Immutep Announces Positive Update on IMP761, a First-in-Class LAG-3 Agonist Antibody for Autoimmune Diseases, from Phase I Study

- *Single-ascending dose portion of study has successfully completed 2.5 and 7 mg / kg levels*
- *Dose dependent immunosuppressive effect against a strong foreign antigen observed with continued favourable safety profile*
- *Substantial reduction in T cell activity highlights the potential efficacy of IMP761 in treating autoimmune diseases*
- *Given encouraging efficacy and safety, the trial will continue as planned and further updates are anticipated in 1H CY2026 including presentation of data at a major medical conference*

SYDNEY, AUSTRALIA – December 22, 2025 – Immutep Limited (ASX: IMM; NASDAQ: IMMP) ("Immutep" or "the Company"), a late-stage immunotherapy company targeting cancer and autoimmune diseases, today announces a positive update from the placebo-controlled, double-blind first-in-human Phase I study in healthy participants evaluating IMP761, a first-in-class LAG-3 agonist antibody for autoimmune diseases.

The single-ascending dose escalation portion of the trial has successfully completed the 2.5 and 7 mg / kg dosing levels of IMP761 with continued positive safety and efficacy data. IMP761 was tolerated well with no treatment-related adverse reactions beyond mild intensity. Additionally, evidence of dose dependent immunosuppressive effects with IMP761 was observed with significant, long-lasting inhibition of the three T-cell-mediated intradermal reactions to a strong foreign antigen at day 2, 9 and 23.

Dr. Frédéric Triebel, CSO of Immutep, said: "We are excited to see IMP761 having a long-term immunosuppressive effect after a single injection. A solid pharmacokinetic/pharmacodynamic relationship has now been established between 1 and 7 mg/kg with eight participants per group to cover the variability of the responses. This novel immunotherapy's significant level of immune suppression combined with its favourable safety provide proof-of-concept data in its potential to silence the dysregulated T cells at the epicenter of many autoimmune diseases. Encouragingly, our clinical progress with IMP761 has corresponded with increased external interest in this program."

The LAG-3 (lymphocyte-activation gene-3) immune checkpoint has been identified as a promising therapeutic target for many autoimmune diseases, including rheumatoid arthritis, Type 1 diabetes, and multiple sclerosis.[1-3] IMP761 is the first LAG-3 agonist antibody developed to potentially treat these large, increasingly prevalent disorders, each of which represent multi-billion dollar markets.

By enhancing the "brake" function of LAG-3 to silence dysregulated self-antigen-specific memory T cells, IMP761 is designed to target the cause of autoimmune diseases and restore balance to the immune system. LAG-3 expression on activated T cells demonstrates high specificity for disease sites, especially in regions characterised by chronic inflammation. This distinct characteristic of the LAG-3 immune checkpoint suggests IMP761 may enable a more targeted therapeutic approach with fewer adverse effects compared to other treatments.

Given the encouraging efficacy and safety to date, the trial will continue as planned and additional updates are anticipated in the first half of CY2026 including a potential presentation of data at a major medical conference in the field of autoimmune diseases.

About IMP761

IMP761, a first-in-class immunosuppressive lymphocyte-activation gene-3 (LAG-3) agonist antibody, has the potential to address the root cause of many autoimmune diseases by specifically silencing autoimmune memory T cells that accumulate at disease sites and restoring balance to the immune system. As published in the Journal of Immunology, encouraging pre-clinical in vivo and in vitro studies show IMP761 inhibits peptide-induced T cell proliferation, activation of human primary T cells, and an antigen-specific delayed-type hypersensitivity (DTH) reaction.[4] Additional preclinical data in oligoarticular juvenile idiopathic arthritis (o-JIA) published in Pediatric Research details how IMP761 led to a decrease in a broad spectrum of effector cytokines.[5] This study also shows children with o-JIA have a skewed LAG-3 metabolism and suggests they can benefit from agonistic LAG-3 activity.

About Immutep

Immutep is a late-stage biotechnology company developing novel immunotherapies for cancer and autoimmune disease. The Company is a pioneer in the understanding and advancement of therapeutics related to Lymphocyte Activation Gene-3 (LAG-3), and its diversified product portfolio harnesses LAG-3's ability to stimulate or suppress the immune response. Immutep is dedicated to leveraging its expertise to bring innovative treatment options to patients in need and to maximise value for shareholders. For more information, please visit www.immutep.com.

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This announcement was authorised for release by the CEO of Immutep Limited.