ASX/Media Release

Immutep's Phase II TACTI-002 Study Reports Encouraging Data at SITC

- Overall Response Rates (ORR) in 1st line NSCLC and 2nd line HNSCC continue to be very favourable
- 5 patients with a Complete Response (disappearance of all lesions): 2 patients in 1st line NSCLC and 3 patients in 2nd line HNSCC
- Encouraging efficacy for low PD-L1 expressing patients who do not typically respond to immune checkpoint (PD-L1) therapy
- Partial response and long lasting stabilization of disease as well as favourable Overall Survival (OS) in PD-1/PD-L1 resistant/refractory patients leading to a favorable DMC recommendation to open Stage 2 of 2nd line NSCLC of the trial

SYDNEY, AUSTRALIA – 10 November 2020 – Immutep Limited (ASX: IMM; NASDAQ: IMMP) announces encouraging new interim data from its ongoing Phase II TACTI-002 study evaluating the combination of eftilagimod alpha ("efti" or "IMP321") with MSD's KEYTRUDA® (pembrolizumab).

The data was presented by TACTI-002 Principal Investigator, Dr Matthew Krebs of the Christie NHS Foundation Trust in Manchester, UK at the Society for Immunotherapy of Cancer (SITC) 35th Anniversary 2020 Annual Meeting as part of a *late breaker* poster presentation and *poster walk* for highly scored abstracts.

The poster is also available on Immutep's website: www.immutep.com

Principal investigator, Dr Matthew Krebs, said: "In first-line NSCLC and second-line HNSCC we are seeing very encouraging results compared to historical studies where pembrolizumab has been given as monotherapy in comparable patient groups. These results highlight the potential therapeutic benefit of adding efti to the checkpoint inhibitor pembrolizumab, together with an excellent safety profile. The data strongly support further evaluation of the combination in both lung and head and neck cancers."

Immutep CSO and CMO, Dr Frederic Triebel said: "We are very encouraged by the number of lung cancer and head and neck cancer patients responding to efti in combination with pembrolizumab, including many patients that wouldn't typically respond to immune checkpoint therapy. We have presented here more mature data from Stage 1 of Parts A and C of the trial, along with first data from Stage 2 of Parts A and C. We have also presented first data from Part B of the trial where patients are PD-1 resistant (confirmed by two confirmatory scans).

The results from this trial, and our other trials, continue to support our hypothesis that the combination of our lead product candidiate, efti, with a PD-1 inhibtor such as pembrolizumab should result in a meaningful benefit to patients across various cancers. These results are supportive of further late stage clinical development."

Table 1 – TACTI-002 Interim Results (data cut-off date: 8 October 2020)

	Part A 1st line NSCLC	Part B 2nd line NSCLC	Part C 2nd line HNSCC
Tumour response - iBOR per iRECIST	**Stages 1 & 2 N (%) Total (N=36)**	**Stage 1 N (%) Total (N=23)**	**Stage 1 & 2 N (%) Total (N=28)**
Complete Response (iCR)	2 (5.6)	0 (0)	3 (10.7)
Partial Response (iPR)	11 (30.6)	1 (4.4)	7 (25.0)
Stable Disease (iSD)	11 (30.6)	7 (30.4)	3 (10.7)
Progressive Disease (iPD)	9 (25.0)	14 (60.9)	10 (35.7)
Not evaluable	3 (8.3)	1 (4.4)	5 (17.9)
Disease Control Rate (DCR)	**24 (66.7)**	**8 (34.8)**	**13 (46.4)**
Objective Response Rate (iORR) ITT*	**13 (36.1)**	**1 (4.4)**	**10 (35.7)**
Objective Response Rate in eval. pts	**13 (39.4)**	**1 (4.5)**	**10 (43.5)**

*Intention-to-treat (ITT) analysis of the results of an experiment is based on the initial treatment assignment and not on the treatment eventually received. ITT analysis is intended to avoid various misleading artifacts that can arise in intervention research such as non-random attrition of participants from the study or crossover.

2nd line HNSCC - Part C

Stages 1 and 2 combined results commentary:

- Overall response rate stays consistent with approximately 36% (approximately 44% in evaluable patients) and is more than double compared to KEYNOTE studies (ORR ~15%)[1,2] in a comparable patient population
- Durable and deep responses including 3 patients with a Complete Response
- Responses in low PD-L1 status patients which do not typically respond to PD-L1 therapy
- All patients with a response except one still under therapy → in total 10/28 patients still under therapy at data cut-off date (7 patients for 6+ months) → PFS and OS trend favorably

Conclusion: Data presented for HNSCC is very robust and form an excellent basis for late stage clinical development in this indication.

1st line NSCLC - Part A

Stages 1 and 2 combined results commentary:

- Patients recruited into Stages 1 and 2 represent slightly different patient populations
- 13 patients with responses (ORR ITT: approximately 36% and in evaluable patients: approximately 39%) including 2 patients with a Complete Response
- 22/36 (61%) of patients had a target lesion decrease
- Responses were reported in all PD-L1 subgroups:
  - ORR for patients in the ≥ 1% PD-L1 subgroup was 44% (11/25). Compares favourably to ORR of ~27% from a comparable patient population receiving pembrolizumab alone[3,4].

