity in the highly sought cancer immunotherapy field
- Highly credentialed board, scientific advisory board and senior management team
- KEY-Vaxx has demonstrated potential in pre-clinical studies

Downside Case

- Potential risk that KEY-Vaxx can trigger unregulated autoimmune responses in patients but, encouragingly no evidence of autoimmune disorders in preclinical trials to date
- Still at least 12-24 months of clinical trials ahead
- The launch of biosimilars to Herceptin could put downward pressure on pricing and narrow the benefit of HER-Vaxx

Board of Directors

Executive Chairman	Paul Hopper
CEO and Managing Director	Leslie Chong
Non-Executive Director	Charles Walker
Non-Executive Director	Dr Axel Hoos

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Disclaimer and disclosure of interest are displayed on the last two pages of this report.

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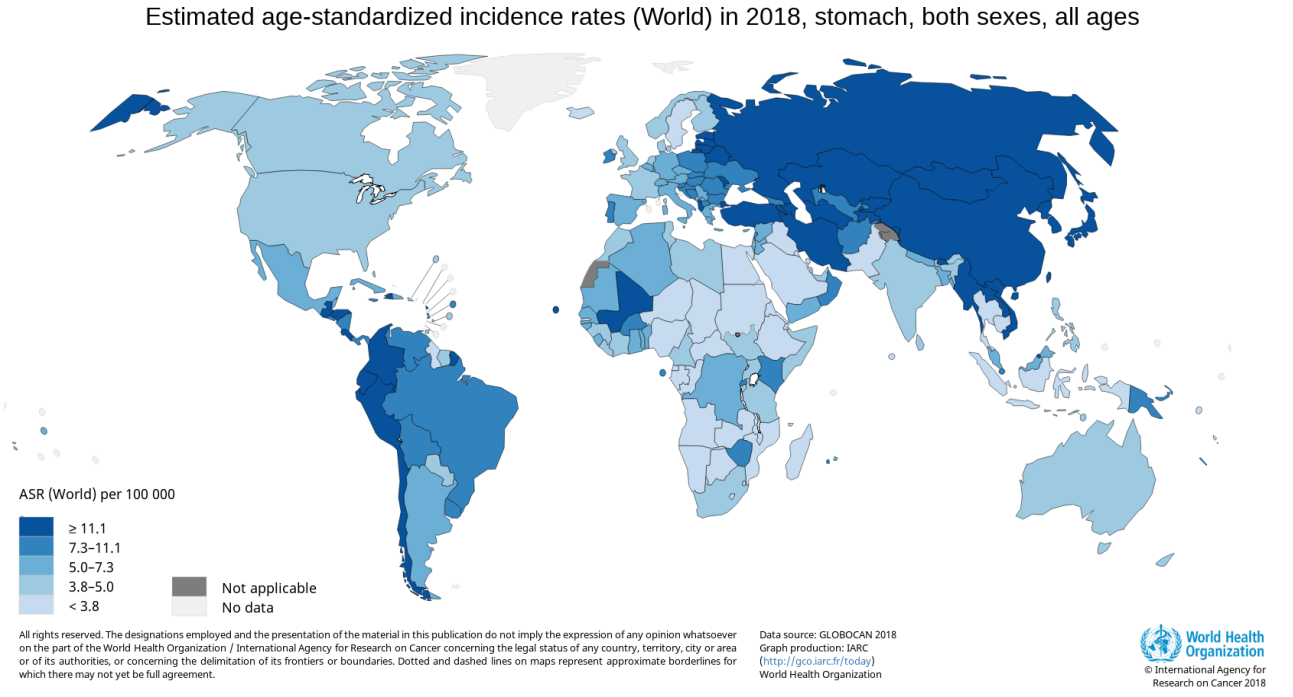
COMPANY OVERVIEW

What is Imugene?

Imugene is a clinical stage immuno-oncology company developing a range of novel and new immunotherapies that seek to harness the immune system of cancer patients to generate antibodies against tumours. The immunotherapies are specifically focused on gastric and breast cancers, but potentially could be extended to other tumour associated antigens. Imugene's B-cell vaccines seek to achieve a similar or greater effect than existing synthetically manufactured monoclonal antibody therapies. Imugene is developing a B cell vaccine, KEY-Vaxx, targeting PD-1 and specifically the same PD-1 binding region of Merck's Keytruda. Its lead in-house product is HER-Vaxx, a proprietary therapeutic cancer immunotherapy that stimulates a polyclonal antibody response to HER-2/neu, the same biomarker targeted by the US$6.9bn per year drug Herceptin, owned by Roche/Genentech. The company's original formulation of HER-Vaxx was tested in a Phase 1 breast cancer trial and demonstrated that it stimulated antibody responses against three separate peptides in eight out of 10 patients in the study. This potentially improves on the Herceptin and Perjeta combination that reduces the hazard ratio of death to 0.66 in breast cancer. Imugene is now conducting a Phase 1b trial of HER-Vaxx in gastric cancer patients in Asia and Europe. Gastric cancer presents a higher unmet need than breast cancer with the World Health Organisation estimating that in 2018, 1,033,701[1] new cases will present, with almost 80% of those (769,728) in Asia (more than 400,000 in China), and 133,133 in Europe. The heat map in Exhibit 1 below sets out the higher rates of gastric cancer in Asia, parts of Europe and Latin America. This compares with an estimated 2,088,876 new breast cancer cases. Mortality rates from gastric cancer are higher, 782,685 estimated for 2018, versus an estimated 626,679 for breast cancer.

