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COMPANY NOTE

Immutep Limited (IMM-AU)

LAG-3 therapies taking immunology to the next level

OUTPERFORM

Target Price AUD1.350
Current Price AUD0.550

KEY TAKEAWAY

LAG-3 targeted drugs look increasingly likely to take cancer therapy to the next level. Uniquely focussed, Immutep continues to accumulate data supporting the efficacy its LAG-3 agonist Eftilagimod alpha ("Efti") in a variety of cancers and drug combinations. Data from the TACTI-002 study in non-small cell lung cancer ("NSCLC") and positive signals in head and neck suggest the drug may extend the benefits of anti-PD-1 / L1 immune checkpoint inhibitors ("ICI"); without additional toxicity. While the AIPAC Phase IIb in metastatic breast cancer ("mBC") initially fell short of significance in progression-free survival ("PFS"), Efti showed a positive impact on overall survival in sub-groups totalling 60% of mBC patients. With the recently announced $65m fund-raising, IMM should be fully financed for a pivotal Phase 3 and well positioned for a transformative licensing deal. With continuing news flow from its pipeline and the Novartis licensed LAG3 antagonist, we see substantial upside. We reiterate our OUTPERFORM recommendation and increase our TP to AUD 1.35 (from AUD 1.24).

Potential to extend benefits of PD-1 / PD-L1 ICIs - Dramatic benefits of ICI treatments are mostly confined to a minority of patients in certain cancers. With Efti opening the throttle and ICIs releasing the immune brake, data from TACTI-002 Phase II trial already suggest that Efti could extend the impact of the ICI pembrolizumab in NSCLC and head and neck cancer. With an ORR approaching 50%, the response in first line NSCLC is on a par with much harsher ICI / chemo, but better tolerated. Results in head and neck patients indicate that the Efti combo has a meaningful benefit in these normally poorly responsive patients. The INSIGHT-004 Phase 1 suggests that benefits may extend to other hard to treat solid cancers.

Data supports Efti development in mBC patient subgroups - Although the positive trend in overall PFS over paclitaxel did not achieve significance, later positive responses in patient sub-groups indicate survival benefits for subgroups amounting to 60% of mBC patient and quality of life ("QoL") benefits across the patient population. There is a firm basis for the planned Phase 3 with efficacy potentially augmented by patient's stratification and optimisation of the chemotherapy regimen.

Evidence of synergy with chemo - Data analysis suggested an increased benefit from Efti when patients were actively receiving chemo, which disappeared when chemo was stopped. This suggests not only that Efti anti-tumour effects might improve from exploring different chemo regimens, but also combination with other inflammatory / immune stimulating interventions such as radiotherapy. A triple PD-1 / L1, chemo and Efti combination trial is now planned.

Positive outlook for LAG-3 antagonists - Recent data from BMS indicated that its anti-LAG3 mAb relatlimab could enhance the activity of Opdivo in melanoma; the first drug to do so. This is clearly positive for Immutep's LAG525 with Novartis and a growing list of other LAG3 antagonists under development by a host of third parties.

AUD	2019A	2020A	2021E	2022E
Sales	7	17	10	22
EBIT	(19)	(13)	(12)	(2)
Net Profit	(19)	(13)	(12)	(2)
Net Cash/Debt ($M)				
FY Jun	5.8	26.3	80.2	79.7

Source: Company data, goetzpartners Research estimates. Warning Note: Past performance and forecasts are not a reliable indicator of future results or performance. The return may increase or decrease as a result of currency fluctuations.

FINANCIAL SUMMARY

Net Cash/Debt (M):	20.00

MARKET DATA

Current Price:	AUD0.550
Target Price:	AUD1.350
52 Week Range:	AUD0.730 - AUD0.150
Total Enterprise Value:	351
Market Cap (M):	408
Shares Out (M):	748.2
Float (M):	712.9
Average Daily Volume:	2,707,215

EQUITY RESEARCH

DR. CHRIS REDHEAD
Research Analyst
T +44 (0) 203 859 7725
chris.redhead@goetzpartners.com

PRICE PERFORMANCE

Source: Factset

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Company overview

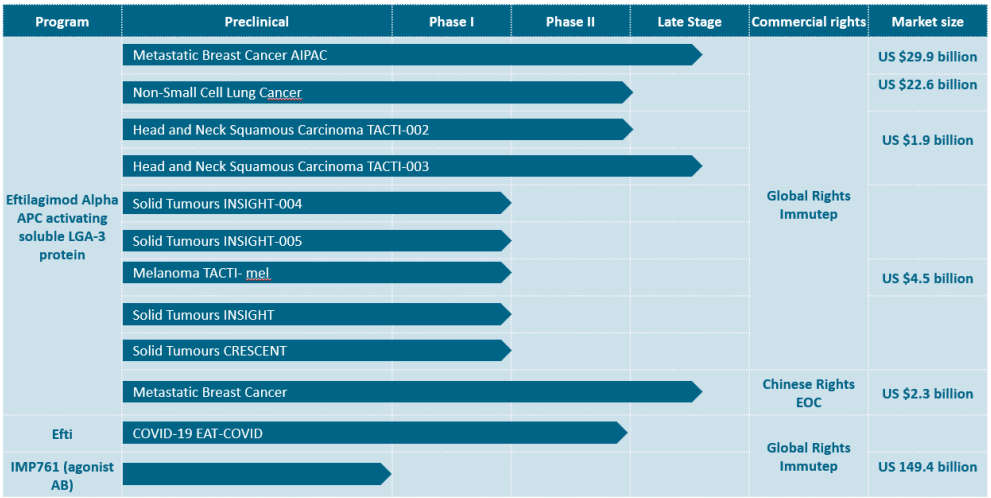
Listed on the ASX and with ADR's traded on NASDAQ, Immutep is uniquely focussed on the development of cancer and immunotherapies utilising the LAG3 (Lymphocyte Activation Gene-3) protein. With its HQ in Sydney, Australia and operations in Europe and the USA, Immutep has established a pipeline of in-house and large-pharma-out-licensed programmes (FIGURE 1), which utilise the LAG-3 protein's dual role as both an activator and inhibitor of the adaptive immune system.

The company's lead in-house programme is a first-in-class LAG-3 fusion protein IMP321 / eftilagimod alpha ("efti") that exploits the protein's ability to stimulate immunity through the activation of antigen presenting cells ("APCs"). Currently in Phase 2 trials, efti has already demonstrated evidence of efficacy in combination with PD-1 inhibitors in non-small cell lung cancer ("NSCLC") and head and neck carcinoma ("HNSCC") as well as with chemo in metastatic breast cancer ("mBC"). Recent data from the Two ACTive Immunotherapies-002 (TACTI-002) Phase 2 trial suggest that combination of efti with pembrolizumab ("pembro"), a PD-1 inhibitor, elicits an overall response rate ("ORR") in more than 40% of 1st line NSCLC patients compared to c.20% with pembro alone. A further trial INSIGHT-004 Phase I trial is studying the combination of efti with the PD-L1 inhibitor, avelumab, in solid tumours. Data from the Active immunotherapy PAClitaxel trial ("AIPAC") mBC Phase 2b trial combining efti with chemotherapy indicates a survival benefit for two major subpopulations, providing firm basis for a pivotal Phase 3.

LAG-3 antagonism in immuno-oncology is being pursued by a large number of players, foremost Bristol Meyers Squibb ("BMS"). LAG-3 antagonists block a LAG3-MHC Class II molecule interaction in many immune cells, particularly APCs, maintaining antigen presentation to stimulate T cell proliferation and mitigating T cell exhaustion. Immutep out-licensed its LAG-3 antagonist IMP701/LAG525 to CoStim Pharmaceuticals Inc. now owned by Novartis ("NVS"). NVS has LAG525 in 5 clinical trials encompassing both solid tumours, including mBC and melanoma, and blood cancers. Studies involving the use of LAG525 in combination with chemotherapy, immune-oncology biologics and small molecules are already yielding positive results.

Led by experienced CEO Marc Voigt, Immutep recently announced a raise of A$65m. Now financed to the end of 2023E, the company aims to use the data from the on-going TACTI-002, AIPAC and INSIGHT-004 to secure an out-licensing deal during the course of the next 12 - 18 months.

FIGURE 1: Immutep product pipelines



Source: Company data, goetzpartners Research estimates

Investment thesis

Only pure play LAG3 company

Outstanding data across numerous cancers in multiple combinations

The only pure play LAG-3 player, Immutep finds itself on the crest of what is looking like the next major phase of cancer immunotherapy. Immutep continues to generate positive data on the use of its unique LAG-3 agonist, Efti, in a range of solid cancers, including lung, head & neck ands breast cancers. Safe and well tolerated and with apparent synergy with both existiing PD-1 / L1 immune checkpoint inhibitors ("ICI") and conventional therapies such as chemo, efti should play a central role in the combination therapies that are set to dominate cancer therapy. Now fully funded, the company is now well placed to move its efti forwards into first pivotal phase 3 in breast cancer, where the drug has already generated positive survival data. The increasing volume of data supporting efti's synergy with PD-1 / PD-L1, ICIs will make the company an increasingly attractive partner for licensing and co-develoment programmes.

