The global leader in developing LAG-3 therapeutics

Annual General Meeting
November 2019

(ASX: IMM, NASDAQ: IMMP)
Notice: Forward Looking Statements

The purpose of the presentation is to provide an update of the business of Immutep Limited ACN 009 237 889 (ASX:IMM; NASDAQ:IMMP). These slides have been prepared as a presentation aid only and the information they contain may require further explanation and/or clarification. Accordingly, these slides and the information they contain should be read in conjunction with past and future announcements made by Immutep and should not be relied upon as an independent source of information. Please refer to the Company’s website and/or the Company’s filings to the ASX and SEC for further information.

The views expressed in this presentation contain information derived from publicly available sources that have not been independently verified. No representation or warranty is made as to the accuracy, completeness or reliability of the information. Any forward looking statements in this presentation have been prepared on the basis of a number of assumptions which may prove incorrect and the current intentions, plans, expectations and beliefs about future events are subject to risks, uncertainties and other factors, many of which are outside Immutep’s control. Important factors that could cause actual results to differ materially from assumptions or expectations expressed or implied in this presentation include known and unknown risks. Because actual results could differ materially to assumptions made and Immutep’s current intentions, plans, expectations and beliefs about the future, you are urged to view all forward looking statements contained in this presentation with caution.

Additionally, the INSIGHT investigator sponsored clinical trial described in this presentation is controlled by the lead investigator and therefore Immutep has no control over this clinical trial. This presentation should not be relied on as a recommendation or forecast by Immutep. Nothing in this presentation should be construed as either an offer to sell or a solicitation of an offer to buy or sell shares in any jurisdiction.
2019 Summary

- Strong operational and financial progress
- Continued focus on LAG-3 immunotherapy
- Progressed the development of four product candidates for cancer and autoimmune disease
- Reported encouraging interim data for lead product candidate, efti
- Committed partnerships with five of the world’s largest pharmaceutical companies - Merck (MSD), Novartis and GSK, plus Merck (Germany) and Pfizer, along with Eddingpharm (EOC) in China
- Preparations for multiple data readouts in coming months

<table>
<thead>
<tr>
<th>Ticker</th>
<th>ASX: IMM; NASDAQ: IMMP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ordinary Shares / American Depository Shares (ADSs)</td>
<td>73% / 27%</td>
</tr>
<tr>
<td>Market Cap (29 Oct 19)</td>
<td>A$109m</td>
</tr>
<tr>
<td>Ordinary shares on issue* (29 Oct 19)</td>
<td>3.9 billion ordinary shares</td>
</tr>
<tr>
<td></td>
<td>1 ADS equals 100 ordinary shares</td>
</tr>
</tbody>
</table>

* Market capitalisation based on ASX share price. For detailed summary of all securities on issue refer to latest Appendix 3B released on ASX.
Corporate Highlights of past 12 months

- Sound financial management
- ADR raise in Dec 2018: US$5.2million (A$7.2million)
- ASX Placement and Rights Issue A$10 million, post FY19
- R&D cash incentives received from Australian & French schemes
- Presentations at SITC, World Immunotherapy Congress, ASCO
- Six new patents granted in FY19, five relating to efti
R&D Highlights of past 12 months

TACTI-mel
• Phase I recruitment completed & positive final efficacy data reported

AIPAC
• Phase IIb clinical fully recruited comprising 227 patients in June 2019 across 30 clinical sites across the UK and Europe

TACTI-002 – with Merck & Co.
• IND application granted by FDA
• Phase II trial 32 patients participating so far

INSIGHT
• Phase I trial in Germany (Investigator Initiated Trial study) 13 patients recruited

INSIGHT-004 – with Merck KGaA & Pfizer
• Phase I trial – six patients dosed thus far; cohort 1 fully recruited

IMP761
• Pre-clinical study successfully completed, with cell line development steps started
Collaboration Highlights of past 12 months

Novartis
• Data presentation of LAG525 at ASCO with 5 clinical trials now live

GSK
• Commenced Phase II clinical study evaluating GSK2831781 (derived from IMP731) in 280 ulcerative colitis patients
• GSK £4million (~A$7.39 million) milestone payment

EOC Pharma
• Start of Phase I in metastatic breast cancer in China

CYTLIMIC
• Clinical trial collaboration concluded in Jan 2019
### Key Financials FY19