Exhibit 1: Estimated incidence rates of stomach cancer in 2018



Source: Globocan, World Health Organisation

1 Globocan, World Health Organisation statistics, http://gcu.iarc.fr

Company background

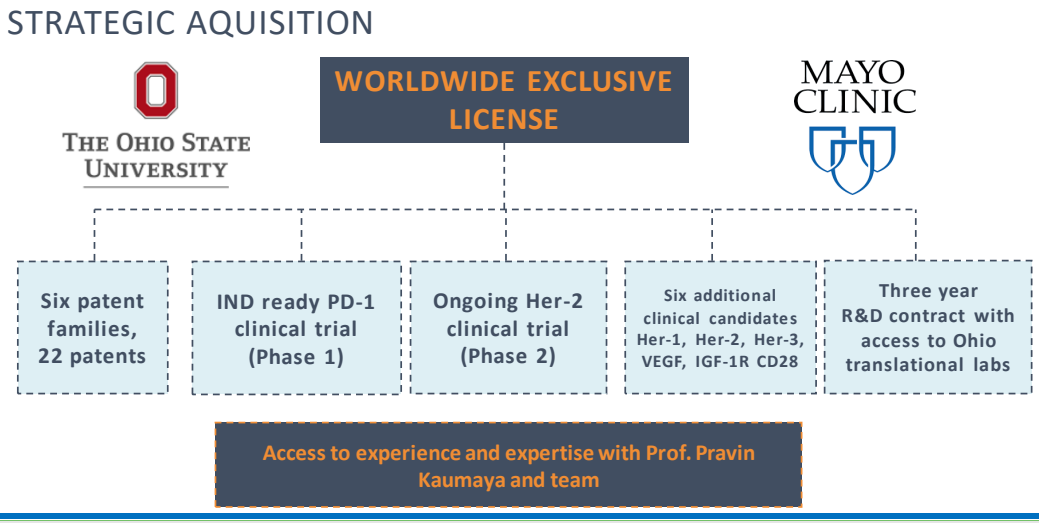
Imugene has been a listed entity on the ASX since the early 2000s. Its original focus was the development of vaccines for Porcine Respiratory and Reproductive Syndrome and Swine Flu for the pig industry and vaccines for Avian Flu and coccidiosis for the poultry industry. In August 2012, the company acquired, after a strategic review, the proprietary drug delivery technology Linguet, to improve the efficacy and safety of a diverse number of nutraceuticals (vitamins and supplements), prescription and over the counter medicines with an initial focus on Vitamin D. The acquisition was scrip- based with 100m shares issued in exchange.

In December 2013, under the guidance of current chairman, Paul Hopper, Imugene acquired BioLife Science Qld which owned the rights to a gastric and breast immuno-oncology cancer drug known as HER-Vaxx. BioLife Science was incorporated in April 2012 and had acquired from BioLife Science Forschungs-und Entwicklungsges mbHH (BSFE, a company incorporated in Austria), the ownership rights to two families of granted and pending patents (specified IP). BSFE was founded in 2000 by scientists from the University of Vienna and Euro Capital Partners. BSFE gained an 18% royalty, based on Imugene sales, in exchange for the IP. Mr Hopper, a former COO of BioLife Science Qld, following Imugene shareholder approval, was granted 68.3m Imugene shares ($1m at A$0.015/share) in connection with the BioLife acquisition. At the time Imugene raised A$2.6m to fund the Phase I trials. The company has subsequently raised ~$42m, including the $20.1m in gross proceeds post June 30, 2018, to develop the portfolio.

Transformative Acquisition

In June 2018, Imugene announced it had signed an exclusive, world-wide licence to the entire body of cancer vaccine work and intellectual property developed by Professor Pravin Kaumaya of the Ohio State University Wexner Medical Centre and Dr Tanios Bekaii Saab of the Mayo Clinic. The transaction is potentially transformative for Imugene, taking the company from a one product, one-trial focused opportunity to a substantial intellectual property estate with six patent families comprising 16 patents or pending applications for a large range of B-cell peptide and cancer vaccines. These included PD-1 HER1, HER2, HER3 VEGF, IGF-1R, CD 28 peptides and combinations. The transaction also delivered the PD-1 checkpoint inhibitor B-cell vaccine for Phase 1 trial and FDA-approved Phase II HER2 Clinical trials at Ohio State. Terms of the transaction were not specified beyond being a commercially attractive upfront payment, a royalty rate in low single digit royalty on sales, and exclusive, world-wide and sub-licensable until expiry of the last patent. The last of the PD-1 patents are due to expire in 2038 and the last of the non-PD-1 patents are due to expire in 2035. Imugene noted that it did not expect the transaction cost to impact materially on its FY18 or FY19 financial results. We set out the key benefits of the transaction in Exhibit 2.

