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ASX/Media Release

Immutep Reports Improved and Statistically Significant Survival Benefit for Three Key Patient Groups in Final Phase IIb AIPAC Study Results in Metastatic Breast Cancer

- Final Overall Survival (OS) data supports Phase III clinical development of efti in combination with paclitaxel in metastatic breast cancer
- OS benefit trend in total population, with median survival benefit of +2.9 months from efti plus chemotherapy, compared to chemotherapy plus placebo
- Statistically significant and clinically meaningful OS benefit confirmed now in three predefined patient subgroups (patients < 65 years, low monocytes and luminal B) with improved data versus data presented in December 2020
- Survival benefit of +7.5 months, +19.6 months and +4.2 months in the < 65 years, low monocytes and luminal B subgroups, respectively. Reflects a benefit of > 50%, > 150% and > 33%, respectively.
- Efti increased circulating CD8 T cells which is significantly correlated with improved OS
- Investor webcast Wednessday, 17 November 2020, at 8.00 am Australian Eastern Daylight Time (AEDT), details below.

SYDNEY, AUSTRALIA - 10 November 2021 – Immutep Limited (ASX: IMM; NASDAQ: IMMP) ("Immutep" or "the Company"), a biotechnology company developing novel LAG-3 related immunotherapy treatments for cancer and autoimmune disease, announces final OS data from its Phase IIb AIPAC trial which are being presented in a *late breaker* presentation at the Society for Immunotherapy of Cancer (SITC) Annual Meeting 2021 held from 10-14 November 2021.

227 patients with HER2-negative/HR positive metastatic breast cancer (HR+ MBC) were 1:1 randomised in the placebo-controlled, double-blind AIPAC study. The trial evaluated Immutep's lead product candidate eftilagimod alpha ("efti") in combination with paclitaxel chemotherapy (efti group, N=114) in comparison to a combination of placebo and paclitaxel chemotherapy (comparator group, N=113).

Immutep CEO, Marc Voigt commented: "These very pleasing final results give us additional confidence that efti can ultimately deliver a meaningful clinical improvement for diverse sets of cancer patients. The results from our AIPAC trial are especially pleasing because metastatic breast cancer patients in the chemotherapy setting are a difficult to treat and large patient population where immunotherapies often fail to provide an additional benefit. These supportive results are also timely as we solidify the trial design for our planned Phase III study in metastatic breast cancer, subject to regulatory body interactions."

AIPAC Principal Investigator, Hans Wildiers of University Hospitals Leuven, Leuven, Belgium, said: "Efti added to paclitaxel led to a non-significant 2.9 months median OS increase in predominantly endocrine resistant HR+ HER2neu/- MBC patients. Results were significant in predefined subgroups which are in line with the mechanism of action of efti. This is one of the first trials to report efficacy of chemotherapy after introduction of CDK 4/6 inhibitors in previous treatment lines. It underlines the high unmet medical need in this patient population. Based on the excellent safety profile of efti and the high unmet medical need a phase III study of efti plus weekly paclitaxel is warranted."

Immutep CSO and CMO, Frederic Triebel, noted: "The final results from our Phase IIb AIPAC trial represent the most definitive insights we have reported relating to the clinical benefit efti has on overall survival for metastatic breast cancer patients. It is remarkable to see efti has significantly improved the survival in three

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predefined subgroups of patients. AIPAC also shows that efti increases the number of circulating CD8 T cells which, in turn, is significantly correlated with improved overall survival. This is all consistent with our long held belief that efti provides a sustained activation of the immune system and we are seeing that "pushing the gas" in this way provides a clinical benefit to a large proportion of patients in the AIPAC study."

Key Efficacy Results: data cut-off 14 May 2021

Overall population

In the total patient population, final OS data (based on 72.5% of events) showed patients in the efti group had a median OS of 20.4 months compared to 17.5 months for patients in the comparator group, reflecting a survival benefit of +2.9 months (HR = 0.88; p = 0.197), see Table 1. The minimum follow-up was 22 months and post-study treatment of patients was similar.

Predefined patient subgroups

The study demonstrated a statistically significant and clinically relevant survival benefit in the efti group in three key predefined patient subgroups: < 65 years of age, low monocytes and luminal B (subgroups were defined prior to unblinding). Both the magnitude and statistical significance of the benefit has improved across the three groups, compared with the interim OS results reported in December 2020.

Patients under the age of 65 years reported a median OS of 22.3 months compared to 14.8 months in the comparator group, indicating a survival benefit of +7.5 months (HR = 0.66; p = 0.017) favoring the efti group.

Patients with a low monocyte count (< 0.25/nl) at the commencement of the study reported a median OS of 32.5 months compared to 12.9 months in the comparator group, indicating a survival benefit of +19.6 months (HR = 0.44; p = 0.008) favoring the efti group. This supports efti's mode of action as an antigen-presenting cell (APC) activator which drives an adaptive immune response.

