ROTH Capital Partners

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COMPANY NOTE | EQUITY RESEARCH | November 01, 2021

Healthcare: Biotechnology

Company Update
Target Price Changed

Imugene Limited | IMU.AX - $0.50 - ASX | *Buy*

Stock Data	
52-Week Low - High	$0.05 - $0.52
Shares Out. (mil)	5,645.25
Mkt. Cap.(mil)	$2,794.40
3-Mo. Avg. Vol.	33,850,360
12-Mo.Price Target	AUD0.62
Cash (mil)	AUD119.5
Tot. Debt (mil)	AUD0.0

Cash (mil): proforma cash includes recent AUD90M equity raise after FYE2021

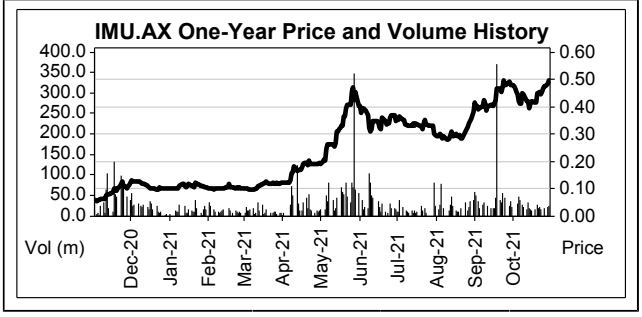
FY ends June 30

Revenue ($AUD millions)

Yr Jun	—2020—	—2021—	—2022E—
		Curr	Curr
1Half	0.0A	0.0A	-
2Half	0.0A	0.0A	-
YEAR	0.0A	0.0A	0.0E

EPS $AUD

Yr Jun	—2020—	—2021—	—2022E—
		Curr	Curr
1Half	(0.00)A	(0.00)A	0.00E
2Half	(0.00)A	(0.00)A	0.00E
YEAR	(0.00)A	(0.00)A	(0.00)E



IMU.AX: Solid Tumor Partnership with Eureka Therapeutics, Raising PT to AUD0.62

IMU has partnered with Eureka Therapeutics to combine IMU's onCARlytics oncolytic virus with Eureka's Artemis anti-CD19 T cell therapy in an effort to treat solid tumors. The collaboration is currently preclinical, but the broader Artemis platform has been tested in early stage clinical trials. We have increased our price target to AUD0.62 from AUD0.43, mostly given our view of the strong science that supports IMU's choice of internal programs to prioritize and choice of technologies with which to partner.

- The two companies will target solid tumors by combining their highly complementary oncology therapies, given the lack of success thus far with cellular therapy in solid tumors versus liquid tumors. IMU's onCARlytics oncolytic virus specifically targets and infects tumor cells and by so doing forces expression of CD19 on the surface of tumor cells, thereby allowing Eureka's anti-CD19 Artemis autologous T cell therapy to recognize CD19 and kill the cell. This strategy intends to overcome the relative absence of useful tumor targets expressed on solid tumor cells versus liquid tumor cells. There remains further preclinical *in vitro* and *in vivo* work to be done, after which we expect clinical trials to be conducted, most likely in the U.S. and Australia. The companies are not being specific about which solid tumor types they initially intend to target, but on the recent conference call they mentioned liver, lung and gastric cancer. The broader Artemis platform has already been in early stage clinical trials, but the Artemis anti-CD19 program in particular has not.
- In addition to potentially rendering solid tumors susceptible to T cell therapy, the combination treatment approach may also substantially reduce cytokine release syndrome (CRS), a dangerous and sometimes fatal side effect of T cell therapy. More specifically, the Artemis T cell therapy platform couples T cell activation with cell-intrinsic regulation mechanisms, as it does not directly couple intracellular signaling domains to co-stimulatory domains, thereby potentially allowing for a safer and more effective product versus other CAR T therapies via reduction of CRS and other life-threatening cytokine-related safety issues that have been observed with other CAR T technology.
- In other recent developments demonstrating IMU's clinical progress with two of its other products, the first Phase 1 triple negative breast cancer patient was recently dosed with CHECKvacc, IMU's oncolytic virus that also carries a gene for an anti-PD-L1 antibody, thereby providing more than one anticancer mechanism in a single treatment. We also note that the Phase 1 PD1-Vaxx immunotherapy monotherapy trial is showing early signs of immune responses in NSCLC patients, as indicated by detection of polyclonal antibodies to PD-1. IMU will select one of the three Phase 1 doses to test in combination with standard of care therapy, which may include a PD-L1 inhibitor or other immunotherapy agent, in NSCLC patients that either progressed on, or did not respond to, prior therapy.