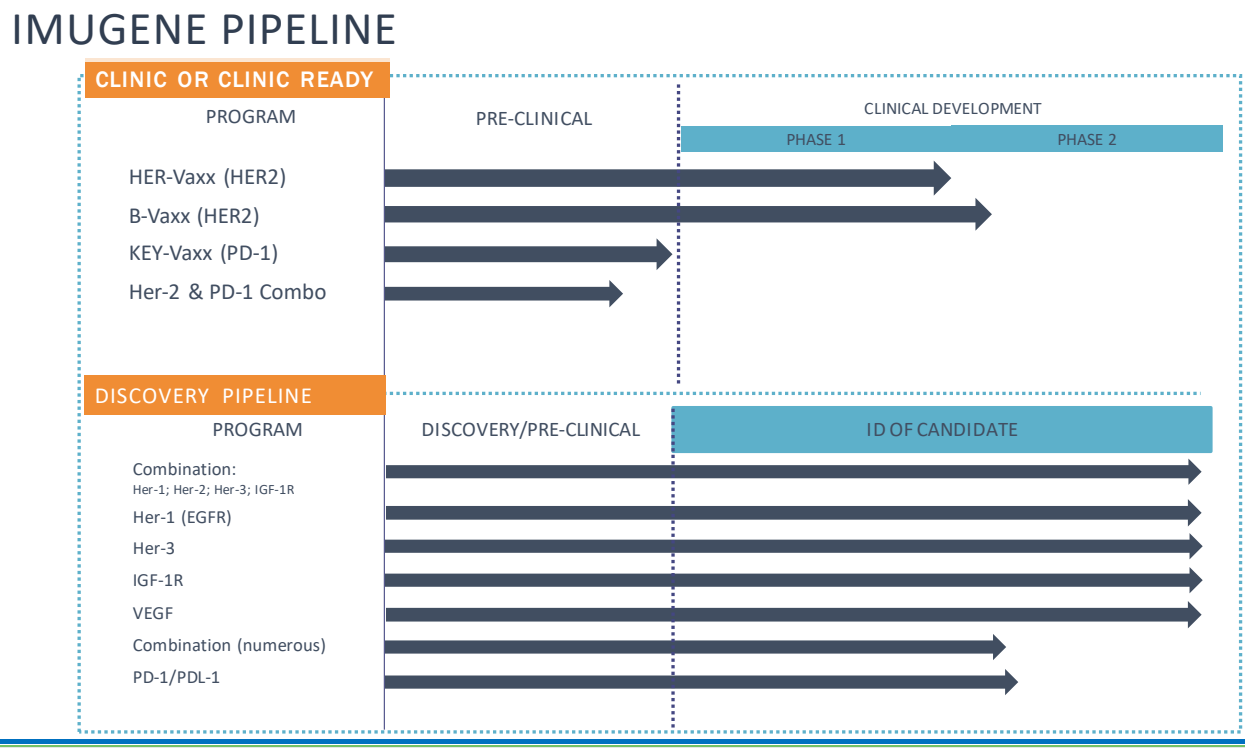
Exhibit 2: Ohio State University and Mayo Clinic B-Cell peptide vaccine portfolio transaction



Source: Imugene

It should be noted that the PD-1 intellectual property portfolio is licensed from OSU/Mayo Clinic while all other IP targets are licensed from OSU only. Exhibit 3 shows how Imugene expects the in-licences programs to fit into its expanded candidate pipeline.

Exhibit 3: Expanded lead candidate and discovery/preclinical pipeline

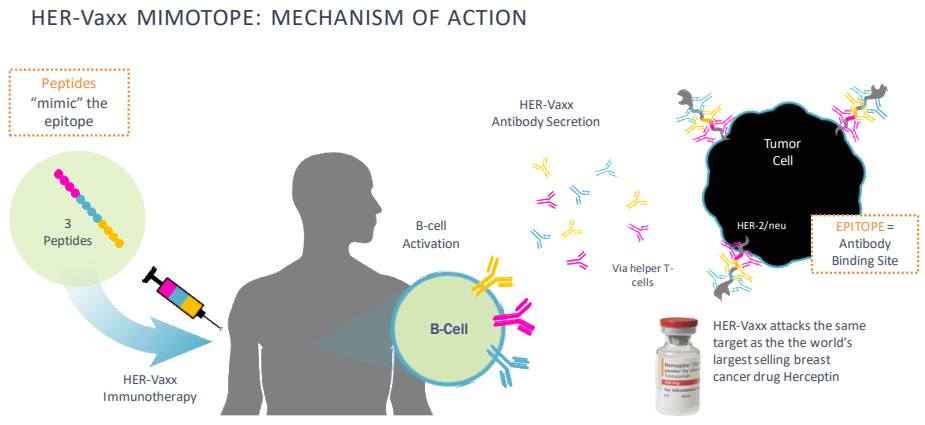


Source: Imugene

HER-Vaxx programme

Imugene's in-house HER2 vaccine, HER-Vaxx, is in a Phase Ib/II study in gastric cancer. HER-Vaxx aims to stimulate production of high levels of polyclonal antibodies against the HER2/neu receptors which are prevalent in both breast cancer and gastric cancer. How the therapy works is set out in the following exhibit.

