

04

# Investor Update

NOVEMBER 2019

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MARC VOIGT

## Message from the CEO

I'm pleased to welcome you to another investor update from the team at Immutep. While the previous months since our last update have been incredibly busy, Immutep is expecting to become even busier as we prepare to report over the coming months on several clinical trials evaluating eftilagimod alpha ("efti" or "IMP321").

We recently reported first data from our Phase II clinical trial, TACTI-002 (see Operational Snapshot), announcing that the predefined number of patient responses has been observed in the first cohort of the first line non-small cell lung cancer arm (called Part A). This has prompted us to expand the trial to include an additional 19 patients. More detailed trial data was reported at SITC, a key industry conference in November 2019.

Also, in October 2019 we reported the final efficacy data of TACTI-mel. TACTI-mel is our phase I trial in melanoma evaluating the combination of efti with Keytruda. The results of this Phase I study show that patients are responding well to the combination treatment. Their tumours are shrinking and not growing back over a long follow up period. In addition, we have seen the complete disappearance of all target tumour lesions for a number of patients and one complete confirmed response where the tumour has completely disappeared.

Our pipeline of data is:



This data, culminating in the first read out from AIPAC represents a very important and decisive period in the Company's history. Positive data could pave the way for creation of very significant value for Immutep and its shareholders.

AIPAC is our most advanced and largest clinical trial. It is also a potentially pivotal trial. Subject to sufficient and clinically meaningful data and regulatory interactions, the final read-out of progression-free survival (PFS) data could serve as a basis to pursue regulatory approval pathways for efti with the European Medicines Agency and the U.S. Food and Drug Administration. The AIPAC data will also give us an indication of efti's efficacy in that setting and help us to make strategic decisions about the commercial path ahead.

*[Continued on p. 3]*

## Message from the CEO

*[Continued from p. 2]*

From another perspective, positive AIPAC data could provide validation of a new class of products in immuno-oncology: antigen presenting cell activators, or, the “pushing the gas” concept. This would be a landmark in itself as the only class of immuno-oncology products widely used today are the immune checkpoint inhibitors (e.g. anti-CTLA-4 or -PD-1/L1 antibodies) that “release the brakes”.

### Chinese Official Delegation Visit

Immutep Limited was honoured to host a delegation of Chinese officials at its Sydney offices in October. The delegation was led by His Excellency Mr Zhang Hu, Vice Governor, People’s Government of Guangdong Province. Deanne Miller, our Chief Operating Officer, presented an overview of Immutep’s LAG-3 technology and our global opportunity.

Immutep has strong operational links with China, putting it on the radar of Chinese officials. Its manufacturing partner, WuXi Biologics, produces the GMP batches of efi for the Company’s clinical trials across the globe. In addition, Immutep works with its Chinese partner EOC Pharma, an oncology focused affiliate of Eddingpharm, to support EOC’s clinical trials of efi in China. EOC holds the exclusive development rights for efi in China, including Hong Kong, Macau, and Taiwan OC. The delegation was organised by the NSW Department of Premier and Cabinet.

### AGM

We were delighted to see so many shareholders at our recent Annual General Meeting on 1 November 2019. It was an opportunity for the Immutep Board and management team to report to shareholders and provide a comprehensive update on all our product candidates, clinical programs and partners.



It was also an opportunity to explain why we needed to execute a share consolidation, pursuant to which every 10 shares has been consolidated into 1 share. Whilst the total number of ordinary shares were reduced, the theoretical total value of the shares has not changed. In tandem with the consolidation, we changed the ratio of our NASDAQ-listed American Depositary Shares (ADS) from 100 ordinary shares being represented by 1 American Depositary Share, to 10 ordinary shares being represented by 1 American Depositary Share. This means the total number of American Depositary Shares listed on NASDAQ did not change as a result of the consolidation of our ASX listed ordinary shares.

It was important that Immutep completed the consolidation ahead of the multiple potential share price catalysts in front of us, i.e. the clinical data we are expecting to report (see the pipeline diagram above). By rationalising the shares on issue, investment in Immutep is expected to be more attractive to a broader range of institutional and professional investors and other members of the investing public.