With additional momentum building around LAG-3 as a result of positive data from BMS's relatimab and a pipeline of at least lten clinical stage third party LAG-3 antagonists (including IMM's own LAG525 with Novartis), Immutep looks increasingly valuable and is an attractive acquisition target.

Now fully financed and with the promise of further positive efti data, our sum of the parts ("SoTP") valuation indicates a current fair value of AUD 1.35 / share.

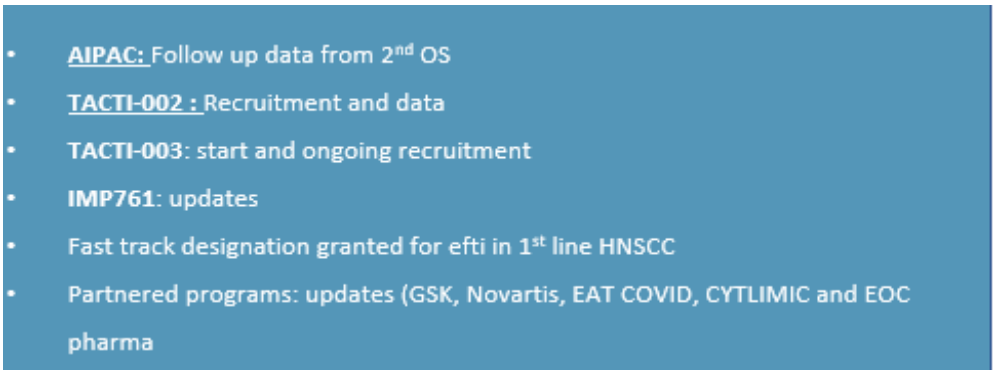
News flow

Impressive increases in overall survival with potential for further improvement.

We anticipate continuing positive newsflow throughout 2021. This would include further overall survival data from the AIPAC Phase 2b breast cancer trial and data from the TACTI-002 studies in NSCLC and HNSCC. The out-licensed programmes should provide news flow with NVS possibly releasing further data on LAG525 during the course of 2021E. Interim Data from the BMS LAG-3 programme have been released, showing a significant benefit on progression free survival. Positive readouts from the large pipeline of thirdparty LAG-3 antagonists should continue to provide forward momentum.

FIGURE 2: Upcoming milestones expected for Immutep in 2021

Newsflow from in-house and external programmes

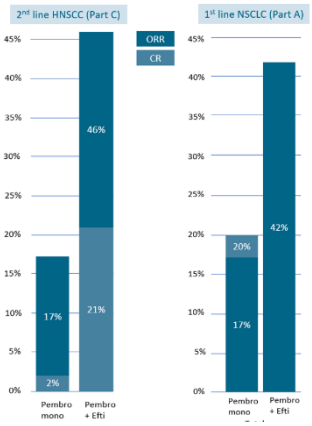


Source: Company data, goetzpartners Research estimates

IMM front and centre of the LAG-3 revolution

The development of PD-1 / PD-L1 immune checkpoint inibititors revolutionised immuno-oncology. The development of LAG-3-based therapies marks perhaps the next revolutionary stage in cancer therapy. Immutep has already demonstrated the potential of its LAG-3 agonist efti, which boosts the anti-tumour response by the activation of dendritic cells. The drug has already been shown to accelerate the anti-cancer immune response in a range of cancers and drug combinations. Safe and well tolerated, efti has demonstrated encouraging results compared to existing therapies in the TACTI-002 trials in lung, head and neck cancers when used in combination with anti-PD-L1. While initial PFS data disappointed, the AIPAC trail combining efti with chemo in breast cancer later provided impressive overall survival data in substantial patient sub-groups. With signs of improvement in quality of life across the patient population and efficacy potentially further boosted by adjusting the chemotherapy regimen, the data provides a strong basis for the planned movement into pivotal phase 3. Efti's outstanding tolerability opens the door to triple or more drug combination uniting the benefits and synergies between immunotherapies and conventional chemotherapies. In addition to efti, the leading LAG-3 antagonist, relatimab, from BMS is the only drug so far shown to be able to boost PD-1 / L1 efficacy in melanoma.

FIGURE 3: Efti increases PD-L1 response rates



Source: goetzpartners Research estimates.

Efti benefits in PD-L1 and chemo combos

Data from TACTI, INSIGHt and AIPAC trials indicate that efti is safe and has potential efficacy when used in combination with both anti-PD-1 / PD-L1 combinations and may have potential in triple combinations bringing all three together.

Synergy with PD-L1 immune checkpoint inhibitor ("ICI")

Combination therapy with eftilagimod alpha and pembrolizumab demonstrates very favourable overall response in the TACTI-002 Phase II data in 1st and 2nd line NSCLC (non-small cell lung cancer) and 2nd line HNSCC (head and neck cancer). Tumour response has been observed in all subgroups, including low PD-L1 expressing patients. Recent interim data in 1st line NSCLC and 2nd line HNSCC (head and neck cancer). 7 patients have now seen complete responses to the i-pembrolizumab ("pembro") combo (2 in 1st line NSCLC and 5 in 2nd line HNSCC). With 48.4% of evaluable patients responding, the 1st line NSCLC efti-pembro data compares well to anti-PD-L1-chemo; but more sustained and without the toxicity. Striking data in patients unresponsive to PD-1 / PD-L1 in 2nd line HNSCC revealed double the ORR expected from ICI alone, including 5 complete responses. A Phase I INSIGHT-004 has also demonstrated promising results in a range of difficult to treat solid cancer types.

Efti combination well tolerated compared to PD-L1 monotherapy

Trials using the efti-PD-1 / PD-L1 combo to date have revealed little additional toxicity compared to the PD-L1 monotherapy. These findings provide a rationale for successful and well-tolerated combinatorial treatment.

Well tolerated in PD-1 / L1 combinations

FIGURE 4: Efti combination well tolerated compared to pembro monotherapy

Treatment Related Deaths (TRD)	Adverse Effects Leading to discontinuation	Adverse Effects (AE)	Safety Signals
Efti pembrolizumab combination			
0%	3.5%	49.6% (more than 1 AE of grade 3)	No new signals identified
Pembrolizumab Monotherapy (1)			
2%	10-15%	74.1% (more than 1 AE of grade 3)	No new signals identified

(1) Pembrolizumab alone or with chemotherapy versus cetuximab with chemotherapy for recurrent or metastatic squamous cell carcinoma of the head and neck (KEYNOTE-048): randomised, open-label, phase 3 study. Prof Barbara Burtness, MD.

Source: goetzpartners Research estimates.

Potential benefits with chemo in breast cancer

Impressive increases in overall survival with potential for further improvement.

Efti combined with chemo has also shown an increased Overall Survival benefit in substantial subset (60%) of metastatic breast cancer patients. Overall survival ("OS") data from Immutep's Phase IIb AIPAC study in metastatic breast cancer ("mBC") Efti in combination with chemotherapy meaningfully benefits subgroups, which together represent >60% of the patient population. In patients <65 years or with low starting monocyte count, efti plus

paclitaxel increased OS by +7.1 months and +9.4 months respectively, in comparison to paclitaxel plus placebo (p<0.05).

FIGURE 5: AIPAC - overall benefit in major patient subgroups

Overall survival in patients <65 years			
	Median	Gain	HR/p
Efti	21.9	+7.1 months	HR 0.62 p=0.012
Placebo	14.8		

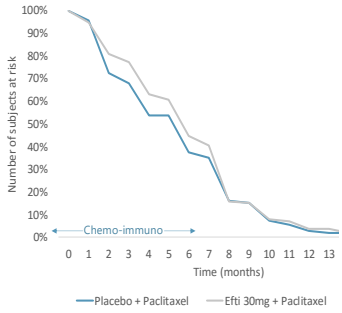
Overall survival in patients with low monocyte count			
	Median	Gain	HR/p
Efti	22.4	+9.4 months	HR = 0.47 p = 0.02
Placebo	12.9		

Source: goetzpartners Research estimates.

Potential for increased efficacy through regimen optimisation

The increased survival combined with other benefits such as improved quality of life across the whole patient population already provides a firm basis for continued development and movement into Phase 3. However, there also appears to be scope to boost the response. Analysis of the response curves suggested that the response to efti was more enhanced during the two months when paclitaxel was given. This indicates that extending the duration of paclitaxel treatment, as is standard practice in the US, could improve efti response. Such extended chemo duration will be applied in the BC study to be performed by the IMM's partner in China and potentially in the future Phase 3.

FIGURE 6: Efti synergy with chemotherapy



Source: goetzpartners Research estimates.

