ASX/Media Release

Immutep Reports Positive Data from its TACTI-002 Phase II Study of LAG-3 Therapy, Efti, at ASCO 2021

- Combination therapy with eftilagimod alpha and pembrolizumab demonstrates very favourable overall response rate (ORR) together with favourable duration and depth of responses in 1st line NSCLC (41.7%, 2 CRs; minimum DoR > 6 months) and 2nd line HNSCC (29.7% ORR, 5 CRs; minimum DoR > 6 months)
- Tumor responses seen in all PD-L1 subgroups, including low PD-L1 expressing patients (i.e. patients with TPS < 50%) which are typically less responsive to anti-PD-1 therapy
- Secondary endpoints including progression free survival (PFS) and overall survival (OS) are trending very favourably in both indications (e.g. median PFS in 1st line NSCLC is 8.2 months and median OS in 2nd line HNSCC is 12.6 months)
- Combination therapy is safe and well tolerated

SYDNEY, AUSTRALIA – 4 June 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 new interim data from its Phase II TACTI-002 study (also designated KEYNOTE-798) with a data cut-off date of 16 April 2021. The data will be presented in two poster presentations by Dr Tim Clay, Investigator, St John of God Subiaco Hospital, Perth, Australia and Dr Irene Brana, Investigator, Vall d'Hebron Institute of Oncology, Barcelona, Spain at the American Society of Clinical Oncology's (ASCO) 2021 Annual Meeting in on-demand sessions available from 9 am on 4 June 2021, US Eastern Time at this year's virtual conference. The posters will also be made available on Immutep's website from that time at:

https://www.immutep.com/investors-media/presentations.html

TACTI-002 is being conducted in collaboration with Merck & Co., Inc., Kenilworth, NJ, USA (known as "MSD" outside the United States and Canada). The study is evaluating the combination of Immutep's lead product candidate eftilagimod alpha ("efti" or "IMP321") with MSD's KEYTRUDA® (pembrolizumab) in up to 183 patients with non-small cell lung cancer (NSCLC) in 1st and 2nd line (Parts A and B, respectively) or 2nd line head and neck squamous cell carcinoma (HNSCC, Part C).

Immutep CSO and CMO, Dr Frederic Triebel said: "As more and more industry focus is on LAG-3 therapies and it is in the spotlight of this year's ASCO, we are very pleased to be reporting such robust and exciting results from our TACTI-002 study of efti in combination with pembrolizumab. We are seeing nearly 50% of the evaluable 1st line NSCLC patients responding to the therapy, as scored by a blinded independent central review committee, with responses in all PD-L1 subgroups and a favourable median PFS. Overall, the NSCLC patients receiving this 1st line therapy are living 8.2 months without their disease progressing, a promising improvement for a chemo-free 1st line regimen. In effect, we are seeing an improvement in patient outcomes compared with that historically seen with anti-PD-1 monotherapy but with a similar safety profile and, also,

comparable results in terms of ORR and PFS to chemo + anti-PD-1 combination therapy but, importantly, with a longer duration of response and lower toxicity."

Investigator, A/Prof Tim Clay, St John of God Subiaco Hospital, Perth, Australia said: "The median PFS of 8.2 months in 1st line NSCLC patients is very encouraging compared to historical studies where pembrolizumab has been given as monotherapy in comparable patient groups. There remains a great need for more effective chemotherapy free regimens in the treatment of NSCLC. These data are exciting and as a result, we will be expanding recruitment with 74 additional patients for Part A."

Investigator, Dr Irene Brana, Vall d'Hebron Institute of Oncology, Barcelona, Spain, said: "The sustained and durable responses reported in 2nd line HNSCC patients are improving as TACTI-002 progresses, with about 14% of patients now benefiting from a complete disappearance of all their tumour lesions. Responses are particularly good in PD-L1 expressing patients (CPS ≥ 1) where an ORR of 45.8% is reported. The strength of these results validates the decision to explore the combination of efti and pembrolizumab in a new Phase IIb study, TACTI-003 in 1st line HNSCC patients which is starting in the coming months."

Table 1 – TACTI-002 Interim ORR Results for Part A and C (data cut-off date: 16 April 2021)

	Part A 1st line NSCLC[1]	Part C 2nd line HNSCC[2]
Tumour Response Best Overall Response (BOR) per iRECIST	**Stages 1 & 2 N (%) Total N=36**	**Stage 1 & 2 N (%) Total N=37**
Complete Response (CR)	2 (5.6)	5 (13.5)
Partial Response (PR)	13 (36.1)	6 (16.2)
Stable Disease (SD)	10 (27.8)	3 (8.1)
Progressive Disease (PD)	6 (16.7)	17 (45.9)
Not Evaluable	5 (13.9)	6 (16.2)
Disease Control Rate (DCR)	**25 (69.4)**	**14 (37.8)**
Objective Response Rate (ORR)	**15 (41.7)**	**11 (29.7)**
ORR in evaluable pts	**15 (48.4), N=31**	**11 (35.5), N=31**

Key Findings

1st line NSCLC - Part A

- Sustained and durable responses: 15 patients with responses giving an ORR of 41.7% on an intention-to-treat basis and 48.4% in evaluable patients, as assessed by blinded independent committee read

[1] As assessed by Blinded Independent Central Review (BICR)
[2] As assessed by local investigator read