Exhibit 4: HER-Vaxx – How it works



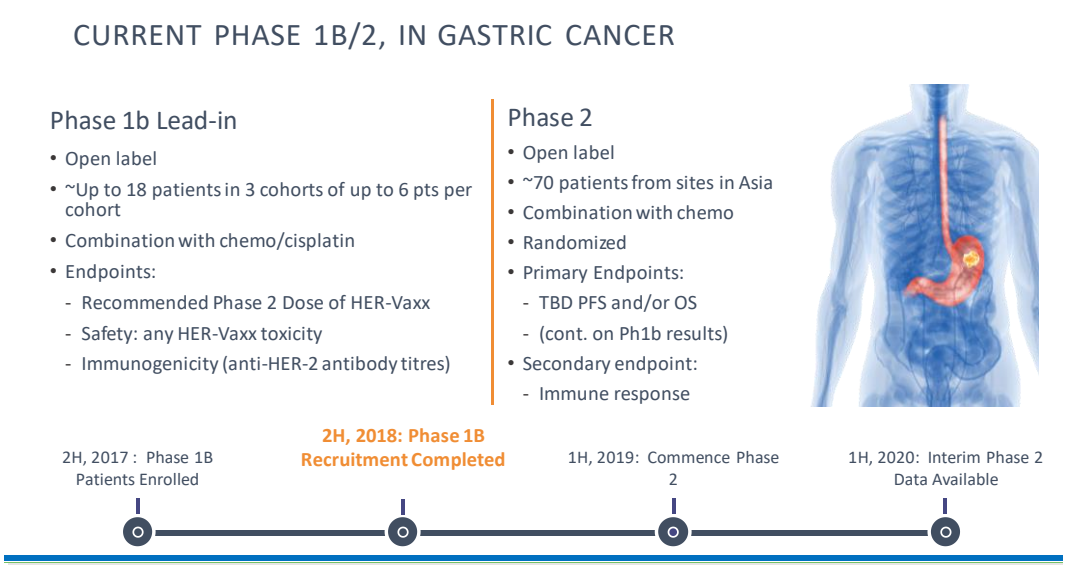
Source: Imugene

The company has successfully conducted a Phase 1 clinical trial in patients with metastatic breast cancer, demonstrating that it stimulated antibody responses against three separate peptides in eight out of 10 patients in the study. This potentially improves on the current Herceptin and Perjeta combination that reduces the hazard ratio of death to 0.66 in breast cancer.

Imugene has chosen to switch the trials to gastric cancer due to the fact that it is not nearly as well served as breast cancer, has lower survival rates and is around the same number of patients (15-25%) being HER2 positive. Prevailing vaccines, such as Herceptin, also have not encountered the same success with gastric cancer as with breast cancer.

The Phase 1b lead-in trial is testing three different doses of the HER-Vaxx vaccine in up to 18 patients in combination with chemotherapy across eight trial sites. The key end points of this Phase are to identify the optimal dose of HER-Vaxx for the Phase 2 part of the study and confirm safety. The company announced in September 2018 that the Phase 1b trial had completed recruitment. Phase 1B will be followed by a randomised open label Phase 2 study with 68 patients with metastatic gastric cancer overexpressing HER2 and will be randomised into two arms of either HER-Vaxx plus chemotherapy or chemotherapy on its own. The end points that the trial wants to monitor will be safety, immune response, progression-free survival and overall survival. The timeline for these phases is laid out in the following exhibit.

Exhibit 5: Timeline of the Phase IB/Phase 2 HER-Vaxx study



Source: Imugene

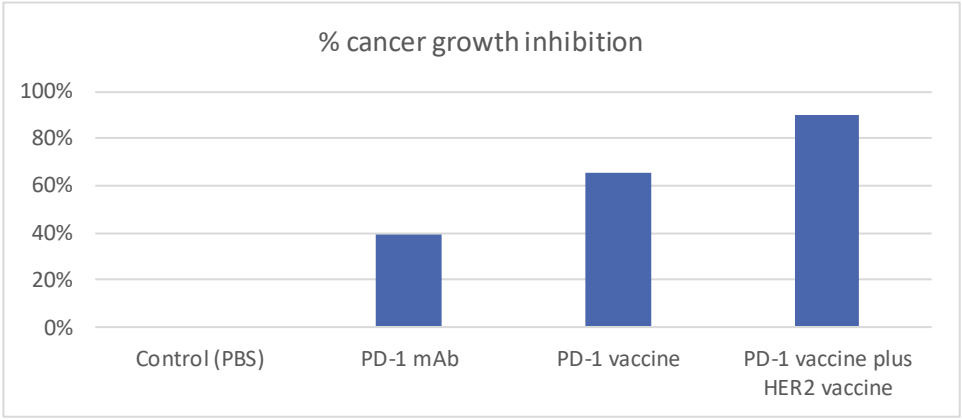
HER-Vaxx is seeking to trigger the immune responses similar to those generated by Herceptin. Herceptin (owned by Roche/Genenetech) reported sales of US$6.7bn in 2017.

KEY-Vaxx programme

OSU's pipeline of PD-1 peptide vaccines is around 24 months ahead of Imugene's in-house PD-1 mimotope programme. Imugene refers to the lead candidate from these vaccines as KEY-Vaxx. The significance of this vaccine is that it has demonstrated efficacy in an industry-acknowledged mouse colon cancer model, where the PD-1 targeting B-cell vaccine is superior to the gold standard mouse PD-1 monoclonal antibody (used in preclinical model testing for Keytruda and Opdivo). Monoclonal antibody immunotherapies Keytruda (Merck) and Opdivo (Bristol Myer Squibb) targeting PD-1 sold USD$3.8B and US$4.9B, respectively, in 2017. Whilst acknowledging the rapid rise in clinical trials involving PD-1 and their combination with other

treatments[2], a PD-1 B-cell vaccination approach represents a paradigm shift in cancer immunotherapy. The combination of the PD-1 vaccine with the acquired Phase II Her-2 vaccine significantly inhibits tumour growth c/w mAb control in a Her-2+ model of colon cancer. The results of the study are set out in the following exhibit.