The improved responses in the subpopulations could also point towards improving efti benefits with other drug targets. Both monocyte counts and age have been shown to influence anti-tumour immune pathways. Monocytes are known to inhibit tumoricidal T cell activity and may abrogate benefits conferred by targeting the LAG3 pathway. Equally, with increasing age, dendritic cells, the main target of Efti, become less responsive and other immune inhibitory pathways are activated that favour tumorigenesis. These effects may not only explain the better responses to Efti combinations in the younger subpopulation, but also suggest that Efti could benefit from combination with other drugs that target other immunological blocks. For example, inhibitors of the inflammatory mediator, CCL2, are already known to reduce monocyte release form bone marrow and could be combined to boost efti efficacy.

Efti demonstrated no increase in AEs compared to chemo alone. This opens the door to additional combinations involving three or more drugs. The potential for more extensive combinatorial therapy does not only improve patient outcomes in the short term by more aggressively targeting the tumour, it also may limit tumour immune escape and treatment resistance, issues which could otherwise limit the longer-term clinical applicability of Efti and other drugs.

No additional toxicity compared to chemo monotherapy

FIGURE 7: No apparent decrease in safety and tolerability compared to chemotherapy alone

Summary of treatment- emergent adverse events (TEAEs)	Paclitaxel + Efti N=114 n(%)	Paclitaxel + Placebo N=112 n(%)
At least one TEAE	113 (99.1)	112(100)
At least one TEAE leading to death	2 (1.8)	3 (2.7)
At least one TEAE for which Efti/Placebo was discontinued	6 (5.3)	7 (6.3)
At least one grade 3 TEAE	78 (68.4)	73 (65.2)
At least one grade 1 or 2 TEAE as worst severity	35 (30.7)	39 (34.8)

Source: goetzpartners Research estimates.

Efti ideally placed at centre of cancer combination therapy

Given safety, tolerability and demonstrated efficacy with both anti- PD-1 / L1 drugs and chemotherapy, Efti promises to take centre stage in cancer combination therapy. Indeed, Immutep recently announced a Phase 1 study INSIGHT-003 to trial triple combination of Efti, chemo and an anti-PD-1 / L1, as well as a new collaboration and supply agreement with Merck KGaA to evaluate Efti with the bifunctional fusion protein immunotherapy bintrafusp (M7824). The INSIGHT-005 phase I / IIa will assess bintrafusp and Efti in solid tumours. Immutep has also indicated that it may initiate a Phase 2 trial in NSCLC, which will test a triple anti-PD-1 / L1, chemo and Efti combination; exploiting the synergies that are emerging between all three drug classes.

Progress in the extensive pipeline of LAG-3 antagonists

There is a growing pipeline of drugs aimed at antagonising the immunosuppressive LAG-3-MHC Class II interaction in T cells, hence allowing maintenance of proliferation of tumoricidal T cells. One such drug is Immutep's own product, LAG-525, which is currently in phase II.

FIGURE 8: LAG-3 antagonist pipeline

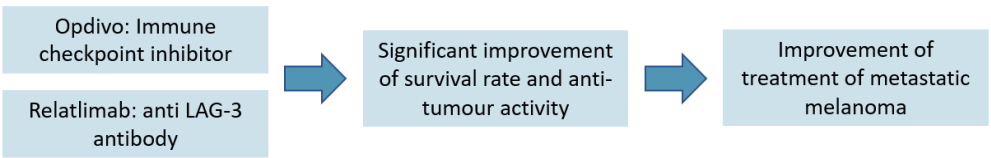
Company	Program	Preclinical	Phase I	Phase II	Phase III	Total Trials	Patients
BMS	Relatilimab					41	9509
Novartis	Leramilimab					5	960
Merck&Co. Inc.	Favezelimab					6	1066
Macrogenics	Tebotelimab					6	1514
H-L Roche	RO7247669					3	538
B.I.	BI754111					5	649
Regeneron	Finalimab					2	836
Tesaro	TSR-033					2	139
Incyte	INCAGN02385					2	74
Symphogen	SYM022					3	169
F-Star	FS-118					2	102
Innovent	IBI110					1	268
Xencor	XmAb-22841					1	242

Source: goetzpartners Research estimates.

LAG-3 antagonists drive previously unseen efficacy with anti-PD-1 / L1

Data from the lead LAG-3 antagonist, relatilimab, from BMS has already demonstrated the potential of this new drug class to boost the benefits of anti-PD-1 / L1 checkpoint inhibitors. Data from the phase II / III REALTIVITY-047 trial showed that combining relatilimab with Opdivo (Nivolumab) extended progression-free survival in metastatic or unresectable melanoma compared to Opdivo alone. This is first time any drug has been shown to increase anti PD-1 / L1 efficacy in this indication and perhaps bodes well for the range of anti-LAG-3 / PD-1 combimations due to appear over the coming two years.

FIGURE 9: Relativity-047 trial

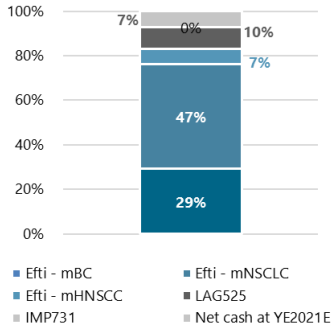


Source: goetzpartners Research estimates.

Sum of the parts valuation

With a fair value of A$0.609 per share, our SoTP (Sum of the Parts) valuation indicates substantial upside from current levels (FIGURE 11.); based on risk-adjusted net present values ("rNPVs") for Efti in mBC, lung and head & neck cancer, LAG525 in multiple tumours, GSK2831781 in ulcerative colitis (all discounted using a WACC of 12.4% and net cash at YE2020E). Now funded until the end of 2021E and with the expectation of additional data, we believe that the company has a strong chance of out-licensing Efti during the course of 2021E to crystalise value and further de-risk Efti development. While in the light of the recent data, we have decreased our probability of success of Efti in mBC to 20% (from 40%), the positive TACTI-002 trial has allowed us to increase the probability to 22% (from 10%). The NSCLC indication now accounts for c.52% of our fair value (FIGURE 10).

FIGURE 10: Immutep SoTP valuation by percentage



Source: goetzpartners Research estimates. Warning Note: Forecasts are not a reliable indicator of future results or performance. The return may increase or decrease because of currency fluctuations.

FIGURE 11: Immutep sum-of-the-parts valuation

Product	Indications	Stage	Peak sales ($m)	Year	NPV (A$m)	Prob.	Adj. NPV (A$m)	NPV/sh (A$)
Eftilagimod alpha	mBC	Phase IIb	1,195	2029E	506	65%	329	0.393
Eftilagimod alpha	mNSCLC	Phase II	2,763	2035E	1,186	45%	534	0.638
Eftilagimod alpha	mHNSCC	Phase II	436	2035E	165	45%	74	0.089
LAG525	Cancer	Phase II	4,000	2033E	172	65%	112	0.134
GSK2831781	UC	Phase II	2,267	2033E	100	0%	0	0.000
Net cash at YE2021E					81	100%	81	0.097
Fair value					**2,209**		**1,130**	**1.351**
Current share price (A$)								0.550
Upside								146%

Source: goetzpartners Research estimates. Warning Note: Forecasts are not a reliable indicator of future results or performance. The return may increase or decrease because of currency fluctuations.

Anti-tumour impact of efti combinations

Demonstrated synergy with both immunotherapies and chemotherapy.

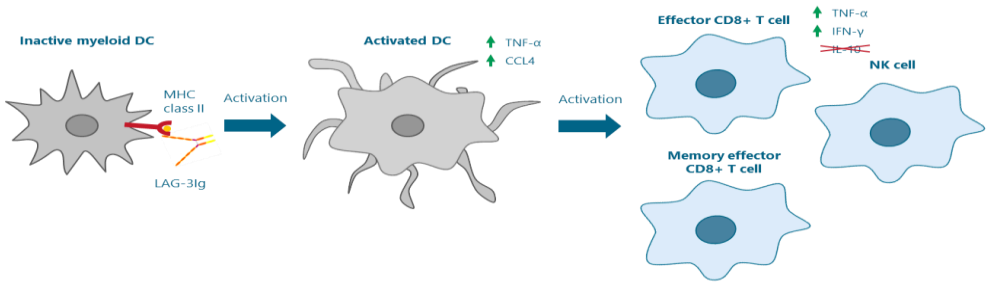
Its unique mechanism of action ("MoA") as an activator of APCs and good tolerability makes Efti a strong candidate for combination with existing cancer therapies including immunotherapies, such as ICIs and other established therapies like chemo. The drug has already shown evidence of synergy with PD-1 inhibitors in lung cancer. Early TACTI-002 trial data suggests ability to boost PD-1 efficacy with ORRs comparable to those so far only achieved with more aggressive PD-1 / chemo combinations. With positive responses also in HNSCC and the trial moving into its extension phase, Efti shows promise of providing a much sought after means of safely and effectively extending the benefits of PD-1-based therapies to a broader patient population and with fewer side effects. While the recent reported AIPAC trial combining Efti with chemo in mBC failed to achieve the dramatic results anticipated, the trial did yield clear signs of efficacy in substantial patient subpopulations amounting to potentially >50% of the patient population and could perhaps have even broader impact with chemo if the treatment regimen used in the AIPAC trial were modified.