<table>
<thead>
<tr>
<th>Category</th>
<th>FY19</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue and other income FY19</td>
<td>$7.5M (FY 18 A$7.4M)</td>
<td>Includes revenues, grants and received interest</td>
</tr>
<tr>
<td>G&amp;A Expenses FY19</td>
<td>$6.4M (FY 18 A$7.2M)</td>
<td>Decrease largely due to the lower employee share-based payment expenses</td>
</tr>
<tr>
<td>R&amp;D and IP Expenses FY19</td>
<td>$16.6M (FY 18 A$10.0M)</td>
<td>Increase was expected and was primarily due to the increased clinical trial activities</td>
</tr>
<tr>
<td>Net Loss FY19</td>
<td>$18.3M (FY 18 A$12.7M)</td>
<td>Increase is due to an increase in research and development activities and decrease in the license revenue</td>
</tr>
<tr>
<td>Net cash (outflows) from operating activities</td>
<td>$15.3M (FY 18 A$7.8M)</td>
<td>Higher primarily due to increased clinical trial activities</td>
</tr>
<tr>
<td>Cash and cash equivalents at the end of the year</td>
<td>$16.6M (FY 18 A$23.5M)</td>
<td></td>
</tr>
<tr>
<td>Cash in Bank</td>
<td>A$19.6M (30 Sep 19)*</td>
<td>Cash runway through to end of CY20 with continued focus on disciplined cash management</td>
</tr>
</tbody>
</table>

*without GSK milestone payment and French R&D tax incentive payment*
## LAG-3 Therapeutic Landscape Overview

<table>
<thead>
<tr>
<th>Company</th>
<th>Program</th>
<th>Preclinical</th>
<th>Phase I</th>
<th>Phase II</th>
<th>Phase III</th>
<th>Total Trials</th>
<th>Patients on Trials</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Antagonist</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BMS</td>
<td>Relatlimab</td>
<td></td>
<td>6</td>
<td>19</td>
<td>2</td>
<td>27</td>
<td>9,422</td>
</tr>
<tr>
<td>Novartis</td>
<td>LAG525 (IMP701)</td>
<td></td>
<td>1</td>
<td>4</td>
<td>1</td>
<td>5</td>
<td>1,100</td>
</tr>
<tr>
<td>B.I.</td>
<td>BI754111</td>
<td></td>
<td>4</td>
<td>1</td>
<td>1</td>
<td>5</td>
<td>849</td>
</tr>
<tr>
<td>Merck &amp; Co. Inc.</td>
<td>MK4280</td>
<td></td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>910</td>
</tr>
<tr>
<td>Macrogenics</td>
<td>MGD013</td>
<td></td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>1,105</td>
</tr>
<tr>
<td>Tesaro&lt;sup&gt;(1)&lt;/sup&gt;</td>
<td>TSR-033</td>
<td></td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>260</td>
</tr>
<tr>
<td>Regeneron&lt;sup&gt;(2)&lt;/sup&gt;</td>
<td>REGN3767</td>
<td></td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>589</td>
</tr>
<tr>
<td>Xencor</td>
<td>XmAb-22841</td>
<td></td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>242</td>
</tr>
<tr>
<td>Symphogen A/S</td>
<td>SYM022</td>
<td></td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>132</td>
</tr>
<tr>
<td>Incyte</td>
<td>INCAGN02385</td>
<td></td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>40</td>
</tr>
<tr>
<td>F-Star</td>
<td>FS-118</td>
<td></td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>51</td>
</tr>
<tr>
<td><strong>Antigen</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>immutep</td>
<td>IMP761</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Autoimmune</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>gsk</td>
<td>GSK2831781 (IMP731)</td>
<td></td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>383</td>
</tr>
</tbody>
</table>

Notes:
- Sources: Company websites, clinicaltrials.gov, and sec.gov, as of September 27, 2019
- * Reference to Eftilagimod Alpha, IMP731 and IMP761
- <sup>(1)</sup> Tesaro was acquired by and is now part of GSK
- <sup>(2)</sup> As of January 7, 2019 Regeneron is in full control of program and continuing development (Sanofi discontinued)
- <sup>(3)</sup> Includes the Phase I study in psoriasis (completed March 2018)
Program Update
# Immutep Controlled Immunotherapy Pipeline*

