immutep
LAG-3 IMMUNOTHERAPY

A Global Leader in LAG-3 Therapeutics in Oncology and Autoimmune Disease

AGM Presentation – November 2022

(ASX: IMM, NASDAQ: IMMP)

Forward-Looking Statements

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This presentation is authorised for release by the CEO of Immutep Limited.

Immutep Overview

Pioneering LAG-3 Portfolio in Oncology & Autoimmune Disease

Immutep is a pure-play LAG-3 clinical-stage company with four product candidates that address significant market opportunities in oncology & autoimmune disease

Collaborations with Industry Leaders

MERCK
NOVARTIS
GSK
Merck KGaA
Darmstadt, Germany
Pfizer
LabCorp
EOC

Compelling Clinical Data

Clinical trials of lead candidate eftilagimod alpha (efti) with immunotherapy & chemotherapy have shown compelling results in NSCLC, HNSCC, HR+/HER2- BC, melanoma and other solid tumors

Global Presence

Supported by strong clinical results and increasing trial momentum, Immutep has continued to forge its leadership role in the recently validated LAG-3 landscape

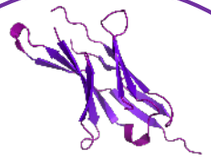
LAG-3: Approved Checkpoint with Unique Characteristics

Immune system's role in controlling cancer has led to regulatory approval of immunotherapies targeting CTLA-4, PD-1, and now LAG-3 checkpoints

Cytotoxic T lymphocyte Antigen-4 (CTLA-4)

Yervoy (anti-CTLA-4) approved 2011; commercial sales ***>$2 billion*** *in 2021*

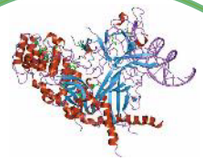
YERVOY (ipilimumab)



Programmed Cell Death Protein-1 (PD-1)

Keytruda & Opdivo (anti-PD-1) approved 2014; combined commercial sales ***>$24 billion*** *in 2021*

KEYTRUDA (pembrolizumab) OPDIVO (nivolumab)



Lymphocyte Activating Gene-3 (LAG-3)*

Relatlimab (anti-LAG-3) approved 2022 in combination with Opdivo; BMS est. ***>$4 billion*** *in NRA sales** in 2029*

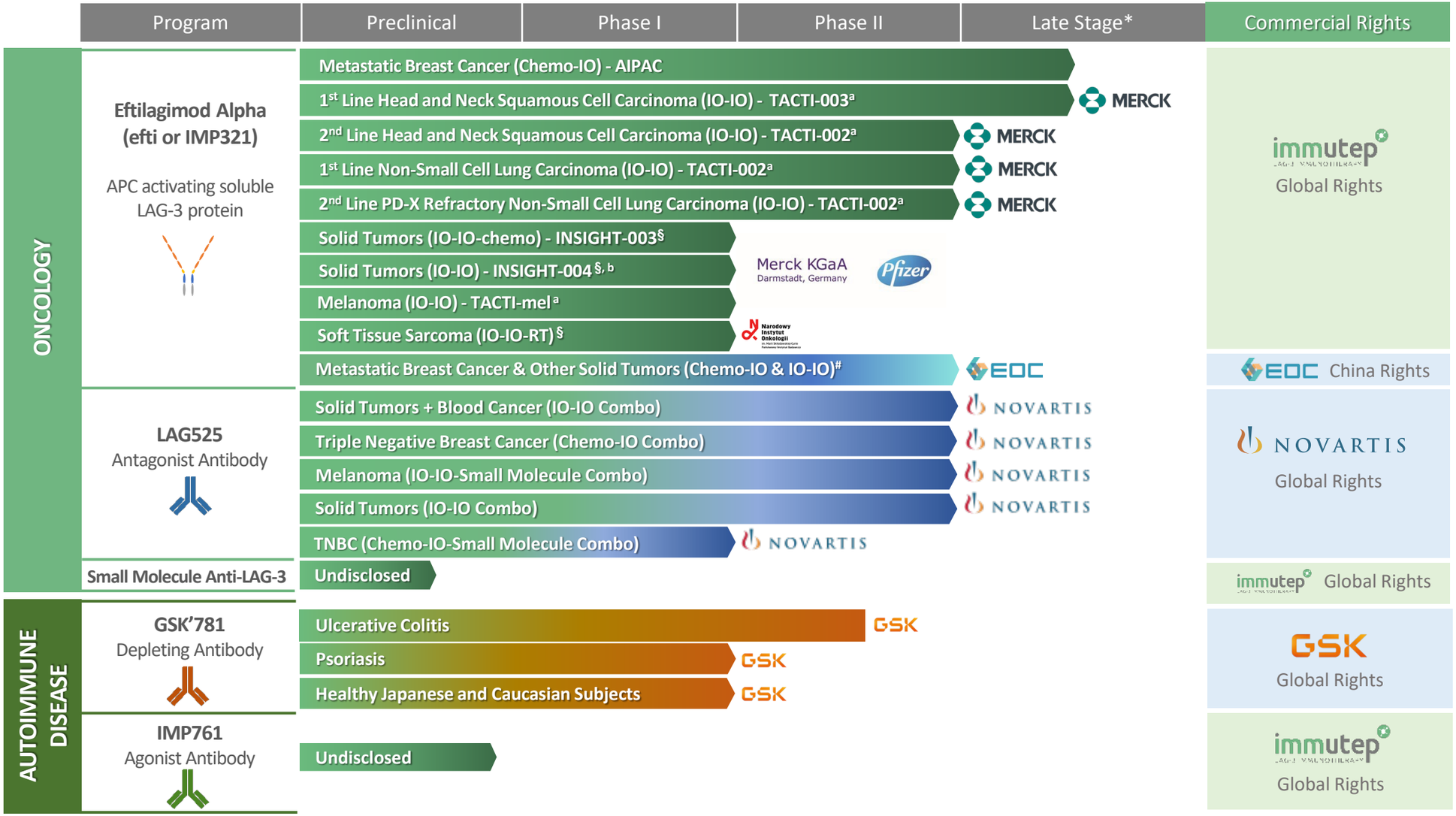
Opdualag (nivolumab and relatlimab-rmbw)