VALUATION

Our 12-month price target of AUD0.62 is based on a DCF analysis using a 15% discount rate that is applied to all cash flows and the terminal value, which is based on a 5x multiple of our projected FY2031 operating income of about AUD1.48 billion. We arrive at this valuation by projecting future revenue from CHECKvacc in TNBC, HER-Vaxx in advanced HER2+ gastric cancer, and PD1-Vaxx in NSCLC. Commercial success outside these financially modeled programs would serve as potential upside to our valuation. Factors that could impede shares of Imugene from achieving our price target include any of its three modeled immuno-oncology products failing to succeed clinically. Also, the FDA and foreign regulatory authorities could fail to approve Imugene's products even if their respective pivotal clinical trials succeed, in the event the agency views the results as not clinically meaningful. Loss of key management personnel could also impede achieving our Imugene price target, as could the significant delay of clinical progress from, for example, lasting COVID-19 headwinds.

RISKS

- **Clinical risk.** Imugene's clinical staged products could fail to deliver statistically significant results in late-stage clinical trials, substantially reducing the value of Imugene's product candidates and therefore our target price.
- **Regulatory risk.** Even if successful in the clinic, Imugene's products could fail to be approved by domestic and/or foreign regulatory bodies, which would reduce Imugene's value and therefore our target price.
- **Financing risk.** Imugene will need additional capital to fund its operations, and such financing may not occur or it could be substantially dilutive to existing investors.
- **Competitive risk.** For any future approved Imugene products, they may not be well adopted in a competitive marketplace, which would adversely affect Imugene's value and therefore our target price.
- **High stock price volatility.** This issue is common among small-cap biotechnology companies with relatively low trading volumes.

COMPANY DESCRIPTION

Imugene is a clinical stage immuno-oncology company developing a range of new and novel immunotherapies that seek to activate the immune system of cancer patients to treat and eradicate tumours. Our unique platform technologies seek to harness the body's immune system against tumours, potentially achieving a similar or greater effect than synthetically manufactured monoclonal antibody and other immunotherapies. Our product pipeline includes multiple immunotherapy B-cell vaccine candidates and an oncolytic virotherapy (CF33) aimed at treating a variety of cancers in combination with standard of care drugs and emerging immunotherapies such as CAR T's for solid tumours. We are supported by a leading team of international cancer experts with extensive experience in developing new cancer therapies with many approved for sale and marketing for global markets. Our vision is to help transform and improve the treatment of cancer and the lives of the millions of patients who need effective treatments. This vision is backed by a growing body of clinical evidence and peer-reviewed research. Imugene is well funded and resourced, to deliver on its commercial and clinical milestones. Together with leading specialists and medical professionals, we believe Imugene's immunooncology therapies will become foundation treatments for cancer. Our goal is to ensure that Imugene and its shareholders are at the forefront of this rapidly growing global market.

Imugene Limited
Income Statement
Fiscal Year ends June
(in AUD$000, except per share items)

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	FY2018A	FY2019A	FY1H20A	FY2H20A	FY2020A	FY1H21A	FY2H21A	FY2021A	FY1H22E	FY2H22E	FY2022E	FY2023E
CHECKvacc royalty revenue												
HER-Vaxx royalty revenue												
PD1-Vaxx royalty revenue												
Total royalty revenue												
Gross profit												
R&D	3,224	7,612	4,234	5,131	9,364	7,132	8,223	15,355	9,621	11,353	20,974	27,266
% growth		136.1%		21.2%	23.0%	39.0%	15.3%	64.0%	17.0%	18.0%	36.6%	30.0%
SG&A	2,554	4,777	3,022	2,493	5,515	3,008	7,303	10,311	5,112	5,368	10,480	11,109
% growth		87.1%		-17.5%	15.4%	20.6%	142.8%	87.0%	-30.0%	5.0%	1.6%	6.0%
Total operating expenses	**5,778**	**12,389**	**7,255**	**7,624**	**14,879**	**10,141**	**15,526**	**25,667**	**14,733**	**16,721**	**31,454**	**38,375**
Operating income	**(5,778)**	**(12,389)**	**(7,255)**	**(7,624)**	**(14,879)**	**(10,141)**	**(15,526)**	**(25,667)**	**(14,733)**	**(16,721)**	**(31,454)**	**(38,375)**
Other income/loss (R&D tax incentive, etc)	1,750	4,205	2,357	1,717	4,074	4,100	3,100	7,200	4,185	4,938	9,124	10,497
Finance income/expense net	94	409	107	190	297	(22)	33	11	100	90	190	200
Net income (pretax)	**(3,934)**	**(7,775)**	**(4,791)**	**(5,717)**	(10,508)	**(6,063)**	**(12,393)**	**(18,456)**	**(10,448)**	**(11,692)**	**(22,140)**	**(27,678)**
Income tax expense (benefit)												
income tax %												
Net income	**(3,934)**	**(7,775)**	**(4,791)**	**(5,717)**	**(10,508)**	**(6,063)**	**(12,393)**	**(18,456)**	**(10,448)**	**(11,692)**	**(22,140)**	**(27,678)**
EPS basic	**(0.0015)**	**(0.0022)**	**(0.0013)**	**(0.0013)**	**(0.0026)**	**(0.0013)**	**(0.0026)**	**(0.0040)**	**(0.0020)**	**(0.0022)**	**(0.0042)**	**(0.0049)**
EPS diluted	**(0.0015)**	**(0.0022)**	**(0.0013)**	**(0.0013)**	**(0.0026)**	**(0.0013)**	**(0.0026)**	**(0.0040)**	**(0.0020)**	**(0.0022)**	**(0.0042)**	**(0.0049)**
Basic shares outstanding	2,637,870	3,581,919	3,727,634	4,422,155	4,074,894	4,531,748	4,795,333	4,663,541	5,226,913	5,383,720	5,305,317	5,652,906
Diluted shares outstanding	2,637,870	3,581,919	3,727,634	4,422,155	4,074,894	4,531,748	4,795,333	4,663,541	5,226,913	5,383,720	5,305,317	5,652,906
share growth rate		36%		18.6%	13.8%	2.5%	5.8%	14.4%	9.0%	3.0%	13.8%	5.0%