## Program

<table>
<thead>
<tr>
<th>Program</th>
<th>Preclinical</th>
<th>Phase I</th>
<th>Phase II</th>
<th>Late Stage(5)</th>
<th>Commercial Rights</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eftilagimod Alpha (LAG-3 Ig or IMP321), APC activating Soluble LAG-3 Protein</td>
<td>AIPAC <em>(Chemo-IO Combo) Metastatic Breast Cancer</em></td>
<td>TACTI-002 <em>(1)</em> <em>(IO-IO Combo) NSCLC (1st/2nd L.) HNSCC (2nd)</em></td>
<td>INSIGHT-004 <em>(2), (3)</em> <em>(IO-IO Combo) Solid Tumors</em></td>
<td>INSIGHT <em>(2)</em> <em>(In Situ Immunization) Solid Tumors</em></td>
<td>EOC 202 <em>(4)</em> <em>(Chemo-IO Combo) Metastatic Breast Cancer</em></td>
</tr>
<tr>
<td>ODN3006</td>
<td>IMP761 <em>(Agonist AB)</em></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## Notes

- Information in pipeline chart current as at 30 September 2019
- In combination with KEYTRUDA® (pembrolizumab) in non-small cell lung carcinoma ("NSCLC") or head and neck carcinoma ("HNSCC")
- INSIGHT Investigator Initiated Trial ("IIT") is controlled by lead investigator and therefore Immutep has no control over this clinical trial
- In combination with BAVENCIO® (avelumab)
- EOC Pharma is the sponsor of the EOC 202 clinical trial which is being conducted in the People’s Republic of China
- Late stage refers to Phase Ib clinical trials or more clinically advanced clinical trials
# Out-Licensed Immunotherapy Pipeline*

<table>
<thead>
<tr>
<th>Program</th>
<th>Preclinical</th>
<th>Phase I</th>
<th>Phase II</th>
<th>Late Stage(1)</th>
<th>Commercial Rights/Partners</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Oncology</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LAG525 (Antagonist AB)</td>
<td>IO-IO Combo: Solid Tumors + Blood Cancer</td>
<td></td>
<td></td>
<td></td>
<td>Global Rights</td>
</tr>
<tr>
<td></td>
<td>Chemo-IO Combo: Triple Negative Breast Cancer</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>IO-IO-Small Molecule Combo: Melanoma</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>IO-IO Combo: Solid Tumors</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Chemo-IO-Small Molecule Combo: Triple Negative Breast Cancer</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Autoimmune</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GSK'781 (Depleting AB)</td>
<td>Ulcerative Colitis</td>
<td></td>
<td></td>
<td></td>
<td>Global Rights</td>
</tr>
<tr>
<td></td>
<td>Healthy Japanese and Caucasian Subjects</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Psoriasis(2)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Information in pipeline chart current as at 30 September 2019

(1) Late stage refers to Phase IIb clinical trials or more clinically advanced clinical trials
(2) Reflects completed Phase I study in healthy volunteers and psoriasis

Notes:

- **LAG525** (Antagonist AB)
- **GSK'781** (Depleting AB)

Global Rights
Lead Program
Eftilagimod Alpha (IMP321) Update
Opportunity for Eftilagimod Alpha

**Efti has multiple shots on goal in different indications and in different combinations**

- **Best-and-First-In-Class** MHCII agonist
- Good safety profile and encouraging efficacy data thus far
- Estimated favorable (low) cost of goods, current flat dosing and manufacturing process
- Potential for use in various combination settings – potential pipeline in a product

### Clinical Trials

- **Late Stage European Phase IIb AIPAC (Immutep)**
- **Phase I TACTI-mel (Immutep)**
- **Phase II TACTI-002 (Immutep\(^{(1)}\))**
- **Phase I INSIGHT – Stratum D (Immutep\(^{(2)}\))**
- **Phase I Solid Tumors (Cytilmic)**
- **Phase I INSIGHT - Stratum A+B (IKF\(^{(3)}\))**

---

Notes:

1. In collaboration with Merck & Co., Inc., Kenilworth, NJ, USA (known as MSD outside the United States and Canada) and in combination with KEYTRUDA® (pembrolizumab)
2. In collaboration with Merck KGaA, Darmstadt, Germany and Pfizer Inc. and in combination with BAVENCIO® (avelumab). This extension of INSIGHT is also referred to as INSIGHT-004
3. INSIGHT Investigator Initiated Trial ("IIT") is controlled by lead investigator and therefore Immutep has no control over this clinical trial
AIPAC: Active Immunotherapy PAClitaxel in HER2-/ HR+ MBC

Safety-run in, 15 (6+9) patients, 2 cohorts → Stage 2
- Arm 1, 113 patients: paclitaxel + IMP321
- Arm 2, 113 patients: paclitaxel + placebo
- Phase IIb, multinational, randomized, double-blind
- Run-in: RP2D Stage 2: Efficacy (PFS)

Other Objectives
- Anti-tumor activity, safety and tolerability, PK, immunogenicity, quality of life

Patient Population
- Advanced MBC indicated to receive 1st line weekly paclitaxel

Treatment
- Run-in: Paclitaxel + IMP321 (6 or 30 mg)
- Arm 1: Paclitaxel + IMP321 (30 mg)
- Arm 2: Paclitaxel + Placebo

Location
- >30 sites in 7 (GB, DE, PL, HU, FR, BE, NL) EU countries

Status Report (Oct 2019)
- ✓ Phase IIb efficacy and safety data consistent with data from safety-run in trial and historical control group / prior clinical trials (Brignone et al J Trans Med 2010, 8:71)
- ✓ Regulatory approval in 7 EU countries
- ✓ 227 patients recruited in Stage 2 → LPI Jun 2019
  - PFS, ORR data expected calendar Q1 2020

Key features:
1- double blinded pivotal trial in MBC patients ➔ CMA in the EU
2- broader perspective: validation of APC activators ➔ a second class of active I-O products after the ICI

R2PD – recommended Phase II dose, ORR – overall response rate, PFS – progression free survival, OS – overall survival, PK – pharmacokinetics
Treatment Landscape for HR+/HER2− MBC

Epidemiology:
- 812,500 HR+/HER2− diagnoses p.a. worldwide (1)
- ~ appr 250,000 develop metastatic disease and are eligible to chemotherapy

- Despite all changes → no improvement for patients receiving chemotherapy
- Paclitaxel one of the most widely used chemotherapies
- No active IO approved in this setting thus far

Notes:
(1) Source: GlobalData 2019
(2) Caldeira et al Oncology and therapy 2016; 4:189-197
(3) https://www.ascopost.com/News/59389 - Usage to be determined as not yet approved by EMA
(4) https://www.onclive.com/insights/mbc-endocrine-partner/role-of-pi3k-inhibitors-in-hr-positive-metastatic-breast-cancer
Efti in Melanoma
TACTI-mel – Trial Design

TACTI-mel: Two ACTive Immunotherapeutics in Melanoma

24 patients, 4 cohorts of 6 patients → Efti (IMP321) + anti-PD-1 (Keytruda®) → Phase I, multicenter, open label, dose escalation → Recommended Phase II dose, safety and tolerability

Other objectives
PK and PD of efti, response rate, PFS
Patient Population
Metastatic melanoma

Status Report (Oct 2019)

✓ Part A: 1, 6 and 30 mg efti s.c. every 2 weeks starting with cycle 5 of pembrolizumab
✓ Part B: efti at 30 mg s.c. every 2 weeks starting with cycle 1 of pembrolizumab
→ Status: recruitment + treatment completed; interim results on following slides
✓ Pembrolizumab (Keytruda®) 2 mg/kg every 3 weeks i.v. part A and B
✓ Final efficacy data presented in Oct 2019
  • Final safety data in H1 2020
**Efti - Clinical Development**
**TACTI-002 (Phase II)**

**TACTI-002: Two ACTive Immunotherapeutics in different indications**

- Simon’s 2 stage design; 3 indications; 109 pts
- Efti (IMP321) + Pembrolizumab (Keytruda®) for 12 months + 12 months pembrolizumab mono
- Phase II, multinational (EU + US + AU), open label
- ORR, PFS, OS, PK, Biomarker; Safety and tolerability

**Patient Population**

| A: 1st line NSCLC PD-X naive |
| B: 2nd line NSCLC, PD-X refractory |
| C: 2nd line HNSCC, PD-X naïve |

**Treatment**

- 30 mg Efti (IMP321) s.c.
- 200 mg Pembrolizumab i.v.