[1] Seiwert T Y et al, 2016; Lancet 17: 956-965 (KN-012)
[2] Cohen E, et al. Lancet 2019; 393: 156-167 (KN-040)
[3] KEYNOTE trial: Mok T, et al. Lancet 2019; 393: 1819-1830 (KN-042)
[4] KEYNOTE trial: Reck M, et al. N Engl J Med. 2016; 375:1823-1833 (KN-024)

- ORR for patients in the < 50% PD-L1 subgroup was 31.6% (6/19). Compares favourably to ORR of < 20% from a comparable patient population receiving pembrolizumab alone, signaling encouraging efficacy for low PD-L1 expressing patients which do not typically respond to immune checkpoint (PD-L1) therapy.

- 11 patients were still under therapy at data cut-off date thereof including 6 patients for 12+ months → PFS trends favorably

The patient characteristics of Stages 1 and 2 of Part A of TACTI-002 are shown in Table 2. The median age of patients in Stage 2 is almost 10 years older than patients in Stage 1. Furthermore, 84% of patients in Stage 2 had an ECOG status of 1 meaning that they are more impacted from deteriorating health, whereas only 29.4% of patients from Stage 1 had an ECOG status of 1.

Table 2 – TACTI-002 Part A (Stages 1 and 2) Patient Characteristics (excerpt)

Baseline Characteristics	**Stage 1 (N=17)** **N (%)**	**Stage 2 (N=19)** **N (%)**	**Stage 1+2 (N=36)** **N (%)**
Median age, years (range)	**65 (53-76)**	**74 (60-84)**	68.5 (53-84)
ECOG 0 ECOG 1	12 (70.6) **5 (29.4)**	3 (16) **16 (84)**	15 (41.7) 21 (58.3)
Squamous (SQ) Non-squamous (NSQ)	10 (58.8) **7 (41.2)**	5 (26) **14 (73)**	15 (41.7) 21 (58.3)

The percentage of patients with progressive disease was similar in both stages (refer to Table 3 below) suggesting a similar overall clinical benefit from the combination therapy in both sets of patients.

Notably, there were more patients in Stage 2 with radiological assessment not reaching the arbitrary 30% bar that were then categorized as having “stable disease” rather than a “partial response”, possibly due to worse initial prognostic characteristics (i.e. older age and worse ECOG status) of those patients.

Table 3 – TACTI-002 Part A (Stages 1 and 2) Interim Results

Tumour response (iRECIST)	**Stage 1 (N=17)** **N (%)**	**Stage 2 (N=19)** **N (%)**	**Stage 1+2 (N=36)** **N (%)**
Complete Response	1 (5.9)	1 (5.3)	2 (5.6)
Partial Response	8 (47.1)	3 (15.8)	11 (30.6)
Stable Disease	4 (23.5)	7 (36.8)	11 (30.6)
Progressive Disease	4 (23.5)	5 (26.3)	9 (25.0)
Not Evaluable	0 (0)	3 (15.8)	3 (8.3)
Overall Response Rate ITT **[95% CI interval]**			**13 (36.1)** **[20.8-53.8]**
Overall Response Rate (evaluable patients only)			**13/33 (39.4)**
Disease Control Rate			**24 (66.7)**

Conclusion: Data presented for 1st line NSCLC are favorable and form an excellent basis for further clinical development in this indication.

2nd line NSCLC - Part B

Stage 1 results commentary:

- Very difficult to treat patient population with:
  - confirmed progression (2 consecutive scans) on PD-1/PD-L1 containing therapy
  - 85% of patients have PD-L1 of < 50% → PD-L1 low expressors predominant
  - best response of PD-1/PD-L1 containing therapy was SD/PD in 61% of patients → potential primary resistance
  - majority (61%) received chemotherapy plus PD-1/PD-L1 in 1st line setting
- 1 confirmed partial response (6+ months; patient still under therapy)
- 4 patients (17.4%) stable or responding for 6+ months and 2 additional patients ongoing at 2+ months
- ≥ 50% still alive at 12 month landmark which compares favorably to standard of care chemotherapy alone (where only the 6 month landmark is expected to be reached by 50% of patients)[5].

Conclusion: Data presented for 2nd line PD-1/PD-L1 resistant NSCLC looks very encouraging especially if compared to alternative treatment options. Based on this data, the DMC confirmed a positive risk-benefit ratio for Part B and recommended the opening of Stage 2 of this part.

Safety

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

TACTI-002 Recruitment Update

Recruitment into the TACTI-002 trial continues to progress well and is ongoing for Stage 2 of Part C. Part B has received a favorable DMC recommendation to open Stage 2 for recruitment. In total, 94 patients out of up to 109 are enrolled across 12 clinical sites in Australia, Europe, the UK and US.

Recruitment details for each part of the trial are shown in Table 4.

Table 4 – TACTI-002 Recruitment (as at 2 November 2020)

	Stage 1 (N) Actual / target	Stage 2 (N) Actual / target	Recruitment Status
Part A (1st line NSCLC)	17/17	19/19	COMPLETE
Part B (2nd line NSCLC)	23/23	0/13	NOT YET OPENED
Part C (2nd line HNSCC)	18/18	17/19	ONGOING

Next Results

Immutep expects to report more mature data from TACTI-002 in the first half of CY 2021.

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

[5] Brahmer et al.: N Engl J Med 2015; 373:123-135 (CM-017)

combination of efti with MSD's KEYTRUDA® (pembrolizumab) in up to 109 patients with second line head and neck squamous cell carcinoma or non-small cell lung cancer in first and second line.

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.