LAG-3 is unique in that its inhibition on T cells & activation of dendritic cells engages the adaptive & innate immune systems against cancer offering significant potential to: (1) improve responses to standard-of-care immunotherapy & chemotherapy, (2) limit emergence of resistance, (3) offer chemotherapy-free options in select indications.

*Discovered by Immutep's CMO & CSO, Prof Frédéric Triebel in 1990; **JPM 2022 Presentation; Non-Risk Adjusted Sales subject to positive registrational trials and health authority approval

Immutep Pipeline Update

Immutep LAG-3 Pipeline

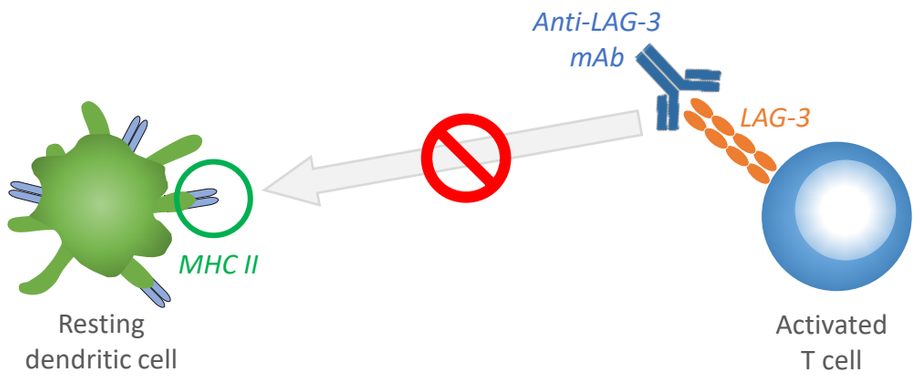


Information in pipeline chart current as of September 2022;For EOC's China rights, Immutep may receive undisclosed milestones plus royalties; LAG525 - ClinicalTrials.gov (for Novartis' global rights, Immutep may receive undisclosed milestones plus royalties); GSK2831781 - ClinicalTrials.gov (for GSK's global rights, Immutep may receive up to £64m in total upfront payments and milestones, plus royalties); * Late stage refers to Phase IIb clinical trials or more clinically advanced clinical trials; # Conducted by EOC in China. Immutep has no control over either the trials. § Investigator Initiated Trials, controlled by lead investigator and therefore Immutep has no control over this clinical trial; [a] In combination with KEYTRUDA®; [b] In combination with BAVENCIO®

Multiple Companies Targeting LAG-3 Inhibition

Releasing the Brake on T cells

Blocking LAG-3 / MHC II interaction increases cytotoxicity of pre-existing CD8 T cell response



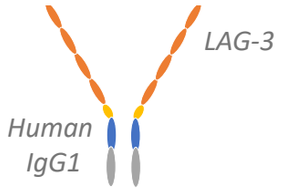
Company*	Program	Phase 1	Phase 2	Phase 3	
Bristol Myers Squibb	Relatlimab	8	35	4	Received FDA approval in March 2022
MERCK	Favezelimab	1	8	1	
REGENERON	Fianlimab	1	1	1	
NOVARTIS	Ieramilimab	1	4		
MacroGenics	Tebotelimab	3	3		
Roche	R07247669	2	3		
Incyte	INCAGN02385	2	2		
Boehringer Ingelheim	BI754111	4	1		
innovent	IBI110	2	1		
GSK	TSR-033	1	1		
SERVIER	SYM022	3			
invoX	FS-118	1			