Unique MoA opens anti-tumour immune throttle

Potent activation mechanism makes Efti ideal for 'releasing the throttle' on the immune system.

Eftilagimod alpha (IMP321) is a potent activator of the immune system, inducing activation of both arms of the immune system (innate and adaptive). As a soluble recombinant version of the naturally occurring LAG-3 protein, Efti binds preferentially to MHC class II proteins present on the surface of myeloid dendritic cells ("DCs"), a subset of APCs. Upon binding to these MHC class II proteins, the DCs become activated, expressing pro-inflammatory cytokines, such as tumour necrosis factor alpha (TNF-α). This cytokine, among others, leads to the activation of fully differentiated effector and memory effector CD8+ T cells along with natural killer ("NK") cells, expressing TNF-α and interferon gamma (IFN-γ). By secreting these cytokines, NKs activate other parts of the adaptive immune system. This unique immune activation makes efti an ideal candidate for combination with other I-O therapies like anti-PD-1 / PD-L1 as well as established anti-cancer treatments such as chemotherapy.

FIGURE 12: MoA of Eftilagimod alpha ("Efti") in activating antigen presenting cells ("APCs")



Source: Company data, Brignone et al. (2007) *J Immunol*

While anti-PD-1 / PD-L1 ICIs, such as Keytruda and OPDIVO, have been shown to have substantial impact and can significantly extend survival compared to previous therapies, dramatic sustained benefits are restricted to limited patient populations in a select number of cancers. As a result, there is a massive effort by drug developers to identify ICI combinations with other drugs that can extend these benefits to more patients in more cancers. In the past two years, 1287 new combination trials testing 222 targets with PD-L1 were opened (Cancer Research, 2019). Where ICIs effectively release the brake from the immune system, there is clear rationale for adding a drug like Efti, which can potentially open the throttle.

Enhancing chemotherapy-induced immune system activation

Although primarily cytotoxic in nature, therapies such as chemotherapy and radiotherapy have also been shown to have a potentially substantial immune component. The debris and cellular signals released during cell death and the reoxygenation of the tumour microenvironment resulting from these treatments is known to promote anti-tumour immune responses, which can be amplified by immune-modulators such as anti-PD-1 / PD-1 antibodies. Approved first-line treatment of metastatic non-squamous NSCLC in 2017, the combination of Keytruda with pemetrexed and carboplatin extends ORR to around 50% compared to 10% - 20% in patients receiving Keytruda alone. Similar effects might be expected with Efti-chemo combinations.

Tolerable safety profile: The key to a good combo

Good safety and tolerability will be key to the successful use of combination therapies. As such, the apparent good tolerability of efti seen in trials to date make it an excellent candidate.

Efti-IO benefit in lung and head & neck cancers

There is an urgent and unmet need for better therapies for both NSCLC and HNSCC. While the moderate response to NSCLC to anti-PD-1 / L1 can be augmented by combination with chemo, this comes with toxicity. The treatment options for late stage HNSCC are more limited; responses to anti-PD-1 / L1 monotherapy.

NSCLC needs combo to boost PD-1 / L1 efficacy without chemo toxicity

The treatment of NSCLC is also complicated by regional complexity, difficulty of surgical resection and the reliance on conventional therapies with higher toxicity. For patients who have not received systemic therapy for advanced NSCLC, tumours are evaluated for PD-L1 expression, as well as targetable driver mutations. For patients without a targetable driver alteration in whom PD-L1 expression is greater than 50% (PD-L1>50%), CPI therapy is recommended with or without chemotherapy, rather than chemotherapy alone. Chemotherapy and immunotherapy regimens are recommended until unacceptable toxicity occurs. For those without a targetable driver alteration and either PD-L1<50% or undetectable PD-L1 expression, platinum-based chemotherapy combined with pembrolizumab, rather than chemotherapy alone, is recommended (NICE guideline NG122). Limited by patient-to-patient differences in PD-1 expression, responses to anti-PD-1 / PD-L1 therapies are limited to 10% - 20% of patients (Hayashi & Nakagawa, 2019). While responses in NSCLC can be boosted to c.50% including low PD-1 expressing patients by the combination with doublet chemotherapy, this clearly comes with the acute and long-term effects There is an urgent need for something that can extend the benefits of PD-L1, but without the toxicity of chemo.

Mostly palliatively options for late stage HNSCC

HNSCC is the sixth most common type of cancer in the world. In general, stage I and II (early) patients are treated with either primary surgery or definitive radiation therapy ("RT"). RT and surgery result in similar rates of local control and survival for many sites; the choice of therapy is typically based upon the specific site and its requirements, the surgical accessibility of the tumour, and the functional outcomes and morbidity associated. Locoregionally advanced (stage III / IV) squamous cell carcinoma of the head and neck is associated with a high risk of both local recurrence and distant metastases. Combined modality approaches (surgery, RT, and / or chemotherapy) are generally required to optimise

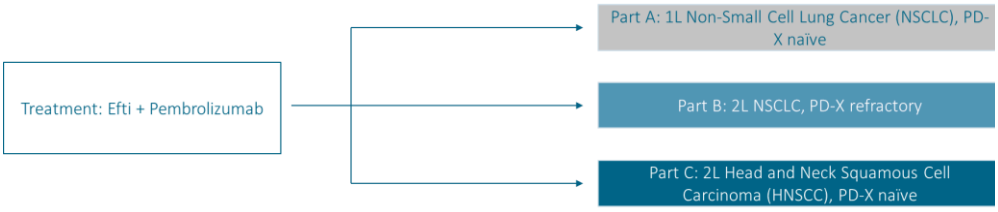
survival in long-term disease (NICE guideline NG36). However, current treatments have major drawbacks. The toxicity associated with treatment for head and neck cancer (whether surgery, RT, and / or chemotherapy) is substantial. Surgery may alter form and function, while acute effects of RT, chemoradiation treatment or immunotherapy can have a significant effect on quality of life.

Positive TACTI-002 trial data

Efti-pembro combo in trial for potential first line treatment for NSCLC

The TACTI-002 phase II trial has already shown the potential benefit of combining Efti with the anti-PD-1 drug pembrolizumab (Keytruda) in NSCLC and HNSCC. Conducted in collaboration with Merck & Co. Inc, the TACTI-002 study aims to investigate the combination of efti and pembro; potentially avoiding the need for toxic chemotherapy. Involving up to 109 patients, the study is taking place in up to 13 study centres in US, Europe and Australia and is split into three different parts based on indication and line of treatment: part A is for the first line treatment of NSCLC, part B for the second line treatment of NSCLC who have been refractory to previous PD-1 / PD-L1 treatment and part C for second line treatment of HNSCC (FIGURE 13). Patients in the trial will undergo a combination phase consisting of 18 cycles of treatment for 54 weeks and then a monotherapy phase lasting 51 weeks. If there are more responses than threshold in patients during stage 1 for each indication, additional patients can be recruited in stage 2 under the Simon's 2-stage design of this trial.

FIGURE 13: Three-part phase II TACTI-002 trial testing a combination of Efti and Pembrolizumab



Source: Company data

Positive results from stage 1 of the TACTI-002 trial have been reported for parts A and C, with a tolerable safety profile observed across all three parts. The 36 patient Part A in 1st line NSCLC has completed and is now entering the 74-patient extension phase. Part B in 2nd line NSCLC is currently recruiting. Part C in 2nd line HNSCC has also completed.

Part A showed impressive results, which are on par with the best of standard of care pembro plus chemo based on PFS and with a comparable or better duration of response.

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Improved ORR in 1L NSCLC patients, regardless of PD-L1 expression levels

FIGURE 14: TACTI-002 Results 1st line NSCLC (Part A)

	PD-L1 (TPS)	Pembro alone (NSQ+SQ)	Pembro+Efti (NSQ+SQ)	Pembro+Chemo	
				NSQ	SQ
ORR (%)	> 50	39.5	53.8	62.1	60.3
	>1	27.3	44.0	55.8	55.1
	<50	-	31.6	40.7	57.1
PFS (months)	Overall pop.	-	8.2	9.0	6.4
	>50	7.1	11.8	11.1	8.0
DoR	Overall pop.	20.2	NR (currently +13)	12.4	7.7
Toxicity		Well tolerated	No significant additional toxicity	+toxicity	
Co-med			No additional co-med required	+cost of chemo co-med	

Source: Company data, goetzpartners Research estimates.

