

ASX/Media Release (Code: ASX: IMM; NASDAQ: IMMP)

**Immutep Presents Positive IMP761 Preclinical Results  
at 14th Congress of European Crohn's and Colitis Organisation**

SYDNEY, AUSTRALIA – 8 March 2019 - Immutep Limited (ASX: IMM; NASDAQ: IMMP) (Immutep or the Company), a biotechnology company developing novel immunotherapy treatments for cancer and autoimmune diseases, today announced positive results from its preclinical study of IMP761, a novel LAG-3 agonist antibody being developed for the treatment of autoimmune diseases. The results were presented at the 14th Congress of European Crohn's and Colitis Organisation (ECCO) Conference in Denmark on 7 March 2019.

Consistent with earlier *in vitro* studies conducted by Immutep on the immunosuppressive activity of IMP761, this new study in a non-human primate animal model showed that IMP761 decreases inflammatory T cell infiltration induced by intra-dermal injection of an antigen. The key conclusions from this *in vivo* study are outlined below:

- Compared to control animals, CD3<sup>+</sup> or CD8<sup>+</sup> T cell infiltration was inhibited by IMP761 for both tested subcutaneous doses (0.03 mg/kg and 0.3 mg/kg) as observed via immunofluorescence staining of T cells in the skin tissue test site biopsy.
- Multivariate analysis of the test site parameters (erythema, CD3, CD4 and CD8 T cell infiltration) showed a significant decrease of this antigen-specific T cell induced intradermal reaction, compared to the control group.

At the site of chronic inflammation, auto-immune memory T cells are stimulated by the same self-peptides repeatedly, acquiring an “exhausted” phenotype. We used LAG-3, a marker for exhausted memory T cells, to target these self-reactive T cells *in vivo*. As LAG-3 is a T cell co-inhibitory receptor, we developed an agonist antibody, IMP761, to increase LAG-3 down-modulation of T cell receptor signaling in these autoimmune T cells.

Immutep CMO and CSO, Frédéric Triebel said, “Future directions in developing more targeted immunosuppressive antibodies should address the root cause of autoimmune diseases by specifically silencing the autoimmune memory T cells accumulating at the disease site. By increasing the physiological negative feedback loop of LAG-3 on T cell receptor signaling in response to self-peptides, IMP761 is preventing the activation of all downstream inflammatory pathways, such as the production of TNF- $\alpha$ , IL-6, IL-17 or IL-23.”

Based on the results of this *in vivo* study which confirms the immunosuppressive activity of IMP761 on the inflammation associated with an antigen-induced T cell response in non-human primate tissues, Immutep will advance IMP761 into clinical development. The Company has commenced CHO cell line development for Good Manufacturing Practice manufacturing.

Immutep CEO Marc Voigt said, “Our IMP761 preclinical study results are very encouraging. We believe that IMP761 represents a new, more targeted therapeutic approach working upstream from currently available immunosuppressive therapies. IMP761 will be an important part of our development efforts, in addition to our lead product candidate, eftilagimod alpha.”

The presentation materials from this event can be accessed via Immutep’s website.

### **Webcast**

Immutep CSO and CMO, Frédéric Triebel and CEO Marc Voigt will discuss the results and the Company’s plans to advance IMP761 into clinical development on a global webcast in the coming weeks. Details of the webcast will be announced separately.

### **About Immutep**

Immutep is a globally active biotechnology company that is a leader in the development of immunotherapeutic products for the treatment of cancer and autoimmune disease. Immutep is dedicated to leveraging its technology and expertise to bring innovative treatment options to market for patients and to maximize value to shareholders. Immutep is listed on the Australian Securities Exchange (IMM), and on the NASDAQ (IMMP) in the United States.

Immutep’s current lead product candidate is eftilagimod alpha (“efti” or “IMP321”), a soluble LAG-3lg fusion protein based on the LAG-3 immune control mechanism. This mechanism plays a vital role in the regulation of the T cell immune response. Efti is currently in a Phase IIb clinical trial as a chemoimmunotherapy for metastatic breast cancer termed AIPAC (clinicaltrials.gov identifier NCT02614833); a Phase II clinical trial referred to as TACTI-002 (Two ACTIVE Immunotherapies) to evaluate a combination of efti with KEYTRUDA® (pembrolizumab) in several different solid tumours (clinicaltrials.gov identifier NCT03625323); a planned Phase I clinical trial referred to as INSIGHT-004 to evaluate a combination of efti with avelumab (clinical trials.gov identifier NCT03252938); and a Phase I combination therapy trial in metastatic melanoma termed TACTI-mel (clinicaltrials.gov identifier NCT02676869).

Further information can be found on the Company’s website [www.immutep.com](http://www.immutep.com) or by contacting:

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