In addition, we have observed that low-priced shares may be more prone to speculation, and therefore are generally more volatile as compared to higher-priced shares. Accordingly, the consolidation helps to reduce short-term share price volatility and may offset the effects of short-term share price speculation and reduce fluctuations in the Company’s market capitalisation.

*[Continued on p. 4]*

# Message from the CEO

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*[Continued from p. 3]*

## **Financing Update**

We were very pleased to have the ongoing support of our shareholders as we raised AU\$4m in an equity placement and AU\$6m from a fully underwritten Entitlement Offer in July 2019. Importantly, the funds raised are expected to extend the Company's cash runway to the end of calendar year 2020, including a milestone payment of £4m (AU\$7.4m) that we received from our partner GSK related to the first patient being dosed in GSK's Phase II clinical trial evaluating GSK2831781 in ulcerative colitis.

Partner milestone payments form an important source of non-dilutive funding for Immutep. The Company is eligible to receive up to £64m (~A\$118.17m) in developmental milestone payments from GSK as well as single-digit tiered royalties, if GSK2831781 is commercialised.

Overall the Company is in a solid financial position ahead of the coming milestones.

## **People Update**

Gina Orsot joined us as Clinical Trial Manager in our Berlin office having previously worked in the US for Gilead Sciences, a large biotechnology company, and Parexel, a CRO.

As a result of a strategic re-alignment of resources and responsibilities, Jay Campbell, our Chief Business Officer will leave to pursue other opportunities. Jay has been with Immutep since 2017 and has played an important role in broadening awareness of Immutep in the US market and supporting our business development efforts. We thank Jay for the skills and energy he brought to the team and wish him the best for his future endeavours.

The Company's US investor relations will continue to be supported by LifeSci Advisors. From a business development perspective, the Company is very well positioned for the upcoming period.

*[Continued on p. 5]*

# Message from the CEO

[Continued from p. 4]

## LAG-3 landscape

Also, in the past 12 months we saw increasing activity in the LAG-3 space. We are aware of 57 LAG-3 related clinical trials with well over 15,000 participants.

In the graphs below, you can see the number of products targeting LAG-3 (as shown by the column in the centre of each graph) as well as those products targeting other immune checkpoints (as shown by the other columns) in development in 2015 compared to 2019.

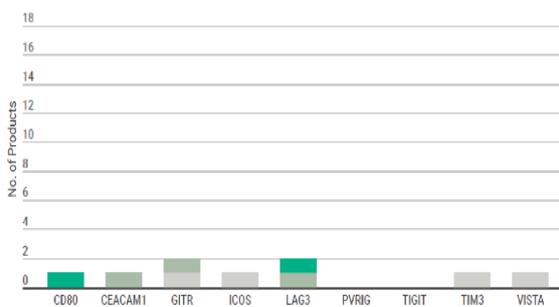
These graphs demonstrate the increasing industry interest and focus on LAG-3. (Source: BioCentury; week 21st October 2019).

It is very rewarding for our CSO/CMO, Dr Frederic Triebel, to see that his discovery of LAG-3 is attracting so much clinical development interest and will hopefully provide clinical benefit to many patients.

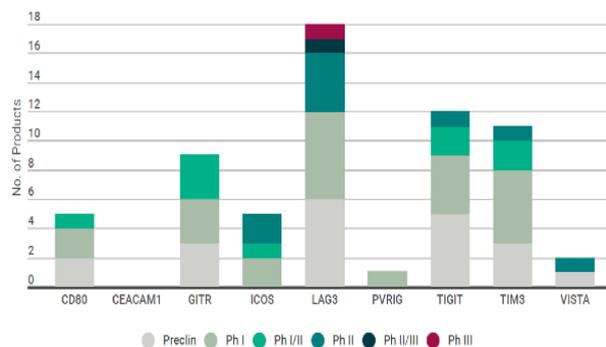
Within this landscape, Immutep remains the only LAG-3 pure play with the greatest number of product candidates around LAG-3 under evaluation. In addition, with the exception of our partner GSK after their acquisition of TESARO for an aggregate cash consideration of approximately US\$5.1 billion, we are the only company developing LAG-3 related product candidates for immuno-oncology and autoimmune diseases.

At this time several relatively small clinical data sets have been published regarding LAG-3. As larger clinical trials, such as AIPAC, come to maturity, much more LAG-3 clinical data will accumulate. The immuno-oncology landscape promises to expand considerably.