Exhibit 6: PD-1/HER-2 vaccine combination active in model of colorectal cancer with no signs of toxicity (inhibition of cancer growth 16 days after infusion of cancer cells)



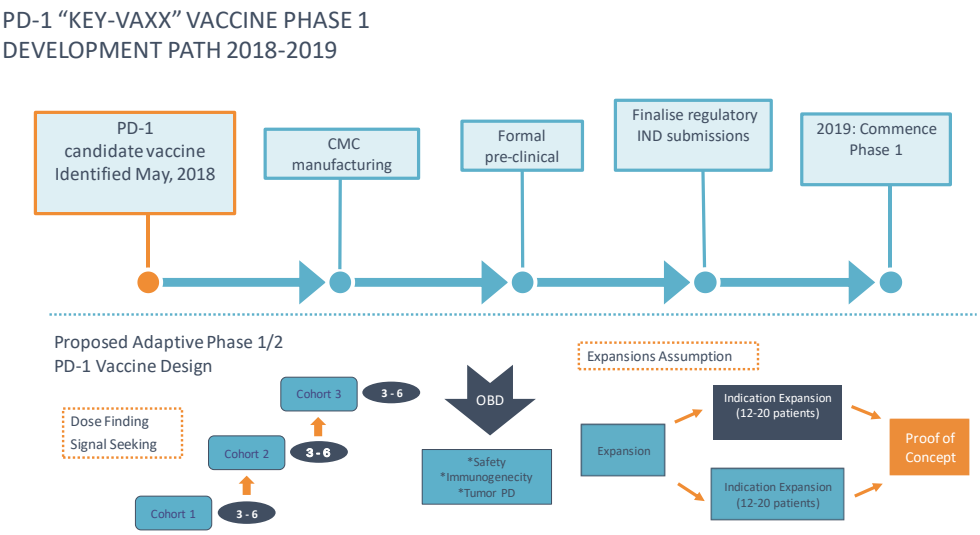
Source: Imugene

Other points to note:

- All mice vaccinated over a period of 9 weeks showed no signs of scruffiness, lesions, and lethargy;
- Organs (spleen, liver, heart, lung, kidney, and tumour) from the Balb/c mice vaccinated with combination peptides (HER-2 and PD-1) were collected from mice and submitted for analysis
- No significant lesions were noted in any of the organs submitted for histologic evaluation.
- There were also no overt biochemical abnormalities noted.

Imugene late last month announced that it has appointed US-based cGMP peptide manufacturer AmbioPharm to supply clinical grade KEY-Vaxx PD-1 vaccine for its proposed Phase 1 PD-1 clinical grade trial. The development path for KEY-Vaxx is set out in the following exhibit.

Exhibit 7: KEY-Vaxx Phase I development path



Source: Imugene

2 Tang et al. Comprehensive analysis of the clinical immuno-oncology landscape, Annals of Oncology, 2017

Board and Management

Paul Hopper leads the board of Imugene and has experience in developing pathways for commercialisation of biotechnology companies, having previously been chairman of former-ASX listed Viralytics which was acquired by Merck at a significant premium (+160%) to its then-listed price.

The management team is led by Leslie Chong, who joined Imugene in October 2015 as CEO and was appointed Managing Director in March 2018. Ms Chong previously was the Senior Clinical Program Lead at Genentech Inc, in San Francisco and brings more than 20 years' experience in Phase I-III clinical program development in the field of oncology. The board and senior management team, set out in the following exhibit, bring decades of experience in drug development with much of this in the field of oncology.

Exhibit 8: Board and Management profiles

Director		Public Co directorships	Background
Paul Hopper	Executive Chairman	Executive Director/Founder of Prescient Therapeutics (PTX)	International and ASX biotech capital markets experience in immune-oncology/vaccines. Former chairman of Viralytics (acquired by Merck in Feb 2018 for $500m, a 160% premium), Advisor to LA-based Cappello Group and founder of Pathway Oncology
Leslie Chong	Managing Director & CEO		More than 20 years oncology experience in Phase I-III clinical program development. Previously Senior Clinical Program Lead at San Francisco-based Genentech
Dr Axel Hoos	Non-Executive Director		Senior Vice President and Head of Oncology at GSK, former medical lead for Yervoy, the first survival improving medicine in immuno-oncology
Charles Walker	Non-Executive Director		Former CEO of IMU, former CEO/CFO of Alchemia (ACL), experienced in capital market raisings for international tech transactions
Management			
Leslie Chong	Managing Director & CEO		As above
Dr Nick Ede	Chief Technology Officer		More than 25 years peptide vaccine and drug development, former CEO Adistem and Mimotopes
Dr Mark Marino	Chief Medical Officer		Former CMO of Cytori, Head of Clinical Pharmacology at Eisai and Roche, Head of Research and Early Development at Mannkind, VP Clinical Development at Daiichi-Sankyo; more than 28 years' experience in drug development
Dr Anthony Good	Vice President of Clinical Research		More than 20 years global clinical development experience

Source: Company data

Scientific Advisory Board

Imugene has access to some of the world's leading oncologists and immunologists through its Scientific Advisory Board:

