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

24 September 2018

IMMUTEP ENTERS INTO CLINICAL TRIAL COLLABORATION AND SUPPLY AGREEMENT WITH MERCK KGAA, DARMSTADT, GERMANY, AND PFIZER

SYDNEY, AUSTRALIA – Immutep Limited (ASX: IMM; NASDAQ: IMMP) ("Immutep" or "the Company") is pleased to announce that it has entered into a clinical trial collaboration and supply agreement with Merck KGaA, Darmstadt, Germany and Pfizer Inc., to evaluate the combination of Immutep's lead immunotherapy product candidate eftilagimod alpha ("efti" or "IMP321") with avelumab*, a human anti-PD-L1 antibody, in patients with advanced solid malignancies.

"We are delighted to have the opportunity to collaborate with Merck KGaA, Darmstadt, Germany, and Pfizer on this Phase I clinical trial that will evaluate the clinical benefits of combining our immune stimulator, eftilagimod alpha, with avelumab, a PD-L1 blocking mechanism of action. We feel that this new collaboration, with these industry leaders, further supports our hypothesis that there is a potentially meaningful therapeutic benefit in combining eftilagimod alpha with a checkpoint inhibitor in the treatment of cancer. We look forward to the initiation of this clinical trial, planned for later this year, and the prospects of further clinical investigations," said Marc Voigt, CEO of Immutep.

"This novel combination regimen adds to our clinical development program to further evaluate the potential in different challenging cancers," said Alise Reicin, Head of Global Clinical Development at the biopharma business of Merck KGaA, Darmstadt, Germany, which in the US and Canada operates as EMD Serono. "We are eager to assess the opportunity of combining eftilagimod alpha with avelumab to improve patient outcomes."

"We continue to focus on opportunities to advance combination trials with avelumab, as we believe the pathway to progress in immuno-oncology lies in combination approaches," said Chris Boshoff, M.D., Ph.D., Senior Vice President and Head of Immuno-Oncology, Early Development, and Translational Oncology, Pfizer Global Product Development. "We look forward to collaborating with Immutep on this clinical trial collaboration, which will help us accelerate and advance treatment options that will potentially benefit more patients."

The planned clinical evaluation will be an amendment to the existing INSIGHT Phase I clinical trial and will evaluate the safety, tolerability and recommended Phase II dose of efti when combined with avelumab in patients with advanced solid malignancies. The Institute of Clinical Cancer Research, Krankenhaus Nordwest GmbH in Frankfurt, Germany ("IKF") will be the sponsor of the clinical trial and it will be conducted under the existing protocol of the ongoing INSIGHT clinical study. Prof. Dr. Salah-Eddin Al-Batran, the lead investigator of INSIGHT and member of Immutep's clinical advisory board, will be the lead investigator of the trial.

Prof. Dr. Al-Batran commented: "We are excited to have the opportunity to sponsor this clinical trial of two complementary mechanisms of action and build upon the existing relationship between IFK and Immutep. This clinical trial will be conducted through an amendment to our existing protocol which will hopefully allow us to commence the clinical trial before the end of the year."

The clinical trial will evaluate the clinical benefits of releasing the brakes and pushing the accelerator of the body's immune system at two different positions in the cancer immunity cycle. Immutep's efti is a first-in-class antigen presenting cell ("APC") activator which stimulates cancer-fighting T cells, while

avelumab is an anti-PD-L1 therapy that works by increasing the ability of the body's immune system to help detect and fight tumor cells.

Avelumab has received accelerated approval** by the US Food and Drug Administration (FDA) for the treatment of patients with metastatic Merkel cell carcinoma (MCC) and previously treated patients with locally advanced or metastatic urothelial carcinoma (mUC), and is under further clinical evaluation across a range of tumor types under a global strategic alliance between Merck KGaA, Darmstadt, Germany, and Pfizer.

*Avelumab is under clinical investigation for treatment of solid malignancies and has not been demonstrated to be safe and effective for these uses. There is no guarantee that avelumab will be approved for solid malignancies by any health authority worldwide.

About Eftilagimod Alpha

Eftilagimod alpha ("efti" or "IMP321"), a LAG-3Ig fusion protein, is a MHC class II agonist that activates antigen-presenting cells ("APCs") such as dendritic cells and monocytes (primary target cells) and then CD8 T-cells (secondary target cells). The activation of the dendritic cell network and the subsequent T cell recruitment at the tumour site with efti may lead to stronger anti-tumor CD8 T cell responses than observed with checkpoint inhibitor monotherapy, as in the case of the TACTI-mel (Two ACTive Immunotherapies in melanoma) Phase I clinical trial (clinicaltrials.gov identifier NCT02676869). In combination with chemotherapy, the activation of the APC network with efti the day after injection of a single agent chemotherapy may lead to stronger cytotoxic cellular responses associated with an improved long-term Th1 (IFN-γ) immune status, both parameters being essential for a potent immune response against the tumour, as in the case of the AIPAC (Active Immunotherapy PAClitaxel) Phase IIb clinical trial (clinicaltrials.gov identifier NCT02614833).