2015



2019



(Source: BioCentury; week 21st October 2019)



# INDUSTRY CONFERENCES AND POSTER PRESENTATIONS

Immutep's management and clinical team has been and remains highly active participating in industry conferences in 2019. This has helped raise the profile of the Company with potential industry partners in anticipation of a clinical data intensive period over the coming quarters.

Frédéric Triebel, our Chief Scientific Officer & Chief Medical Officer, presented positive, more mature data from our ongoing TACTI-mel phase I clinical study of efi at the **World Immunotherapy Congress USA 2019** in March. More mature data was presented at the **World Advanced Therapies & Regenerative Medicine Congress & Expo 2019** in May. The results showed that efi has a very favorable safety profile and patients had encouraging Overall Response Rates (ORR) of 33% in Part A (where patients were dosed with efi at cycle 5 of pembrolizumab treatment) and 50% in Part B (where patients were dosed with efi from day 1 of cycle 1 of pembrolizumab).

Also, in March 2019, Mathieu Angin PhD, our Research Scientist, presented positive results from Immutep's preclinical study of IMP761, a novel LAG-3 agonist antibody being developed for treatment of autoimmune diseases, at the **14th Congress of ECCO (European Crohn's and Colitis Organisation)**. The results confirmed previous preclinical studies that demonstrated the immunosuppressive activity of IMP761. Further research on IMP761 will help us understand its potential to treat the root-cause of autoimmune diseases through specific silencing of autoimmune memory T cells accumulating at the disease site.

We attended both the **American Association for Cancer Research (AACR) Annual Meeting 2019**, in March/April and the **ESMO Breast Cancer Congress**, in May. At the **New York Academy of Sciences**, Frontier in Immunotherapy, in May Frédéric Triebel participated in a panel discussion.

The **American Society for Clinical Oncology (ASCO) Annual Meeting** is one of the most widely attended annual conferences in our industry. Held in May/June, Immutep was honored to give two progress poster presentations on our clinical trials. The first poster provided an overview of our ongoing Phase II TACTI-002 study, its design and primary end points. The second poster related to efi and provided an overview of the investigator-initiated phase I study, INSIGHT-004, which is being conducted in collaboration with Merck KGaA, Darmstadt, Germany and Pfizer Inc.

**TACTI-002 (Two Active Immunotherapies)**: A multicenter, open label, Phase I study in patients with previously untreated unresectable or metastatic non-small cell lung cancer (NSCLC) or recurrent PD-L1 refractory NSCLC or with recurrent or metastatic squamous head and neck cancer (HNSCC) receiving the soluble LAG-3 fusion protein effiligid alpha (IMP761) in combination with pembrolizumab (PD-1 antagonist).

**Background**: The combination of immune checkpoint inhibitors (ICIs) has revolutionized the treatment of cancer. However, the majority of patients do not respond to ICI monotherapy. The combination of two different ICIs may improve response rates. IMP761 is a novel LAG-3 agonist antibody that has been shown to have immunosuppressive activity in preclinical models. The combination of IMP761 with pembrolizumab may improve response rates in patients with advanced cancer.

**Methods**: This is a phase I, open-label, multicenter study. The study is divided into two parts: Part A and Part B. Part A involves dosing patients with pembrolizumab at cycle 5 of treatment, and Part B involves dosing patients with IMP761 from day 1 of cycle 1 of pembrolizumab treatment. The primary endpoint is the overall response rate (ORR).

**Results**: The study is ongoing, and preliminary results are being analyzed. The ORR is being evaluated in both Part A and Part B.

**Conclusion**: The combination of IMP761 and pembrolizumab may improve response rates in patients with advanced cancer. Further studies are needed to confirm these findings.

**The "INSIGHT" Trial**: Two new strata of an explorative, single center, open-labeled, phase I study to evaluate the feasibility and safety of subcutaneous injections with IMP321 (LAG-3 fusion protein, effiligid alpha) combined with either standard-of-care drug therapy or combined with PD-L1 inhibition (avelumab) in advanced stage solid tumor entities.