- Dr Josep Tabernero is President of the European Society for medical Oncology and is head of the Medical Oncology Department at the Vall d'Hebron Barcelona Hospital Campus, Director of the Vall d'Hebron Institute of Oncology and leads the Research Innovation of Catalonian Cancer Centers Network. He directs the Barcelona-based Vall d'Hebron Institute of Oncology's gastrointestinal and endocrine tumours group and the research unit for molecular therapy of cancer;
- Professor Pravin Kaumaya of Ohio State University Comprehensive Cancer Centre, and the lead inventor of Imugene's newly licensed peptide cancer vaccine programs from Ohio State University. He has developed multiple cancer vaccines, is a recognised world leader in cancer vaccine research and author of more than 130 peer-reviewed articles. Currently Professor of Medicine in Department of Obstetrics and Gynaecology at the Ohio State University Wexner Medical Centre and the James Comprehensive Cancer Centre;

- Professor Tanios Bekail Saab, program co-leader, GI Cancer, Mayo Clinic Cancer Centre, senior associate consultant with the Mayo Clinic in Arizona and Medical Director, Cancer Clinical Research Office (CCRO);
- Professor Peter Schmid is the Chair of Cancer Medicine at Queen Marky Hospital London and leads the Centre for Experimental Medicine at Barts Cancer Institute; His field of expertise is in breast and lung cancer, cancer immunotherapy and early drug development;
- Dr Yelina Janjigian is a medical oncologist at the Memorial Sloan Kettering Cancer Centre, U.S.A. She has expertise in oesophageal and stomach (gastric) cancer and is active in GI clinical trials testing combinations of Her-2 and checkpoint inhibitor therapies;
- Professor Ursula Wiedermann-Schmidt is the co-inventor of HER-Vaxx and a Professor of Vaccinology at Medical University of Vienna. She was, until recently, the Chief Science Officer of Imugene; and
- Dr Neil Segal, medical oncologist at the Memorial Sloan Kettering Cancer Centre, with expertise in GI, Colon, Pancreatic cancers and a clinical lead in several trials using PD-L1 inhibitors.

Top 5 shareholders

Imugene has two institutional shareholders, Private Portfolio Managers and Platinum Asset Management, listed as its two largest shareholders, owning respectively, 6.7% and 4.6%. The third largest holder is Dr Nicholas Smith with 2.4%, and fourth and fifth are JP Morgan Nominees (2.2%) and chairman Paul Hopper (2.1%). The company has 307m in options over shares yet to be issued, which will translate into another 8.5% of shares on issue. Three-quarters of these options have a strike price of $0.026 per share.

STRENGTHS, WEAKNESSES, OPPORTUNITIES AND THREATS

Exhibit 9: SWOT Analysis

STRENGTHS	WEAKNESSES
In-licence deal with OSU and Mayo Clinic has expanded and accelerated pipeline by 2 years	Could stimulate off-target autoimmune responses resulting in unwanted toxicity
Board and management highly experienced in drug development	Trials to date for KEY-Vaxx only conducted on mice but have provided efficacy and response rate with minimal toxicity
Supported by world-leading immunologists and oncologists on its Scientific Advisory Board	Small scale clinical trials may not predict accurately the rate of seroconversion in response to peptide immunisation and the strength and longevity of the response
Well-funded to take it through to end of Phase I trials	Polyclonal anti-PD-1 response may be difficult to turn off when necessary due to autoimmunity or other adverse reactions In comparison to treatment with monoclonal antibodies
KEY-Vaxx, if successful, presents at lower cost than current ICI monoclonal therapies	
Both HER2 B-cell vaccines, B-Vaxx and HER-Vaxx have completed Phase 1 studies proving that they stimulate production of poluclonal antibodies against HER2	
Transformed from a single product company to one with a suite of opportunities	
OPPORTUNITIES	**THREATS**
Phase II deal with a big pharma company is the goal	May not get the regulatory approvals to commercialise
Big pharma is looking for novel combinations that combine: without increasing toxicity, with minimal cost increase and with better response rates and efficacy – Imugene's vaccines tick these three boxes	Current approved regimes may reduce costing to compete
Opportunity to extend HER2 B-Vaxx to other cancers – oesophageal, ovarian, uterine, endometrial and lung.	Crowded market with several competing products

Source: RaaS Advisory

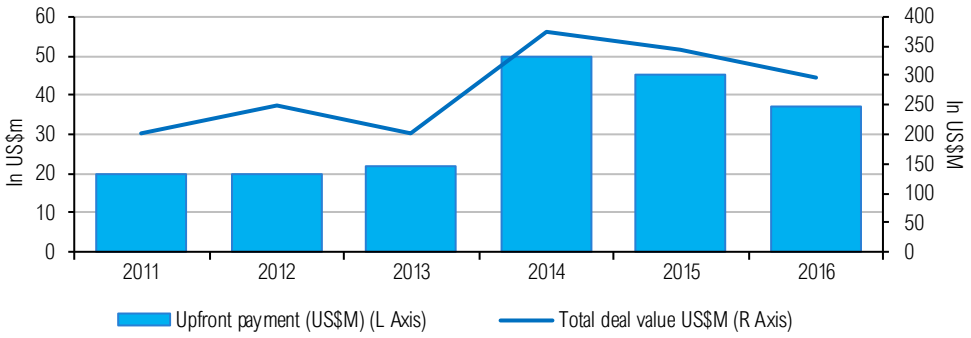
In our view, the strengths and opportunities outweigh the weaknesses and threats. Imugene has the usual development risks associated with technology companies including the unknown outcome of its trials, the risk that another technology will trump its own, regulatory risk in different regimes, the potential that the incumbent drug companies will drop their prices to compete aggressively, or that its commercial partners fail to follow through on commercialisation. There have been a number of examples of this last risk emerging for

immune-oncology companies recently, most notably for Immunomedics which saw its US$2bn deal with Seattle Genetics dropped after 12 months.