Sustained response rates in 2L HNSCC patients

The synergistic effect of Efti in combination with chemotherapy and / or CPI therapy, without an associated increase in toxicity, offers the possibility of combinatorial treatment that enables a less aggressive chemotherapy or immunotherapy regimens while still achieving the same or a greater ORR. Alternatively, Efti also opens to the door to sensitising patients previously unresponsive to CPI therapy. Given evidence also suggests a role of inflammation in Efti efficacy in combination with other therapeutics, success in radiotherapy can also be speculated.

Results in second line HNSCC were even more impressive with an ORR of 46% including a 21% complete reponse compared 17.3% and 2% with pembro alone. Similarly, 50% of patients were alive a at 12 months compared to 37% with pembro based on historic data.

FIGURE 15: TACTI-002 Results 1st line HNSCC (Part C)

	PD-L1 (CPS)	Pembro alone	TACTI-002
ORR (%)	>1	17.3 (2% CR)	45.8 (20.8% CR)
	Overall pop.	14.6	35.5
mPFS (months)	>1	2.2 (28.7% PFS rate at 6 months	4.1 (45% PFS rate at 6 months)
	Overall pop.	2.1 (25.6% PFS rate at 6 months)	2.1 (30% PFS rate at 6 months)
mOS (months)	>1	8.7 (40% alive at 12 months)	12.6 (54% alive at 12 months)
	Overall pop.	8.4 (37% alive at 12 months)	12.6 (50% alive at 12 months)

Source: goetzpartners Research estimates.

The efti combination was also significantly better tolerated than the chemo combination. While chemo is clearly associated with substantial toxicity, the efti-pembro combination appears no worse than pembro alone.

FIGURE 16: Efti combination well tolerated compared to pembro monotherapy

Treatment Related Deaths (TRD)	Adverse Effects Leading to discontinuation	Adverse Effects (AE)	Safety Signals
Efti pembrolizumab combination			
0%	3.5%	49.6% (more than 1 AE of grade 3)	No new signals identified
Pembrolizumab Monotherapy (1)			
2%	10-15%	74.1% (more than 1 AE of grade 3)	No new signals identified

(1) Pembrolizumab alone or with chemotherapy versus cetuximab with chemotherapy for recurrent or metastatic squamous cell carcinoma of the head and neck (KEYNOTE-048): randomised, open-label, phase 3 study. Prof Barbara Burtness, MD.

Source: goetzpartners Research estimates.

Overall, although early results, this trial provides evidence of improved outcomes and minimised toxicity in combinatorial Efti treatment.

Other potential immunotherapy combinations

Efti is also involved two other trials in combination with other immunotherapies. One is the INSIGHT-004 trial, as part of a new clinical collaboration and supply agreement with Merck KGaA and Pfizer. A combination of efti with avelumab (another anti-PD-L1) in patients with advanced solid malignancies. Data released at ASCO indicated that the combination was well tolerated and yielded signs of benefits in several difficult to treat solid cancers.

In June 2021 Immutep announced a new collaboration with Merck KGaA for Lag-3 Therapy. The new collaboration and supply agreement will lead to the initiation of a phase I / IIa clinical trial in patients with solid tumours and will be called INSIGHT-005. The primary aim of the trial is to evaluate the feasibility, safety, and efficacy of efti in combination with the bifunctional fusion protein immunotherapy bintrafusp (M7824) being developed by Merck KGaA.

Bintrafusp links anti-PD-L1 with an anti-TGF-beta antibody. TGF-beta is a cytokine well known for its association with tumour propagation and metastatic potential, immunosuppression, fibrosis, tumour

angiogenesis and chemotherapy / radiotherapy resistance. Bintrafusp has a double action, it blocks TGF-beta immunosuppressive pathway while also antagonising immunosuppression via PD-L1. An additional arm (E) of the Investigator leads Phase 1 / 2a INSIGHT programme, INSIGHT-005 will look at the impact of this combination on range of solid tumours. They are expected to begin recruiting mid-2021 and first results are anticipated in 2022E.

Data from the AIPAC Phase 2 (see below) indicates that Efti appears not to generate a significant increase in serious AEs compared to chemo alone. This contrasts with, for instance, anti-CTL-4 drugs ICIs, and opens the door to triple or higher combinations with Efti. Also announced in June 2021, INSIGHT-003 Phase 1 / 2a will look at the combined impact of Efti, chemo and PD-1 / L1 in a range of solid tumours. Cyclidic, another partner, is evaluating a combination immunotherapy of HSP70 derived peptide, a GPC3 derived peptide, Efti and Hiltonol in patients with advanced or metastatic solid cancer. In initial results from the phase I trial, approximately 70% of patients showed immune response to each peptide.The involvement of efti in four clinical trials using combination therapies is key for expanding the use into many indications and exploiting the full potential of the drug.

Efti-chemo potential in breast cancer

Largest trial to date

Immune's largest trial to date the Active immunotherapy PAClitaxel ("AIPAC") trial, is a phase IIb trial for metastatic breast cancer. The trial is focussed on the treatment of hormone receptor positive (HR+) human epidermal growth factor receptor negative (HER2-) patients who have progressed following 1 - 2 rounds of endocrine treatment, which is increasingly accompanied by CDK 4/6 inhibitors. Treatment for these patients is generally palliative with a focus on quality of life and extending survival.

Data from the AIPAC mBC trial does indicate the potential for efti-chemo combination in several substantial patient subpopulations. This is the first time an antigen presenting cell activator has shown overall survival benefits in HR+ / HER2- metastatic breast cancer.

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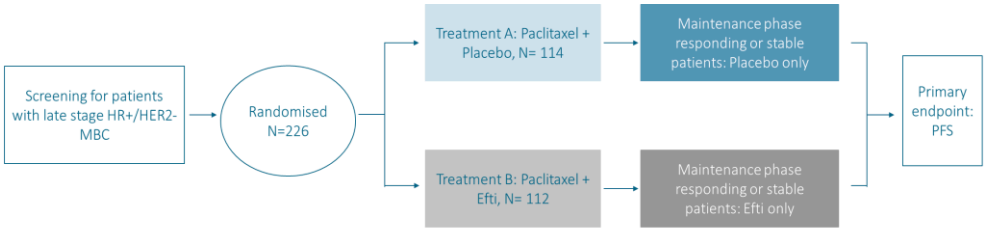
FIGURE 17: Structure of the AIPAC phase IIb trial



Source: Company data

Substantial survival benefit in two major subpopulations accounting for 60% of patients

Promising and enhancing the overall trend in overall survival, median survival benefits of 2.7 months have been observed when Efti+chemo are compared to chemo+placebo. Specifically, there has been a 7.1 month improvement in OS in patients under the age of 65 years and 9.4 months improvement in patients with a low starting monocyte count. Given the above-discussed role of both age and monocyte count in anti-tumour immune responses, improved outcomes in older patients or patients with higher monocyte counts could be addressed by combination with additional immune modulator therapies.

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FIGURE 18: Efti increases overall survival compared to chemo plus placebo

Phase IIb AIPAC Study in Metastatic Breast Cancer			
OS in <65 years old	OS in patients with low monocyte count	OS in total population	Benefits
7.1 months	**9.4 months**	**2.7 months**	• sustained long-term increase in peripheral CD8 T cells • lower HR • reduced risk of death

Source: Company data

These positive results in these subpopulations were accompanied by a maintenance of QoL in the whole population post 25 weeks compared to the placebo. In addition, the worse performance of patients which is evident in the CDK 4/6 treated patients was avoided in those treated with Efti.

Importantly, the combination of chemo and Efti did not result in any apparent increase in toxicity compared with that with paclitaxel alone, again highlighting a capacity for a treatment with improved patient outcome with no more adverse effects than existing therapies.

FIGURE 19: Efti generates no additional toxicity compared to chemotherapy alone

Summary of treatment- emergent adverse events (TEAEs)	Paclitaxel + Efti N=114 n(%)	Paclitaxel + Placebo N=112 n(%)
At least one TEAE	113 (99.1)	112(100)
At least one TEAE leading to death	2 (1.8)	3 (2.7)
At least one TEAE for which Efti/Placebo was discontinued	6 (5.3)	7 (6.3)
At least one grade 3 TEAE	78 (68.4)	73 (65.2)
At least one grade 1 or 2 TEAE as worst severity	35 (30.7)	39 (34.8)

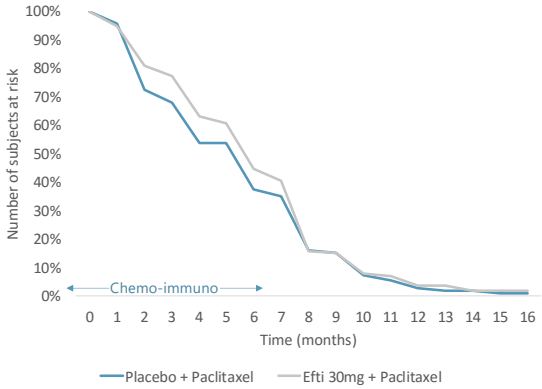
Source: Company data

Data from this trial also hints that the effect on the total patient could perhaps be boosted by adjusting the treatment regimen. The study protocol required that patients only received paclitaxel for the first seven months of efti treatment. From the data, it was evident that the efti appeared a benefit over placebo during the first seven months, but this benefit disappeared thereafter (FIGURE 20). This suggests that retaining or extending the duration of chemotherapy could provide further improve Efti therapy.