**Background**: The combination of immune checkpoint inhibitors (ICIs) has revolutionized the treatment of cancer. However, the majority of patients do not respond to ICI monotherapy. The combination of two different ICIs may improve response rates. IMP321 is a novel LAG-3 agonist antibody that has been shown to have immunosuppressive activity in preclinical models. The combination of IMP321 with either standard-of-care drug therapy or avelumab may improve response rates in patients with advanced cancer.

**Methods**: This is a phase I, open-label, single-center study. The study is divided into two strata: Stratum A and Stratum B. Stratum A involves dosing patients with IMP321 and standard-of-care drug therapy, and Stratum B involves dosing patients with IMP321 and avelumab. The primary endpoint is the overall response rate (ORR).

**Results**: The study is ongoing, and preliminary results are being analyzed. The ORR is being evaluated in both Stratum A and Stratum B.

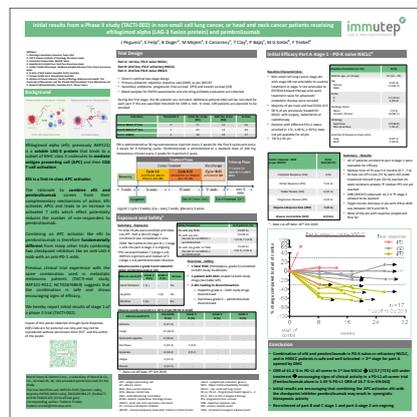
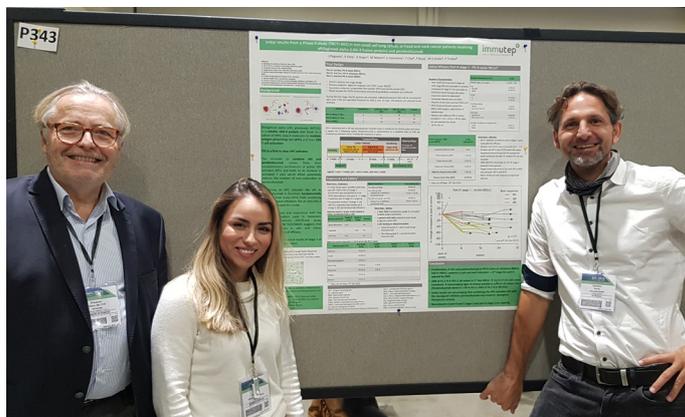
**Conclusion**: The combination of IMP321 and either standard-of-care drug therapy or avelumab may improve response rates in patients with advanced cancer. Further studies are needed to confirm these findings.

[Continued on p. 7]

# INDUSTRY CONFERENCES AND POSTER PRESENTATIONS

[Continued from p. 6]

In October 2019, Immutep's Dr. Frederic Triebel, trial coordinator, Daniela Urueta, and Christian Mueller presented our scientific poster at the **34th Annual Meeting of the Society for Immunotherapy of Cancer (SITC)** in the US. The poster provided an update on TACTI-002, our ongoing Phase II clinical trial, including more mature positive data. The poster shows that patients in stage 1 of Part A reported a preliminary Overall Response Rate (ORR) of 41%. This ORR compares favourably to standard of care monotherapy treatments for all comers PD-L1 NSCLC patients.



Poster as PDF: [www.immutep.com/investors-media/presentations.html](http://www.immutep.com/investors-media/presentations.html)



Just recently in November 2019, we also participated in **BioEurope** which took place in Hamburg, Germany. BioEurope is Europe's largest life science partnering conference and gives the Immutep team the chance to engage with global life science companies including existing and potential partners.



# OPERATIONAL SNAPSHOT

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## **AIPAC – Phase IIb study in breast cancer**

Immutep completed the enrollment of patients into its largest and most advanced clinical trial, AIPAC, in June 2019. 227 patients are participating in this potentially pivotal trial at more than 30 clinical sites across Europe. The first read-out of Progression-Free Survival (PFS) data together with the overall response rate, is expected to be reported in Q1 of 2020.

## **TACTI-002 – Phase II study in solid cancers**

Recruitment is advancing well for our TACTI-002 trial which we are conducting in collaboration with Merck & Co., Inc., Kenilworth, NJ, USA (known as “MSD” outside the United States and Canada). The first patient was enrolled and safely dosed into the trial in March 2019 and the trial now has 38 patients participating. This includes full enrolment of 17 patients into the first cohort of the first line non-small cell lung cancer arm, called Part A, which has now been expanded to include an additional 19 patients following the predefined number of patient responses being observed. More detailed trial data was reported at SITC (see CEO update), showing that patients in stage 1 of Part A reported a preliminary Overall Response Rate (ORR) of 41%. Further data is expected to be reported in Q1 of 2020.

