ASX/Media Release

Immutep Appoints Leading Research Institute to Conduct First-in-Human Phase I Study of IMP761

- *Centre for Human Drug Research (CHDR) will conduct Phase I trial to evaluate IMP761, a first-in-class LAG-3 agonist antibody designed to restore balance to the immune system and address the underlying cause of autoimmune diseases*
- *CHDR will utilize its unique challenge model that enables insights into IMP761's pharmacological activity early in clinical development*
- *Trial expected to begin mid-CY2024*

SYDNEY, AUSTRALIA – 18 April 2024 – Immutep Limited (ASX: IMM; NASDAQ: IMMP) ("Immutep" or "the Company"), a clinical-stage biotechnology company developing novel LAG-3 immunotherapies for cancer and autoimmune disease, today announces it has entered into an agreement with the Centre for Human Drug Research (CHDR), a world-class institute in Leiden, the Netherlands specializing in cutting-edge early-stage clinical drug research, to perform a first-in-human clinical study of IMP761. This proprietary LAG-3 agonist antibody has been designed to restore balance to the immune system and address the underlying cause of many autoimmune diseases.

Subject to the relevant ethic and regulatory approvals, the single and multiple ascending dose, placebo-controlled, double-blind, Phase I study will enrol approximately 49 healthy volunteers, with the objective of assessing safety, pharmacokinetics (PK) and pharmacodynamics (PD). The study will implement CHDR's unique keyhole limpet haemocyanin (KLH) challenge model that allows for the evaluation of immunomodulatory agents' pharmacological activity at the earliest stages of clinical development.

Immutep's Chief Scientific Officer, Frédéric Triebel, M.D., Ph.D., stated, "IMP761 is a first-in-class LAG-3 agonist antibody developed to reinforce the dampening of T cell responses in autoimmunity. The phase I trial in healthy subjects is designed to establish clear PK/PD relationships at different dose levels, with a placebo control group, to lay the foundation for the future development of this novel immunotherapy. We are excited to leverage CHDR's expertise in working with targeted immunotherapy candidates in the clinical setting to evaluate IMP761's potential in changing how autoimmune disorders are treated."

Matthijs Moerland, Ph.D., CHDR's Research Director Immunology and Principal Investigator for the upcoming trial, said, "It is an honour for us to run the first clinical study with IMP761. We're very excited to be partnering with Immutep for this critical step in the development plan of their promising antibody. We are confident that CHDR's unique neoantigen KLH challenge model will help define and measure by dose levels its pharmacological activity in man."

Immune checkpoint agonists, including LAG-3, PD-1, and CTLA-4, are increasingly gaining recognition in the healthcare industry for their inherent ability to treat autoimmune diseases.[1] In numerous scientific publications, LAG-3 has been identified as a promising target for agonist immunotherapy for autoimmune disorders including rheumatoid arthritis, Type 1 diabetes, and multiple sclerosis, among others.[2,3,4]

IMP761 is uniquely positioned as the world's first immunosuppressive LAG-3 agonist antibody. It may address numerous autoimmune diseases by silencing self-antigen-specific memory T cells, which accumulate at disease sites, and preventing their overactivation. This is accomplished through enhancing LAG-3's natural downregulation of auto-reactive memory T cells. IMP761 remains on target to enter the clinic mid-CY2024 and Immutep looks forward to providing more information as it approaches this important milestone.

About IMP761

IMP761, a first-in-class immunosuppressive 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. 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 in just 48 hours. This study also showed children with o-JIA have a skewed LAG-3 metabolism and suggested they can benefit from agonistic LAG-3 activity.

About Immutep

Immutep is a clinical-stage biotechnology company developing novel LAG-3 immunotherapy for cancer and autoimmune disease. We are pioneers in the understanding and advancement of therapeutics related to Lymphocyte Activation Gene-3 (LAG-3), and our diversified product portfolio harnesses its unique 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.

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