Benefits may be extended by extending period of chemo exposure.

This regimen will be adopted as part of future trials. It has already been adopted by Immutep's Chinese partner EOC Pharma, who have exclusive rights to Efti in China. EOC 's Phase I with 12 patients receiving 6mg or 30mg doses of efti is due to complete by YE CY2021E. Immutep will receive defined milestones and royalties from EOC as the products moves through development and into the market. The enhancing effect of chemo might also suggest that the presence of a 'co-inflammatory' stimulus could enhance the impact of Efti on solid tumours. This may be key in shaping future trials not only in mBC, but also in other indications such as NSCLC, where an Efti / chemo combo seems an obvious next step. This inflammatory stimulus for Efti efficacy also provides a rationale to explore combinations with radiotherapy, also known to promote an inflammatory response in tumours. These data form the basis for a pivotal phase 3 due to begin 2022E.

FIGURE 20: AIPAC BICR trial data indicates potential Efti-paclitaxel synergy



PFS estimates – primary analysis Blinded independent investigator read (BICR)	Paclitaxel + Efti N=114	Paclitaxel + Placebo N=112
Median (months)	7.29	7.29
Mean (months)	7.12	6.64
% progression free at 6 months	**63%**	**54%**

Source: Company data

With an accumulating body of clinical evidence suggesting the benefit of Efti combinatorial therapy in NSCLC, mBC and HNSCC, and with different treatment regimens, there is great potential for Efti to be used in other aggressive, poorly treated solid tumours in which CPI therapy and chemotherapy is currently limited and poorly tolerated. Though little evidence has explored radiotherapy, the success of Efti with chemotherapy highlights another possible avenue of success in ORR and minimising toxicity.

Efti revenue model

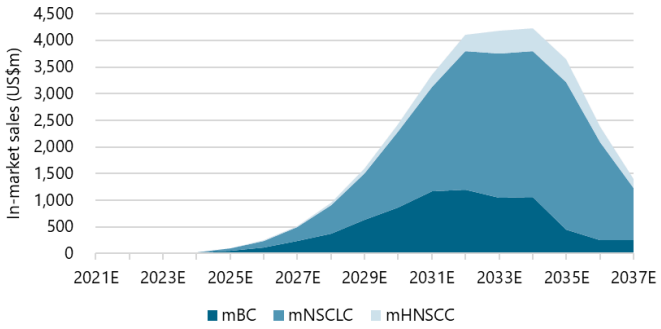
We estimate that if successfully marketed by a major partner Efti could generate upwards of $3bn in sales in Europe and the US. Our key assumptions and in-market sales forecasts for Efti are shown in FIGURE 21 and FIGURE 22. We model a global licensing deal worth $1bn, of which we include only $600m in our forecasts, including a $50m upfront payment, $125m in regulatory milestones and $425m in sales-based milestones. We further assume that Immutep receives tiered royalties on sales, rising progressively from 15% for the first $250m to 25% for sales over $2bn, yielding a blended royalty rate of up to 21.5% (FIGURE 23).

FIGURE 21: Efti in-market sales forecasts – summary

Indication	First launch	Peak penetration		Peak sales ($m)
		US	Europe	
mBC	2024E	15%	10%	889
mNSCLC	2025E	10%	6.5%	1,826
mHNSCC	2026E	12%	8%	326
Portfolio				**3,041**

Source: goetzpartners Research estimates. Warning Note: Forecasts are not a reliable indicator of future results or performance. The return may increase or decrease because of currency fluctuations.

FIGURE 22: Efti in-market sales forecasts



Source: goetzpartners Research estimates. Warning Note: Forecasts are not a reliable indicator of future results or performance. The return may increase or decrease because of currency fluctuations.

Efti is protected by a series of separate patents that cover combinations with chemotherapy and immune therapies, as well as manufacturing. We believe that these together with the data exclusivity for innovative biologics of 8 and 12 years in the EU and USA respectively should provide protection from the introduction of biosimilars into the mid-2030s.

FIGURE 23: Eftilagimod alpha sales model

Dec YE	2020E	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E	2032E	2033E	2034E	2035E
Global eftilagimod sales ($m)					**17**	**95**	**249**	**516**	**951**	**1595**	**2427**	**3362**	**4115**	**4177**	**4234**	**3655**
mBC sales					17	56	115	229	378	631	869	1171	1195	1040	1058	456
mNSCLC sales						39	128	266	530	878	1417	1964	2607	2722	2742	2763
mHNSCC sales							6	21	43	86	140	226	313	415	434	436
Global licensing deal																
Royalties to Immutep ($m)					2	14	37	83	165	302	502	735	924	939	954	809
Blended royalty rate					0	0	0	0	0	0	0	0	0	0	0	0
Royalties to Immutep (A$m, into P&L)					**3**	**19**	**50**	**111**	**221**	**404**	**672**	**985**	**1238**	**1258**	**1278**	**1084**
Upfront ($m, amortised over 10 years)			50													
Share of upfront recognised in P&L (A$m)			6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7				
Milestones (A$m, into P&L)				**33**		**134**	**100**		**134**				**335**			

Source: goetzpartners Research estimates. Warning Note: Forecasts are not a reliable indicator of future results or performance. The return may increase or decrease because of currency fluctuations.

Pharma out-licensed programmes

Novartis - LAG525 releasing anti-tumour T-cell suppression

Antagonism of the LAG-3 suppressor function is the focus of many players with BMS's relatimab currently in Phase III (FIGURE 24). Originally licensed to CoStim Pharmaceuticals Inc, the Immutep product IMP701 is currently under development by Novartis who acquired CoStim in 2014. Now named LAG525, Novartis has the drug in five separate clinical trials in over 1000 patients. These include phase II in combination with another immunotherapy for solid tumours and blood cancer, phase II in combination with chemotherapy for triple negative breast cancer ("TNBC"), phase II in combination with immunotherapy and a small molecule drug for melanoma, phase II in combination with immunotherapy for solid tumours and finally a phase I trial combining chemotherapy and a small molecule with IMP701 for TNBC.

FIGURE 24: Landscape overview of LAG-3 antagonist therapeutics

Company	Programme	Preclinical	Phase I	Phase II	Phase III	Total trials	Patients on trials
BMS	Relatlimab		7	23	2	32	9,693
NOVARTIS	LAG525 (IMP701)		1	4		5	1,104
B.I.	BI754111		4	1		5	849
Merck & Co. Inc.	MK4280		2	1		3	940
Macrogenics	MGD013		1	1		2	1,105
Symphogen A/S	SYM022		2			2	132
H-L Roche	RG6139		1			1	200
Regeneron	REGN3767		1			1	589
Innovent	IBI110		1			1	268
Xencor	XmAb-22841		1			1	242
Tesaro	TSR-033		1			1	200
F-Star	FS-118		1			1	51
Incyte	INCAGN02385		1			1	40

Source: Company data

These studies are expected to generate data and associated milestone payments to Immutep during 2021E and beyond. With a launch expected in 2025E, we anticipate that revenues from LAG525 could reach $4bn generating peak royalties of over $250 (>AUD$340m) (FIGURE 25).

FIGURE 25: LAG525 sales model

Dec YE	2020E	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E	2032E	2033E	2034E	2035E
LAG525 global sales to Novartis ($m)						**200**	**500**	**1,100**	**2,000**	**3,000**	**3,400**	**3,900**	**3,920**	**4,000**	**3,800**	**3,200**
growth							150%	120%	82%	50%	13%	15%	1%	2%	(5%)	(16%)
Royalties to Immutep ($m)						10	25	56	110	180	212	252	254	260	244	196
Blended royalty rate						5.0%	5.0%	5.1%	5.5%	6.0%	6.2%	6.5%	6.5%	6.5%	6.4%	6.1%
IMM financial year						FY24/25	FY25/26	FY26/27	FY27/28	FY28/29	FY29/30	FY30/31	FY31/32	FY32/33	FY33/34	FY34/35
Royalties to Immutep (JunYE) ($m)						5	18	41	83	145	196	232	253	257	252	220
Royalties to Immutep P&L (A$m)						**7**	**23**	**54**	**111**	**194**	**263**	**311**	**339**	**344**	**338**	**295**

Source: goetzpartners Research estimates. Warning Note: Forecasts are not a reliable indicator of future results or performance. The return may increase or decrease because of currency fluctuations.