*[Continued on p. 9]*

### **What are all the different Parts in TACTI-002?**

TACTI-002 evaluates the combination therapy of efiti and Keytruda in three types of patients. These are:

1. First line Non-Small Cell Lung Cancer (NSCLC) – known as **Part A**
2. Second line NSCLC PD-X refractory – known as **Part B**
3. Second line Head and Neck Squamous Cell Carcinoma – known as **Part C**

### **Why is TACTI-002 being expanded?**

TACTI-002 has an adaptive trial design called Simon’s two-stage. This allows the number of patients to be increased if positive results are observed in stage 1, creating a stage 2. So far, Immutep has reported positive results for Part A which includes patients with first line NSCLC and accordingly, the Data Review Committee decided that the trial could be safely expanded to include a new cohort of 19 patients, forming stage 2 of Part A.

As Immutep reports results for Parts B and C, it will be able to expand these parts too, if the results are positive.

### **What type of patients are included in TACTI-002?**

TACTI-002 is an all comer study in terms of PD-L1 status. This means that patients were eligible to participate regardless of their PD-L1 status which ranges from < 1%; 1-49% and ≥50%. PD-L1 status is a well-known predictive marker for response to pembrolizumab (part of the combination therapy with efiti). In other words, patients were able to participate whether or not they were expected to respond to pembrolizumab.

# OPERATIONAL SNAPSHOT

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*[Continued from p. 8]*

## **TACTI-mel – Phase I trial in melanoma**

Immutep was pleased to report more mature and encouraging interim results from our TACTI-mel trial in March 2019 and again in May 2019. Final efficacy data was reported in October 2019, confirming deep durable responses have been observed, with 12 patients (50% having a decrease of  $\geq 75\%$  in the target lesions and 9 patients (38% being treated for  $\geq 12$  months with pembrolizumab and effi.

As the trial is approaching its conclusion, we are expecting to report the final safety data in H1 of 2020.

## **IKF – INSIGHT Phase I trial in advanced solid cancers**

The Institute of Clinical Cancer Research, Krankenhaus Nordwest GmbH in Frankfurt, Germany (IKF), is the sponsor of our INSIGHT trial. It reported that patient recruitment was progressing, with finally 14 patients participating in the trial. A single patient case was presented in Immutep's global webcast in June 2019. The INSIGHT trial includes a 4th arm called INSIGHT-004 (see below).

## **INSIGHT-004 – Phase I trial in advanced solid cancers**

We recently started our INSIGHT-004 study in collaboration with Merck KGaA, Darmstadt, Germany and Pfizer Inc. The first patient with advanced solid malignancies was enrolled and dosed in Germany in June 2019. Six patients are now participating in the trial. We expect to report the first safety data from this trial in Q4 of 2019. INSIGHT-004 is the 4th arm of the INSIGHT trial, detailed above.

## **IMP761 – Preclinical studies in autoimmune disease**

Immutep reported positive preclinical data from its preclinical studies of IMP761 in March 2019. Encouraged by the results, we have started steps for cell line development and manufacturing in preparation for clinical studies of this product candidate. Immutep held a global webcast for investors outlining the encouraging preclinical results in March 2019. A replay of the webcast can be accessed here:

[www.finnewsnetwork.com.au/MediaCenter/MediaCenterMobile.aspx?Site=FNN1502](http://www.finnewsnetwork.com.au/MediaCenter/MediaCenterMobile.aspx?Site=FNN1502)



## PARTNERING SNAPSHOT

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### **Novartis – LAG525**

Novartis is our partner for the development of LAG525, which is a humanised LAG-3 antagonist antibody derived from Immutep's IMP701 antibody. We are pleased to see that Novartis has now commenced a 5th study of the product candidate, a Phase Ib clinical trial in triple negative breast cancer. Across the five trials, LAG525 will be evaluated in a total of 1,100 patients, significantly enhancing our understanding of this product candidate.