Source: SEC filings, company press releases, and ROTH Capital Partners

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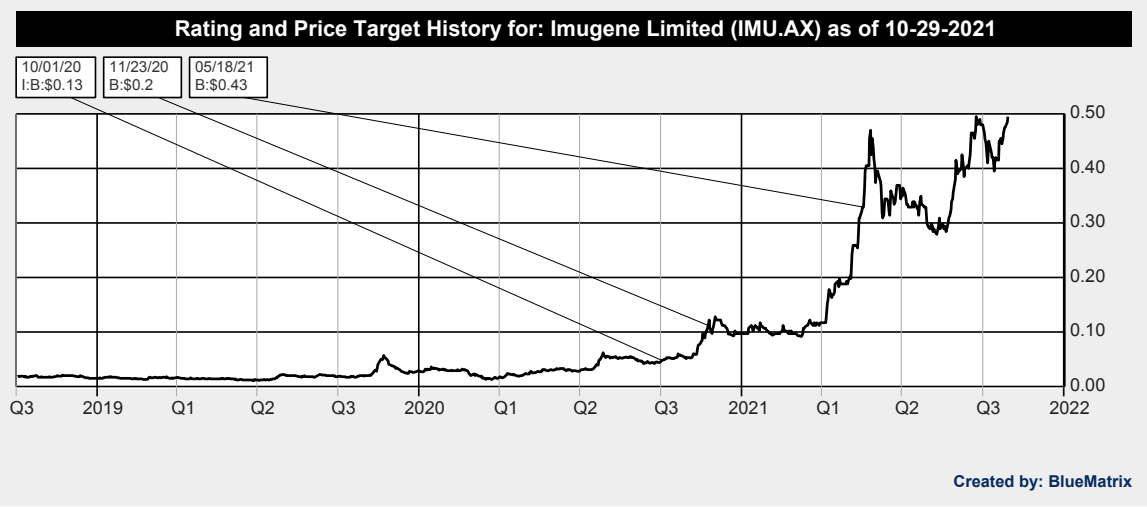

Each box on the Rating and Price Target History chart above represents a date on which an analyst made a change to a rating or price target, except for the first box, which may only represent the first note written during the past three years. **Distribution Ratings/IB Services** shows the number of companies in each rating category from which Roth or an affiliate received compensation for investment banking services in the past 12 month.

Distribution of IB Services Firmwide

			IB Serv./Past 12 Mos. as of 11/01/21	
Rating	**Count**	**Percent**	**Count**	**Percent**
Buy [B]	**325**	**78.31**	**219**	**67.38**
Neutral [N]	**48**	**11.57**	**26**	**54.17**
Sell [S]	**2**	**0.48**	**1**	**50.00**
Under Review [UR]	**38**	**9.16**	**25**	**65.79**

Our rating system attempts to incorporate industry, company and/or overall market risk and volatility. Consequently, at any given point in time, our investment rating on a stock and its implied price movement may not correspond to the stated 12-month price target.

Ratings System Definitions - ROTH employs a rating system based on the following:

Buy: A rating, which at the time it is instituted and or reiterated, that indicates an expectation of a total return of at least 10% over the next 12 months.

Neutral: A rating, which at the time it is instituted and or reiterated, that indicates an expectation of a total return between negative 10% and 10% over the next 12 months.

Sell: A rating, which at the time it is instituted and or reiterated, that indicates an expectation that the price will depreciate by more than 10% over the next 12 months.

Under Review [UR]: A rating, which at the time it is instituted and or reiterated, indicates the temporary removal of the prior rating, price target and estimates for the security. Prior rating, price target and estimates should no longer be relied upon for UR-rated securities.

Not Covered [NC]: ROTH does not publish research or have an opinion about this security.