Patients with a more aggressive cancer, characterised as luminal B reported a median OS of 16.8 months compared to 12.6 months in the comparator group, indicating a survival benefit of +4.2 months (HR = 0.67; p = 0.049) favoring the efti group. Luminal B cancers are typically more immunogenic (receptive to immune system activation to attack cancer).

Table 1 – Overall Survival in key patient subgroups at final analysis at 72.5% of events in the overall population

Group	Efti group / Comparator group	Median OS (months)	Absolute OS benefit from efti
Total Population	Efti + paclitaxel	20.4	**+2.9 months** HR = 0.88 p = 0.197
	Placebo + paclitaxel	17.5	
< 65 years	Efti + paclitaxel	22.3	**+7.5 months** HR = 0.66 p = 0.017
	Placebo + paclitaxel	14.8	
Low monocytes < 0.25/nl	Efti + paclitaxel	32.5	**+19.6 months** HR = 0.44 p = 0.008
	Placebo + paclitaxel	12.9	
Luminal B	Efti + paclitaxel	16.8	**+4.2 months** HR = 0.67 p = 0.049
	Placebo + paclitaxel	12.6	

Note: A lower HR, means a reduced risk of death, e.g. by 56% in the low monocyte group.

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Immuno Monitoring Results
An increase in peripheral CD8 T cells was reported in patients in the efti group, consistent with efti's mode of action as an APC activator. This increase significantly correlated with improved OS, demonstrating strong proof-of-concept in a randomised, double blinded setting.

Safety
The combination of efti and paclitaxel chemotherapy was overall safe and well tolerated, further building upon efti's strong safety profile to date. No new safety signals were observed.

Next Steps
Immutep is preparing a Phase III investigatation of efti in combination with paclitaxel in metastatic breast cancer, subject to regulatory interactions with the relevant competant authorities which are ongoing across multiple different countries where the trial is intended to take place. Immutep will update shareholders with further detail in due course.

The poster presentation with additional data and commentary that are not included in the abstract will be available on https://www.sitcancer.org/2021/home from 12 November 2021 at 7 am EST and made available on Immutep's website at www.immutep.com/investors-media/presentations.html.

Webcast Details
Immutep will present this AIPAC data in a global webcast for investors. Details are as follows:

Date & Time:	8.00 am AEDT (Sydney) Wednesday 17 November 2021 4.00 pm EST (New York) Tuesday 16 November 2021 10.00 pm CET (Berlin) Tuesday 16 November 2021
Register:	https://fnn.webex.com/fnn/onstage/g.php?MTID=ef12af93633b5d17a2e4e176fcac2f070
Questions:	Investors are invited to submit questions in advance via immutep@citadelmagnus.com.

A replay of the webcast will also be available at www.immutep.com from the day after the event.

About the AIPAC Trial
Active Immunotherapy Paclitaxel (AIPAC) is a multicentre, placebo-controlled, double-blind, 1:1 randomised Phase IIb clinical trial in HER2-negative/HR positive metastatic breast cancer.

The study is evaluating the combination of Immutep's lead product candidate, eftilagimod alpha (efti, LAG-3Ig or IMP321), and paclitaxel chemotherapy. 227 HER2-negative/HR positive metastatic breast cancer patients are randomised 1:1 to a chemo-immunotherapy arm (efti plus paclitaxel) or to a comparator arm (placebo plus paclitaxel). Patients receive weekly paclitaxel at days 1, 8 and 15, with either efti or placebo injected subcutaneously on days 2 and 16 of each 4-week cycle, repeated for 6 cycles. Thereafter, patients pass over to the maintenance phase with efti alone.

For more information regarding the AIPAC trial, visit clinicaltrials.gov (identifier NCT02614833) and https://www.ncbi.nlm.nih.gov/pubmed/30977393.

About Immutep
Immutep is a globally active biotechnology company that is a leader in the development of LAG-3 related 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.

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Immutep's current lead product candidate is eftilagimod alpha (efti or IMP321), a soluble LAG-3 fusion protein (LAG-3Ig), which is a first-in-class antigen presenting cell (APC) activator being explored in cancer and infectious disease. Immutep is also developing an agonist of LAG-3 (IMP761) for autoimmune disease. Additional LAG-3 products, including antibodies for immune response modulation, are being developed by Immutep's large pharmaceutical partners.

Immutep is listed on the Australian Securities Exchange (IMM), and on the NASDAQ (IMMP) in the United States.

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

Australian Investors/Media:
Catherine Strong, Citadel-MAGNUS
+61 (0)406 759 268; cstrong@citadelmagnus.com

U.S. Media:
Tim McCarthy, LifeSci Advisors
+1 (212) 915.2564; tim@lifesciadvisors.com

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