### **GSK – GSK'781**

GSK is our partner for GSK2831781, which is derived from our IMP731 antibody. It commenced its Phase II clinical study evaluating the product candidate in 280 ulcerative colitis patients in May 2019. This prompted a milestone payment of AU\$7.4m to Immutep. The study is expected to be completed in August 2022. In addition, GSK started another Phase I study in healthy volunteers in June 2019.

### **EOC Pharma – EFTI**

Immutep's partner and Chinese licensee, EOC Pharma, is continuing the recruitment of metastatic breast cancer patients for its Phase I clinical trial in China. The results from the trial are expected to be reported by EOC Pharma in the next 12 months.

### **CYTLIMIC – EFTI**

Immutep is continuing to collaborate with CYTLIMIC to prepare clinical trials that evaluate efti as part of a cancer peptide vaccine, called CYT001. CYTLIMIC recently announced a new collaboration with Chiba University in Japan to start a new Phase I trial of CYT001. The trial is called CRESCENT1. Separately, in August 2019 CYTLIMIC raised JP ¥ 1.3bn (circa US\$12m) in finance from its shareholders, including NEC Corporation and others, after filing its first IND for CYT001.

### **MSD**

See TACTI-002 update in our Operational Snapshot section.

### **Merck KGaA and Pfizer**

See INSIGHT-004 update in our Operational Snapshot section.



## OUTLOOK

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The team is focused on the meaningful clinical results that lay ahead and continuing to support our partners on their respective programs. This is an incredibly exciting time for Immutep and we look forward to reporting further on these results over the coming months.



### COMPANY CALENDER

## What's next

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13 -16 January 2020

**38th Annual J.P. Morgan Health Care Investor Conference**  
San Francisco, California, USA

19 - 22 February 2020

**34th German Cancer Congress, European Association for Cancer Research**  
Berlin, Germany

24 - 29 April 2020

**AACR Annual Meeting 2020**  
San Diego Convention Center, San Diego, California, USA

7 - 9 May 2020

**ESMO Breast Cancer Congress 2020**  
Hub27 Berlin, Messedamm 22, 14055, Berlin, Germany

29 May - 2 June 2010

**ASCO 2020 Annual Meeting**  
McCormick Place, Chicago, IL, USA



IMMUTEP

## Fact Facts

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### Listings

Australian Securities Exchange (ASX), NASDAQ

### Stock Codes

ASX: IMM, NASDAQ: IMMP

### Issued Capital – Ordinary Shares

387.71 million (as of November 15, 2019)

### Market Capitalisation

A\$102.74 million (US\$69.81 million)  
(as of November 15, 2019)

### Issued ADR's

10.4 million (as of November 15, 2019)

### Cash & Term Deposits

~A\$27 million (~US\$18.25 million)  
(as of September 30, 2019)

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## Board of Directors

### Russell J Howard, PhD

Non-executive Chairman

### Mr Marc Voigt

Executive Director and Chief Executive Officer

### Mr Pete A Meyers

Non-executive Director

### Grant Chamberlain

Non-executive Director

## Senior Management

### Prof Dr Frédéric Triebel

Chief Medical Officer and Chief Scientific Officer

### Deanne Miller

Chief Operating Officer, General Counsel and  
Company Secretary

[www.immutep.com](http://www.immutep.com)

## FOLLOW IMMUTEP'S PROGRESS

Immutep is dedicated to maintaining consistent and clear communications with our investors. In addition to our newsletter, we encourage our shareholders to continue following Immutep's progress in a number of ways:

 [www.immutep.com](http://www.immutep.com)

Our website is a treasure trove for those in search of details about our company, our management team, and archived information. We encourage everyone to check it out regularly.

 [www.clinicaltrials.gov](http://www.clinicaltrials.gov)

Immutep registers all of our clinical trials, and the details of enrolling doctors, on the ClinicalTrials.gov website, a service of the United States National Institutes of Health. This register is the largest such repository of clinical trial information around the world.

Our ClinicalTrials.gov ID for our trials are as follows:

- TACTI-mel trial is NCT02676869
- AIPAC trial is NCT02614833
- TACTI-002 trial is NCT03625323

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 **LinkedIn**

<https://www.linkedin.com/company/857541/>

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