- None of the patients with a confirmed response progressed within 6 months and the median duration of response (DoR) is currently estimated to be more than 13 months in patients unselected for PD-L1 expression
- 2/36 (5.6%) patients had a Complete Response (complete disappearance of tumour lesions) and 23/36 (63.9%) of patients had a target lesion decrease (includes the 2 CRs)
- Durable responses observed in all PD-L1 subgroups as assessed by local investigator read,[3] for example:
  - ORR in the ≥ 1% PD-L1 subgroup was 44.0% (11/25)
  - ORR in the < 50% PD-L1 subgroup was 31.6% (6/19)
  - ORR in the ≥ 50% PD-L1 subgroup was 53.8% (7/13)
- Median overall PFS is 8.2 months in patients unselected for PD-L1 expression, as assessed by local investigator read. This is very promising for a chemo-free 1st line regimen. Median PFS increases to 11.8 months in the ≥ 50% PD-L1 subgroup and median PFS in the < 1% PD-L1 subgroup is 4.1 months

Conclusion: The data presented for 1st line NSCLC is very encouraging and will be broadened by the ongoing recruitment in this patient population to form a solid basis for late-stage clinical development.

2nd line HNSCC - Part C

- 11 patients with responses giving an ORR of 29.7% on an intention-to-treat basis and 35.5% in evaluable patients
- Durable responses with now 5 patients (13.5%) having a Complete Response. So far median duration of response is not yet reached. None of the patients with a response progressed within 6 months
- In patients unselected for PD-L1 expression, median PFS is 2.1 months and median OS is 12.6 months
- In patients in PD-L1 CPS ≥ 1 subgroup (N=24), ORR is 45.8%, median PFS is 4.1 months, and median OS is 12.6 months

Conclusion: The 2nd line HNSCC data is mature and continues to be very encouraging and forms an excellent basis to move into the 1st line HNSCC indication via Immutep's randomised Phase IIb TACTI-003 study which is expected to start in mid-2021.

2nd line NSCLC - Part B

Stage 1 results were reported in November 2020 at SITC and Overall Survival is trending favourably. Stage 2 recently opened for patient enrolment and combined results from Stages 1 & 2 are expected to be reported later this year.

Safety

The combination treatment continues to be safe and well tolerated with no new safety signals reported thus far.

Recruitment Update

Trial recruitment continues to progress well, with 127 patients out of up to 183 already participating at 12 clinical sites across Australia, Europe, the UK and US. At present, recruitment is ongoing for the expansion stage of Part A and Stage 2 of Part B.

[3] As assessed by local investigator read and in evaluable patients only

Recruitment details for each Part of the trial are shown below and are current as at 1 June 2021.

Table 2 – TACTI-002 Recruitment (as at 1 June 2021)

	Stage 1 (N) Actual / Target	Stage 2 (N) Actual / Target	Recruitment Status	Expansion Stage Actual / Target
Part A (1st line NSCLC)	17/17	19/19	EXPANDED	23/74
Part B (2nd line NSCLC)	23/23	6/13	RECRUITING	
Part C (2nd line HNSCC)	18/18	21/19[4]	COMPLETE	

Next Results
Immutep currently expects to report further interim data from Part A, final data from Part C, and new results from Stages 1 & 2 of Part B in 2H calendar year 2021 or early calendar year 2022.

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

- Date & Time:
  Thursday, 10 June 2021, at 7:00 am Australian Eastern Daylight Time (AEDT) (Wednesday, 9 June, at 5:00 p.m. U.S. ET)

- Register:
  https://fnn.webex.com/fnn/onstage/g.php?MTID=ebcdb72840d84111e57730c2b6cccd2c1

- 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 TACT-002 Trial
TACTI-002 (Two ACTive Immunotherapies) is being conducted in collaboration with Merck & Co., Inc., Kenilworth, NJ, USA (known as "MSD" outside the United States and Canada). The study is evaluating the combination of efti with MSD's KEYTRUDA® (pembrolizumab) in up to 183 patients with second line head and neck squamous cell carcinoma or non-small cell lung cancer in first and second line.

The trial is a Phase II, Simon's two-stage, non-comparative, open-label, single-arm, multicentre clinical study that is taking place in study centres across Australia, Europe, the UK and US.

4 Two extra patients were treated as allowed under the trial protocol since 2 patients had dropped out due to Covid-19 prior to first post-baseline staging.

Patients participate in one of the following:

- Part A - First line Non-Small Cell Lung Cancer (NSCLC), PD-X naive
- Part B - Second line NSCLC, PD-X refractory
- Part C - Second line Head and Neck Squamous Cell Carcinoma (HNSCC), PD-X naive

TACTI-002 is an all-comer study in terms of PD-L1 status, a well-known predictive marker for response to pembrolizumab monotherapy especially in NSCLC and HNSCC. PD-L1 expression is typically reported in three groups for NSCLC: < 1%, 1-49% and ≥ 50% (Tumour Proportion Score or TPS) and in HNSCC: < 1, 1-19 and ≥ 20 (Combined Positive Score or CPS). Patients with a high PD-L1 status are typically more responsive to anti-PD-1 therapy such as pembrolizumab, whereas those with low PD-L1 status are overall significantly less responsive.

More information about the trial can be found on Immutep's website or on ClinicalTrials.gov (Identifier: NCT03625323)

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 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-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.

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

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