About Avelumab

Avelumab is a human anti-programmed death ligand-1 (PD-L1) antibody. Avelumab has been shown in preclinical models to engage both the adaptive and innate immune functions. By blocking the interaction of PD-L1 with PD-1 receptors, avelumab has been shown to release the suppression of the T cell-mediated antitumor immune response in preclinical models.[1-3] Avelumab has also been shown to induce NK cell-mediated direct tumor cell lysis via antibody-dependent cell-mediated cytotoxicity (ADCC) in vitro.[3-5] In November 2014, Merck KGaA, Darmstadt, Germany, and Pfizer announced a strategic alliance to co-develop and co-commercialize avelumab.

Avelumab is currently being evaluated in the JAVELIN clinical development program, which involves at least 30 clinical programs, including seven Phase III trials, and more than 8,600 patients across more than 15 different tumor types. For a comprehensive list of all avelumab trials, please visit clinicaltrials.gov.

****Indications in the US**

The US Food and Drug Administration (FDA) granted accelerated approval for avelumab (BAVENCIO®) for the treatment of (i) adults and pediatric patients 12 years and older with metastatic Merkel cell carcinoma (mMCC) and (ii) patients with locally advanced or metastatic urothelial carcinoma (mUC) who

have disease progression during or following platinum-containing chemotherapy, or have disease progression within 12 months of neoadjuvant or adjuvant treatment with platinum-containing chemotherapy. These indications are approved under accelerated approval based on tumor response rate and duration of response. Continued approval for these indications may be contingent upon verification and description of clinical benefit in confirmatory trials.

Important Safety Information from the US FDA Approved Label

The warnings and precautions for avelumab (BAVENCIO®) include immune-mediated adverse reactions (such as pneumonitis, hepatitis, colitis, endocrinopathies, nephritis and renal dysfunction and other adverse reactions), infusion-related reactions and embryo-fetal toxicity.

Common adverse reactions (reported in at least 20% of patients) in patients treated with BAVENCIO for mMCC and patients with locally advanced or metastatic UC include fatigue, musculoskeletal pain, diarrhea, nausea, infusion-related reaction, peripheral edema, decreased appetite/hypophagia, urinary tract infection and rash.

For full prescribing information and medication guide for BAVENCIO, please see www.BAVENCIO.com.

Alliance between Merck KGaA, Darmstadt, Germany, and Pfizer Inc., New York, U.S.

Immuno-oncology is a top priority for Merck KGaA, Darmstadt, Germany, and Pfizer Inc. The global strategic alliance between Merck KGaA, Darmstadt, Germany, and Pfizer Inc., New York, US, enables the companies to benefit from each other's strengths and capabilities and further explore the therapeutic potential of avelumab, an anti-PD-L1 antibody initially discovered and developed by Merck KGaA, Darmstadt, Germany. The immuno-oncology alliance will jointly develop and commercialize avelumab and advance Pfizer's PD-1 antibody. The alliance is focused on developing high-priority international clinical programs to investigate avelumab as a monotherapy, as well as in combination regimens, and is striving to find new ways to treat cancer.

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 maximise value to shareholders.

Immutep's current lead product candidate is eftilagimod alpha ("efti" or "IMP321"), a soluble LAG-3Ig 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 NCT 02614833) and a Phase I combination therapy trial in metastatic melanoma termed TACTI-mel (clinicaltrials.gov identifier NCT 02676869). Additional LAG-3 products, including antibodies, for immune response modulation in autoimmunity and cancer are being developed by Immutep's large pharmaceutical partners. Immutep is also developing an agonist of LAG-3 (IMP761) for autoimmune

disease. Immutep is listed on the Australian Securities Exchange (IMM), and on the NASDAQ (IMMP) in the U.S.

Further information can be found on the Company's website at www.immutep.com or by contacting:

U.S. Investors:

Jay Campbell, Vice President of Business Development and Investor Relations, Immutep Limited

+1 (917) 860-9404; jay.campbell@immutep.com

Garth Russell, LifeSci Advisors

+1 (646) 876-3613; garth@lifesciadvisors.com

Australian Investors/Media:

Matthew Gregorowski, Citadel-MAGNUS

+61 2 8234 0105; mgregorowski@citadelmagnus.com

References

1. Dolan DE, Gupta S. PD-1 pathway inhibitors: changing the landscape of cancer immunotherapy. Cancer Control 2014;21(3):231-7.
2. Dahan R, Sega E, Engelhardt J et al. FcγRs modulate the anti-tumor activity of antibodies targeting the PD-1/PD-L1 axis. Cancer Cell 2015;28(3):285-95.
3. Boyerinas B, Jochems C, Fantini M et al. Antibody-dependent cellular cytotoxicity activity of a novel anti-PD-L1 antibody avelumab (MSB0010718C) on human tumor cells. Cancer Immunol Res 2015;3(10):1148-57.
4. Kohrt HE, Houot R, Marabelle A et al. Combination strategies to enhance antitumor ADCC. Immunotherapy 2012;4(5):511-27.
5. Hamilton G, Rath B. Avelumab: combining immune checkpoint inhibition and antibody-dependent cytotoxicity. Expert Opin Biol Ther 2017;17(4):515-23.