COMPARABLE DEALS

If successful in its trials, Imugene could potentially attract one or more of the big Pharma companies either as licensees or acquirers. To that end, it is worth considering what upfront fees and total deal values have been applied in recent years. According to IMS PharmaDeals, the average upfront deal value over the past six years has been around US$35m while the total deal value has averaged US$277m as the following exhibit sets out.

Exhibit 10: Mean upfront deal value and mean total deal value by year 2011-2016



Source: IMS PharmaDeals

The transactions above include all Pharma transactions. Comparable recent oncology transactions are set out in the following exhibit and demonstrate a range of deal values applied at all stages.

Exhibit 11: Comparable oncology deals

Year	Licensor	Licensee	Upfront fee US$m	Total deal value US$m	Development phase	Description
2017	Loxo Oncology	Seattle Genetics	US$450m	US$1,550m	Phase II	Commercialisation of Larotrectinib and LOXO-195, Loxo Oncology's franchise of highly selective TRK inhibitors for patients with TRK fusion cancers.
2016	Symphogen	Bayer	US$175m	US$1,775m	Discovery	Collaboration to advance immunooncology therapeutics against six checkpoint targets
2016	Jounce Thereapuetics	Celgene	US$261m	US$2,561m	Discovery	JTX-2011, targeting inducible T-cell costimulator (ICOS), and up to four early-stage immuno-oncology programmes
2015	Juno Therapeutics	Celgene	US$150m cash/US$850m equity	US$1,100m	Phase I	T-cell therapies for cancer and autoimmune diseases with an initial focus on chimeric antigen receptor technology (CAR-T) and T-cell receptor (TCR) technologies
2015	Blueprint Medicines	Roche	US$45m	US$965m	Discovery	Five small molecule therapeutics targeting kinases believed to be important in cancer immunotherapy.
2015	Regeneron Pharmaceuticals	Sanofi	US$640m	US$2,125m	Phase I	PD-1 (programmed death-1) inhibitor and other immuno-oncology antibodies
2015	Five Prime Therapeutics	Bristol Myer Squibb	US$350m	US$1,737m	Phase I	Colony stimulating factor 1 receptor (CSF1R) antibody programme for immunology and oncology indications

Source: IMS PharmaDeals, BioCentury, Company press releases

Exhibit 12: Imugene Income Statement 2010-2018

In $m	2010	2011	2012	2013	2014	2015	2016	2017	2018
Interest Income	0.044	0.010	0.009	0.023	0.027	0.039	0.000	0.035	0.094
Contract research fees	0.000	2.227	0.236	0.000	0.000	0.600	1.500	0.000	0.000
Other Income	0.312	(0.039)	0.046	0.184	0.511	0.000	0.000	1.164	1.841
Total Income	**0.356**	**2.198**	**0.291**	**0.207**	**0.538**	**0.639**	**1.564**	**1.199**	**1.935**
Business development	(0.152)	(0.151)	(0.084)	(0.393)	(0.062)	(0.241)	(0.363)	(0.196)	(0.220)
Commercialisation expenses	(0.487)	(0.335)	(0.488)	(0.051)	(0.042)	(0.100)	(0.116)	(0.122)	(0.197)
Corporate Administration expenses	(0.617)	(0.567)	(0.375)	(0.651)	(0.697)	(0.875)	(1.091)	(0.776)	(1.126)
Research & development expenses	(0.522)	(0.492)	(0.285)	(0.603)	(0.469)	(1.669)	(2.698)	(2.472)	(4.148)
Foreign exchange gain (loss)	0.000	(0.133)	0.068	(0.027)	(0.017)	(0.063)	(0.026)	(0.021)	(0.091)
Share based payments	0.000	0.000	0.000	(0.040)	(0.066)	0.000	0.000	(0.117)	(0.084)
Total Expenses	**(1.778)**	**(1.677)**	**(1.165)**	**(1.766)**	**(1.353)**	**(2.947)**	**(4.294)**	**(3.704)**	**(5.866)**
Loss before tax & depreciation	**(1.422)**	**0.521**	**(0.874)**	**(1.559)**	**(0.814)**	**(2.308)**	**(2.729)**	**(2.505)**	**(3.931)**
Depreciation and amortisation	0.343	0.341	0.171	0.001		0.0	0.0	0.002	0.003
Loss before income tax	**(1.765)**	**0.180**	**(1.044)**	**(1.560)**	**(0.814)**	**(2.308)**	**(2.731)**	**(2.507)**	**(3.934)**
Income tax benefit (expense)	0.200	0.200	0.000	0.000	0.000	0.000		0.000	0.000
Net loss after tax	**(1.535)**	**0.416**	**(1.044)**	**(1.560)**	**(0.814)**	**(2.308)**	**(2.731)**	**(2.507)**	**(3.934)**
Impairment charge	0.000	0.000	(2.089)	0.000	(1.302)	(0.132)			
Reported net loss after tax	**(1.535)**	**0.416**	**(3.133)**	**(1.560)**	**(2.116)**	**(2.441)**	**(2.731)**	**(2.507)**	**(3.934)**
EPS (cps)	(1.1)	0.29	(2.18)	(0.48)	(0.31)	(0.21)	(0.19)	(0.12)	(0.15)
EPS Adjusted (cps)	(1.1)	0.29	(0.73)	(0.48)	(0.12)	(0.21)	(0.19)	(0.12)	(0.15)
EFPOWA	143.6	143.6	143.6	325.9	689.2	1,176.5	1,320.8	2,069.0	2,637.9
Shares at end of period	143.6	143.6	143.6	376.2	946.6	1,329.9	1,732.1	2,365.2	2,854.9
Capital raised during the year inc options ($m)				1.13	2.60	3.76	3.02	6.25	8.80