**In collaboration with**

**MERCK**

**Key features:**
PD-X refractory patients (part B), chemo-free option for NSCLC, first FDA IND

**Status Report (Oct 2019)**

- Fully approved in all countries (ES, GB, US, AU)
- Part A (PD-L1 all comers, 1st line NSCLC): 41% ORR in stage 1 → 2nd cohort opened (Oct 19)
- 35 pts recruited in total

**13 sites in Europe / US / Australia**

**NSCLC** – non-small-cell lung cancer, **HNSCC** – head and neck squamous cell cancer, **ORR** – overall response rate, **PFS** – progression free survival, **OS** – overall survival, **PK** – pharmacokinetics, **PD-X** – any PD-1 or PD-L1 treatment

Preliminary data, cut-off September 2019
Efti - Clinical Development
INSIGHT-004 (Phase I)

INSIGHT-004 – Dose escalation of efti in combination with avelumab

Patient Population
Solid tumors after failure of standard therapy

Treatment
6/30 mg Efti (IMP321) s.c.
800 mg avelumab i.v.; Both every 2 weeks

Key features: safety with a PD-L1 antagonist avelumab

Status Report (Oct 2019)
✓ 1 site in Germany
✓ Protocol approved by CA/ED
✓ Six patients dosed thus far
  • First data expected end of 2019

In collaboration with
Merck KGaA, Darmstadt, Germany

I.K.F.
Eftilagimod Alpha Partnerships

**EOC**, an Eddingpharm spin-off holding the Chinese rights for efti, Phase I study in MBC ongoing

- **Milestone and royalty bearing partnership** for Immutep where EOC bears all the costs of funding the trials

**CYTLIMIC**

- Spin off from NEC, Japan. Est. Dec 2016; aims to develop cancer drugs discovered by artificial intelligence
- Multiple Material Transfer Agreements; **Clinical Trial Collaboration (up to US$5M)**
- Preclinical and clinical research ongoing
- Milestone bearing partnership for Immutep where CYTLIMIC bears all the costs of funding the trials -> USD 0.5M upfront payment paid to Immutep

**WuXi Biologics**

- Strategic supply partnership for the manufacture of efti
- Through WuXi, Immutep was first company ever to import and use a Chinese manufactured biologic in a European clinical trial
IMP761
(Autoimmune Diseases)
IMP761 Summary

• **The Concept**: treating the cause of autoimmune diseases, not just the symptoms

• **The Target**: the self-peptide specific memory T cells harboring LAG-3

• **The Tool**: an agonistic LAG-3-specific mAb down-modulating self-peptide-induced TCR signaling

• **The Evidence (1)**: *in vitro* down-modulation of peptide-induced human T cell proliferation and activation

• **The Evidence (2)**: *in vivo* down-modulation of peptide-induced T cell infiltration/inflammation at the tissue site in a NHP model

• **Intellectual Property**: 1 family – composition of matter methods of treatment, expiry 2036

• **The Status**: cell line development ongoing and GMP manufacturing preparations underway in order to progress to clinical development
Outlook
2019/ 2020 Clinical Guidance*

Reported:
✓ TACTI-002 to commence, Phase II trial in collaboration with MSD: H1 2019
✓ TACTI-mel data from fourth patient cohort (30 mg dose at cycle 1) in 2019
✓ IMP761 program update: 2019
✓ INSIGHT-004 to commence, IIT Phase I trial in collaboration with Pfizer and Merck KGaA: Q2 2019
✓ AIPAC fully recruited: Q2 2019
✓ TACTI-002 first data in September 2019
✓ TACTI-mel: final efficacy data 15 Oct 2019

Upcoming Data:
• TACTI-002 data update: Q4 2019
• INSIGHT-004 update: Q4 2019
• TACTI-mel safety data: H1 2020
• AIPAC PFS data (metastatic breast cancer): Q1 2020
• TACTI-002 data update: Q1 2020
• INSIGHT-004 data update: H1 2020

*The actual timing of future data readouts may differ from expected timing shown above. These dates are provided on a calendar year basis.
Thank you!