Preclinical Programmes

IMP761 is an antibody against LAG-3, designed to suppress auto-reactive memory T cells, highlighting the potential for use in the treatment of autoimmune diseases. IMP761 is the first LAG-3–specific agonist product candidate acting upstream on activated T cells. Recently, significant progress has been made in cell line development, with a stable CHO cell line established which can produce high product yields of the drug. Immutep are now working on preparations for the GMP compliance development phase for clinical testing to begin.

Financial models

FIGURE 26: Immutep profit and loss model

Profit & Loss Statement	2019A	2020A	2021E	2022E	2023E	2024E	2025E	2026E	2027E
Jun YE (A$k except EPS)	30-Jun-19	30-Jun-20	30-Jun-21	30-Jun-22	30-Jun-23	30-Jun-24	30-Jun-25	30-Jun-26	30-Jun-27
Revenue	**7,490**	**16,500**	**10,484**	**22,141**	**44,888**	**27,862**	**173,553**	**212,573**	**165,282**
growth	2%	120%	(36%)	111%	103%	(38%)	523%	22%	(22%)
License income	140	7,486	4,019	17,624	40,192	22,938	171,193	206,419	155,136
% sales	2%	45%	38%	80%	90%	82%	99%	97%	94%
growth		5256%	(46%)	339%	128%	(43%)	646%	21%	(25%)
Other income	7,350	9,014	6,465	4,516	4,696	4,924	2,361	6,153	10,146
% sales	98%	55%	62%	20%	10%	18%	1%	3%	6%
growth	56%	23%	(28%)	(30%)	4%	5%	(52%)	161%	65%
R&D and intellectual property	*(16,591)*	*(20,396)*	(13,368)	(13,886)	(14,553)	(6,494)	(18,295)	(30,719)	(34,034)
% sales	222%	124%	128%	63%	32%	23%	11%	14%	21%
growth	66%	23%	(34%)	4%	5%	(55%)	182%	68%	11%
Corporate administrative expenses	(6,366)	(6,336)	(6,623)	(6,756)	(6,955)	(4,786)	(9,012)	(12,033)	(13,571)
% sales	85%	38%	63%	31%	15%	17%	5%	6%	8%
growth	(12%)	(0%)	5%	2%	3%	(31%)	88%	34%	13%
D&A expenses	*(1,880)*	*(2,080)*	(1,556)	(1,494)	(1,392)	(1,347)	(1,272)	(1,323)	(1,302)
% sales	25%	13%	15%	7%	3%	5%	1%	1%	1%
growth	4%	11%	(25%)	(4%)	(7%)	(3%)	(6%)	4%	(2%)
Other external expenses	(1,958)	(1,157)	(1,318)	(1,516)	(2,693)	(2,005)	(2,306)	17,678	-
% sales	26%	7%	13%	7%	6%	7%	1%	(8%)	0%
growth	85%	(41%)	14%	15%	78%	(26%)	15%	(867%)	(100%)
Total costs & operating expenses	**(26,795)**	**(29,968)**	**(22,866)**	**(23,651)**	**(25,594)**	**(14,631)**	**(30,885)**	**(26,396)**	**(48,907)**
EBIT	**(19,305)**	**(13,468)**	**(12,382)**	**(1,511)**	**19,294**	**13,231**	**142,668**	**186,176**	**116,375**
Interest expenses		-	-	-	-	-	-	-	-
Profit/Loss before tax	**(19,305)**	**(13,468)**	**(12,382)**	**(1,511)**	**19,294**	**13,231**	**142,668**	**186,176**	**116,375**
growth	51%	(30%)	(8%)	(88%)	(1377%)	(31%)	978%	30%	(37%)
% sales	(258%)	(82%)	(118%)	(7%)	43%	47%	82%	88%	70%
Income tax	-	(0)	-	-	-	(1,323)	(28,534)	(55,853)	(34,913)
Tax rate	0%	0%	0%	0%	0%	10%	20%	30%	30%
Net income/loss	**(19,305)**	**(13,468)**	**(12,382)**	**(1,511)**	**19,294**	**11,908**	**114,135**	**130,324**	**81,463**
EPS calculation									
Earnings per Share (Basic)	**(0.006)**	**(0.004)**	**(0.004)**	**(0.000)**	**0.006**	**0.003**	**0.033**	**0.037**	**0.023**
growth	23%	(35%)	(9%)	(88%)	(1377%)	(38%)	858%	14%	(37%)
Underlying EPS (Basic)	**(0.008)**	**(0.006)**	**(0.005)**	**(0.001)**	**0.005**	**0.003**	**0.033**	**0.030**	**0.020**
Earnings per Share (Diluted)	**(0.006)**	**(0.004)**	**(0.004)**	**(0.000)**	**0.006**	**0.003**	**0.033**	**0.037**	**0.023**
growth	23%	(35%)	(9%)	(88%)	(1377%)	(38%)	858%	14%	(37%)
Underlying EPS (Diluted)	**(0.008)**	**(0.006)**	**(0.005)**	**(0.001)**	**0.005**	**0.003**	**0.033**	**0.030**	**0.020**

Source: Company data, goetzpartners Research estimates. Warning Note: Past performance and forecasts are not a reliable indicator of future results or performance. The return may increase or decrease because of currency fluctuations.

FIGURE 27: Immutep balance sheet model

Balance Sheet	2019A	2020E	2021E	2022E	2023E	2024E	2025E	2026E	2027E
Jun YE (A$k)	30-Jun-19	30-Jun-20	30-Jun-21	30-Jun-22	30-Jun-23	30-Jun-24	30-Jun-25	30-Jun-26	30-Jun-27
ASSETS									
CURRENT ASSETS	**23,542**	**31,152**	**85,143**	**84,707**	**94,872**	**100,887**	**207,871**	**313,887**	**389,129**
Cash and cash equivalents	16,568	26,322	80,217	79,682	89,746	95,659	202,539	308,448	383,581
GST receivable	268	-	-	-	-	-	-	-	-
Grant and other receivables	4,926	3,294	3,360	3,427	3,495	3,565	3,637	3,709	3,783
Other current assets	1,780	1,536	1,567	1,598	1,630	1,663	1,696	1,730	1,765
FIXED ASSETS	**17,000**	**15,445**	**14,835**	**13,833**	**13,393**	**12,663**	**13,191**	**13,003**	**12,605**
Tangible assets, net	53	49	77	108	143	180	221	267	317
Plant & Equipment	25								
Computer	16								
Furniture and fittings	12								
Goodwill	110	-	-	-	-	-	-	-	-
Intangible assets, net	16,837	15,396	14,758	13,725	13,250	12,483	12,970	12,736	12,289
Patents	-	-	-	-	-	-	-	-	-
Intellectual property	16,837	15,396	14,758	13,725	13,250	12,483	12,970	12,736	12,289
TOTAL ASSETS	**40,541**	**46,597**	**99,979**	**98,541**	**108,265**	**113,549**	**221,063**	**326,890**	**401,734**
LIABILITIES									
CURRENT LIABILITIES	**5,299**	**3,364**	**3,432**	**10,199**	**10,269**	**10,340**	**10,413**	**10,487**	**10,563**
Trade payables	2,557	2,934	2,993	3,053	3,114	3,176	3,240	3,305	3,371
Borrowings	-	-	-	-	-	-	-	-	-
Current tax payable	-	-	-	-	-	-	-	-	-
Employee benefits	239	300	306	313	319	325	332	338	345
Other payables	2,503	129	132	135	137	140	143	146	149
Deferred revenue	-	-	-	6,699	6,699	6,699	6,699	6,699	6,699
NON-CURRENT LIABILITIES	**10,855**	**9,934**	**11,256**	**6,077**	**177**	**(4,513)**	**(8,901)**	**(33,274)**	**(39,968)**
Convertible note liability	7,643	8,789	10,107	11,624	13,367	15,372	17,678	-	-
Warrant liability	3,164	950	950	950	-	-	-	-	-
Employee benefits	48	195	199	203	207	211	215	220	224
Deferred tax liability and other	-	-	-	-	-	-	-	-	-
Deferred revenue, less of current portion	-	-	-	(6,699)	(13,397)	(20,096)	(26,795)	(33,493)	(40,192)
TOTAL LIABILITIES	**16,154**	**13,298**	**14,687**	**16,276**	**10,446**	**5,827**	**1,512**	**(22,786)**	**(29,405)**
EQUITY									
SHAREHOLDERS EQUITY	**24,388**	**33,299**	**84,599**	**81,573**	**97,127**	**107,030**	**218,859**	**348,984**	**430,447**
Contributed equity	221,092	242,991	306,672	305,156	301,417	299,412	297,106	296,908	296,908
Reserves	65,534	66,015	66,015	66,015	66,015	66,015	66,015	66,015	66,015
Accumulated losses	(262,238)	(275,706)	(288,088)	(289,598)	(270,304)	(258,397)	(144,262)	(13,938)	67,524
TOTAL LIABILITIES & SHAREHOLDERS' EQUITY	**40,541**	**46,597**	**99,287**	**97,849**	**107,573**	**112,857**	**220,371**	**326,198**	**401,042**

Source: Company data, goetzpartners Research estimates. Warning Note: Past performance and forecasts are not a reliable indicator of future results or performance. The return may increase or decrease because of currency fluctuations.