Source: Imugene Annual Reports

Exhibit 13: Imugene Balance Sheet 2010-2018

In $m	2010	2011	2012	2013	2014	2015	2016	2017	2018
Cash	0.793	1.906	1.017	0.566	1.223	1.957	1.583	4.814	7.822
Trade and other receivables	0.181	0.053	0.000	0.054	0.524	0.541	1.313	1.217	1.915
Other	0.520	0.466	0.301	0.000	0.011	0.017	0.018	0.023	0.096
Total Current Assets	**1.494**	**2.425**	**1.318**	**0.619**	**1.758**	**2.515**	**2.913**	**6.054**	**9.833**
PPE	0.000	0.002	0.000	0.000	0.000	0.000	0.003	0.003	0.004
Intangible	2.601	2.260	0.001	1.965	6.874	6.600	6.600	6.600	7.057
Other	0.004	0.000	0.000	0.000	0.000	0.000	0.020	0.020	0.020
Total Non-Current	**2.605**	**2.262**	**0.001**	**1.965**	**6.874**	**6.600**	**6.623**	**6.623**	**7.081**
Total Assets	**4.099**	**4.687**	**1.318**	**2.584**	**8.631**	**9.115**	**9.536**	**12.678**	**16.914**
Trade and other payables	0.195	0.338	0.139	0.161	0.229	0.317	0.657	0.232	0.343
Employee benefits	0.112	0.142	0.106	0.006	0.018	0.013	0.036	0.065	0.096
Other	0.000	0.000	0.000	0.000	0.450	0.067	0.000	0.000	0.000
Total Current Liabilities	**0.307**	**0.480**	**0.245**	**0.167**	**0.697**	**0.397**	**0.694**	**0.297**	**0.438**
Other noncurrent liability	0.000	0.000	0.000	0.531	1.202	0.985	0.985	0.985	0.985
Employee benefits	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.015
Total Noncurrent liabilities	**0.000**	**0.000**	**0.000**	**0.531**	**1.202**	**0.985**	**0.985**	**0.985**	**1.001**
Total Liabilities	**0.307**	**0.480**	**0.245**	**0.698**	**1.899**	**1.383**	**1.679**	**1.283**	**1.439**
Net Assets	**3.791**	**4.207**	**1.073**	**1.886**	**6.732**	**7.732**	**7.857**	**11.395**	**15.475**
Issued Capital	14.907	14.907	14.907	17.280	24.242	27.682	30.407	36.335	44.286
Reserves	0.966	0.966	0.966	0.966	0.966	0.966	1.096	1.202	0.300
Retained profits	(12.082)	(11.667)	(14.800)	(16.360)	(18.475)	(20.916)	(23.647)	(26.143)	(29.110)
Total Equity	**3.791**	**4.207**	**1.073**	**1.887**	**6.732**	**7.732**	**7.857**	**11.395**	**15.475**
Net working capital	(0.015)	(0.285)	(0.139)	(0.107)	0.295	0.224	0.655	0.985	1.572
% of revenue	(34.0%)	(2782.6%)	(1598.8%)	(463.1%)	1087.9%	580.9%	1663.1%	2781.2%	1666.7%
Net debt (cash)	(0.8)	(1.9)	(1.0)	(0.6)	(1.2)	(2.0)	(1.6)	(4.8)	(7.8)

Source: Imugene Annual Reports

Exhibit 14: Imugene Cashflow Statement

In $m	2010	2011	2012	2013	2014	2015	2016	2017	2018
Operations	(1.743)	1.090	(0.966)	(1.369)	(1.144)	(2.044)	(3.050)	(2.673)	(4.462)
investing	0.041	0.011	0.009	0.017	(0.594)	(0.464)	(0.091)	(0.002)	(0.461)
Financing	0.000	0.000	0.000	0.928	2.396	3.241	2.735	5.928	7.930
Net change in cash	(1.702)	1.102	(0.957)	(0.424)	0.657	0.734	(0.405)	3.253	3.008
Cash/equivalents beginning of year	2.487	0.793	1.906	1.017	0.566	1.223	1.957	1.583	4.814
Exchange rate differences	0.008	0.011	0.068	(0.028)	0.000	0.000	0.031	(0.021)	0.000
Cash/equivalents end of year	0.793	1.906	1.017	0.566	1.223	1.957	1.583	4.814	7.822

Source: Imugene Annual Reports

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FINANCIAL SERVICES GUIDE

RaaS Advisory Pty Ltd

ABN 99 614 783 363

Corporate Authorised Representative, number 1248415

of

BR SECURITIES AUSTRALIA PTY LTD

ABN 92 168 734 530

AFSL 456663

Effective Date: 11th May 2017

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