FIGURE 28: Immutep cash flow model

Cash Flow Statement	2019A	2020E	2021E	2022E	2023E	2024E	2025E	2026E	2027E
Jun YE (A$k)	30-Jun-19	30-Jun-20	30-Jun-21	30-Jun-22	30-Jun-23	30-Jun-24	30-Jun-25	30-Jun-26	30-Jun-27
OPERATING CASH FLOW									
Payments to suppliers and employees	(19,553)	(26,579)	(21,335)	(22,183)	(30,927)	(20,010)	(36,339)	(31,800)	(54,332)
License income	140	7,486	4,019	17,624	40,192	22,938	171,193	206,419	155,136
Interest received	411	229	204	208	212	216	220	225	229
Tax received / paid	-	(0)	-	-	-	(1,323)	(28,534)	(55,853)	(34,913)
Miscellaneous income	1,047	322	294	308	324	340	357	375	394
Grant income	2,670	7,703	5,968	4,000	4,160	4,368	1,783	5,554	9,523
NET CASH USED IN OPERATING ACTIVITIES	**(15,286)**	**(10,839)**	**(10,851)**	**(43)**	**13,961**	**6,529**	**108,680**	**124,920**	**76,038**
CASH FLOW FROM INVESTING									
Payments for held-to-maturity investments	-	-	-	-	-	-	-	-	-
Proceeds from held-to-maturity investments	-	-	-	-	-	-	-	-	-
Payments for P&E and intangibles	(41)	(19)	(254)	(492)	(951)	(616)	(1,801)	(1,134)	(905)
Proceeds from disposal of P&E	-	-	-	-	-	-	-	-	-
Acquisitions, net of cash acquired	-	-	-	-	-	-	-	-	-
Net cash provided by investing activities	**(41)**	**(19)**	**(254)**	**(492)**	**(951)**	**(616)**	**(1,801)**	**(1,134)**	**(905)**
CASH FLOW FROM FINANCING									
Proceeds from issue of shares / options / warrants	8,786	22,031	65,000	-	-	-	-	-	-
Proceeds from borrowings	-	-	-	-	-	-	-	-	-
Repayment of borrowings	-	(78)	-	-	(2,945)	-	-	(17,876)	-
Transaction costs	(773)	(1,475)	-	-	-	-	-	-	-
Net cash provided by financing activities	**8,013**	**20,478**	**65,000**	**-**	**(2,945)**	**-**	**-**	**(17,876)**	**-**
Net change in cash and cash equivalents	(7,315)	9,619	53,895	(535)	10,064	5,912	106,880	105,909	75,133
Effect of exchange rate on cash and cash equivalents	408	135	-	-	-	-	-	-	-
Cash and cash equivalents, beginning of period	23,476	16,568	26,322	80,217	79,682	89,746	95,659	202,539	308,448
Cash and cash equivalents, end of period	**16,568**	**26,322**	**80,217**	**79,682**	**89,746**	**95,659**	**202,539**	**308,448**	**383,581**
Cash generation/(burn)	**(15,328)**	**(10,859)**	**(11,105)**	**(535)**	**13,009**	**5,912**	**106,880**	**123,785**	**75,133**

Source: Company data, goetzpartners Research estimates. Warning Note: Past performance and forecasts are not a reliable indicator of future results or performance. The return may increase or decrease because of currency fluctuations.

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COMPANY DESCRIPTION

Immutep (known as Prima BioMed until November 2017) is an Australian clinical-stage biotechnology company that develops immunotherapies for cancer and autoimmune diseases. Immutep is the global leader in the understanding of and in developing therapeutics that modulate Lymphocyte Activation Gene-3 (“LAG-3”). LAG-3 was discovered in 1990 at the Institut Gustave Roussy by Dr Frédéric Triebel, Immutep's Chief Scientific Officer and Chief Medical Officer. The company has three assets in clinical and one asset in preclinical development. The lead product candidate is eftilagimod alpha ("efti"), a first-in-class antigen presenting cell ("APC") activator being investigated in combination with chemotherapy or immune therapy for advanced breast cancer and melanoma. Immutep is dual-listed on the Australian Stock Exchange (“IMM”) and on the NASDAQ Global Market (“IMMP”) in the US (American Depository Receipts), and has operations in Europe, Australia, and the US. The company has licensing deals with Novartis, GSK and EOC (China only), and clinical trial collaboration and supply agreements with Merck & Co. and Merck KGaA / Pfizer, the latter for lead asset efti.

SCENARIOS

Base Case - GP Investment Case
Immutep generates further clinical data on efti and secures an outlicensing deal over the next 12 - 18 months.

Bluesky Scenario
N/A

Downside risk
Company is unable to generate further positive data on efti and fails to achieve licensing deal.

Peer Group Analysis

SWOT

Strengths: Increasing data supports use of efti in oncology combos. Leader in the understanding of LAG-3; broadest LAG-3 focused pipeline; validation from large pharma partners (Novartis, GSK, Merck & Co.); funded for >12 months.

Weaknesses: One single asset (eftilagimod alpha) accounts for the lion share of value; efti has not demonstrated convincing efficacy in monotherapy settings; efti is protected mainly by use and formulation patents, as the composition of matter patent has already expired.

Opportunities: LAG-3 could become the third pillar in immune checkpoint therapy and efti is the most advanced LAG-3 focused asset; efti could be the first immuno-oncology drug to be approved for metastatic breast cancer; oncology drugs addressing high unmet needs often enjoy shorter development and approval timelines than therapeutics in other disease areas; significant M&A activity in the immuno-oncology space.

Threats: EMA and FDA raise the hurdles for immunotherapy drugs.

INDUSTRY EXPECTATIONS

Immutep is developing immunotherapies for cancer, with a focus on the immune checkpoint LAG-3. The immune checkpoint inhibitor ("ICI") class has experienced rapid adoption since the launch of BMS's Yervoy (ipilimumab) in 2011, owing to their ability to elicit durable responses in 20 - 50% of patients for up to 10 years. The global ICI market was worth $16.8bn in 2018 and is expected to nearly triple by 2022E, driven largely by expanding use of existing therapies both in approved and new indications. The race is on to develop novel compounds with complementary mechanisms of action for combination therapy able to augment response rate without increasing toxicity, which, if successful, are expected to enjoy rapid uptake.

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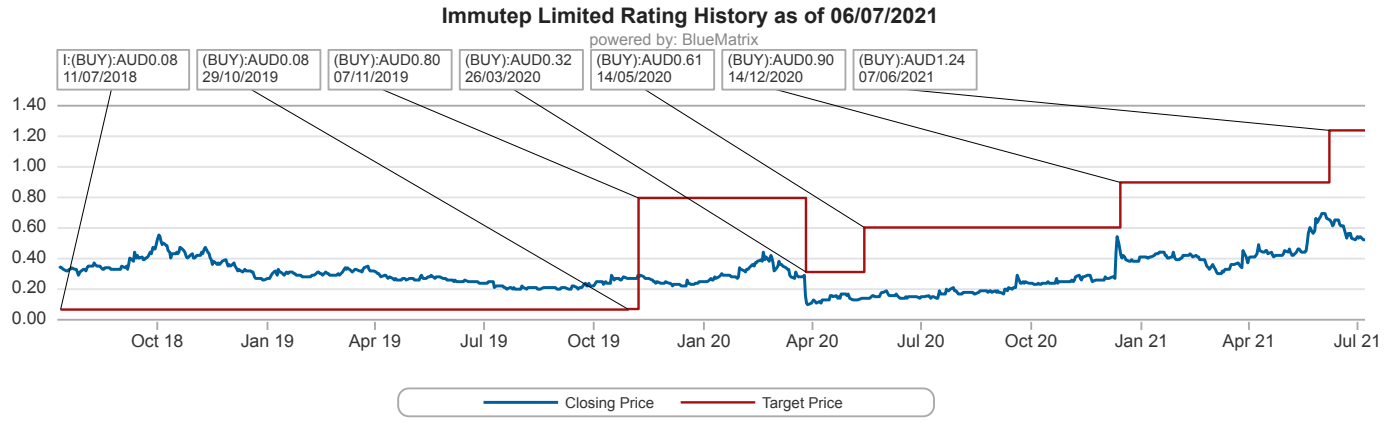

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goetzpartners securities Limited

The Stanley Building, 7 Pancras Square, London, N1C 4AG, England, UK.

Tel: +44 (0)203 859 7725

www.goetzpartnerssecurities.com