- Immutep designed the first anti-LAG-3 antibody and licensed it to CoStim Pharmaceuticals in 2012, which was acquired by Novartis in 2014
- Novartis' anti-LAG-3 mAb, LAG525, activates effector T cells & inhibits regulatory T cells (removing two brakes on the immune system to respond to and kill cancer cells) and has been tested in multiple clinical trials combined with spartalizumab (anti-PD-1) and chemotherapy**
- IP estate for LAG525 continues to strengthen with patent grants in key markets including US, Europe, Japan and China
- Today, Immutep is pioneering a small molecule, oral anti-LAG-3 approach that may offer convenience at fraction of cost of other approaches

*Graphic adapted from Lymphocyte Activation Gene 3 in Immuno-oncology: A Soluble Protein Alternative; BioProcess International Feb 2022. Note InvoX Pharma, a wholly-owned subsidiary of Sino Bioph. Ltd., acquired F-star. Les Laboratoires Servier acquired Symphogen, and GSK acquired Tesaro;
**LAG525 - ClinicalTrials.gov (for Novartis' global rights, Immutep may receive undisclosed milestones plus royalties)

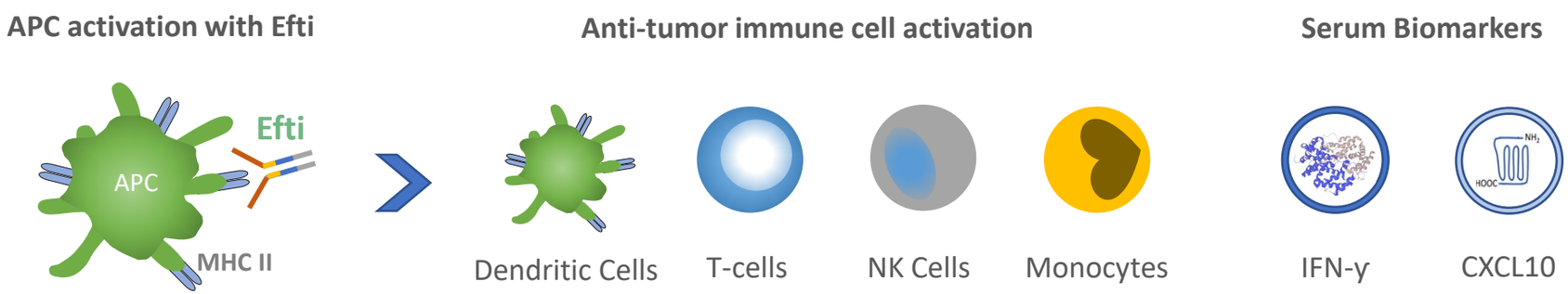
Efti: First-in-Class Positioning in LAG-3 Oncology Landscape

Eftilagimod alpha (Efti)



Immutep's proprietary soluble LAG-3Ig clinical candidate is a first-in-class antigen-presenting cell (APC) agonist via MHC II that capitalizes on LAG-3's unique characteristics

Pushing the Accelerator on the Immune System



Efti, a soluble LAG-3 protein, acts as a key to unlock broad activation of the immune system

- Capitalizes on LAG-3's unique ability to drive adaptive & innate immune systems against cancer
- Has high affinity for a subset of MHC II ligand on APCs
- Its activation of APCs drives broad stimulation of multiple anti-tumor cells, as well as a significant increase in IFN-γ and CXCL10 serum biomarkers for systemic TH1 response

Compelling pairing capabilities

- Excellent safety profile drives high suitability for combination approaches
- Synergistic activity & encouraging clinical results with multiple agents including anti-PD-1, anti-PD-L1, and chemotherapy
- Enhances clinical activity of anti-PD-1 across PD-L1 status, including low & negative PD-L1 tumors

LAG-3 Leadership

Immutep has more LAG-3 product candidates in development than any other biotech or big pharmaceutical company

LAG-3 Pioneer

French immunologist Prof Frédéric Triebel, Immutep Executive Director, CMO & CSO, discovered the LAG-3 gene and founded Immutep S.A.

Efti data selected for SITC 2022 Press Conference

Immutep's late-breaking abstract for 1st line non-small cell lung cancer patients from Phase II TACTI-002 trial was one of only nine abstracts selected by SITC to be showcased at the SITC 2022 Press Conference out of over 1,500 abstracts submitted for SITC 2022.

Prestigious Oral Presentation at ASCO 2022

Data from first line non-small cell lung cancer patients in Immutep Limited's Phase II TACTI-002 trial was selected for a prestigious Oral Presentation at the American Society of Clinical Oncology (ASCO) Annual Meeting.

Keynote address at first ever LAG-3 focused conference

2022 LAG-3 Targeted Drug Development Summit, CEO Marc Voigt delivered opening remarks and Frederic Triebel gave the keynote address.

Benchmarking against Pembrolizumab Monotherapy: Strong ORR/PFS Across Entire PD-L1 Spectrum vs Pembrolizumab

immutep LAG-3 IMMUNOTHERAPY

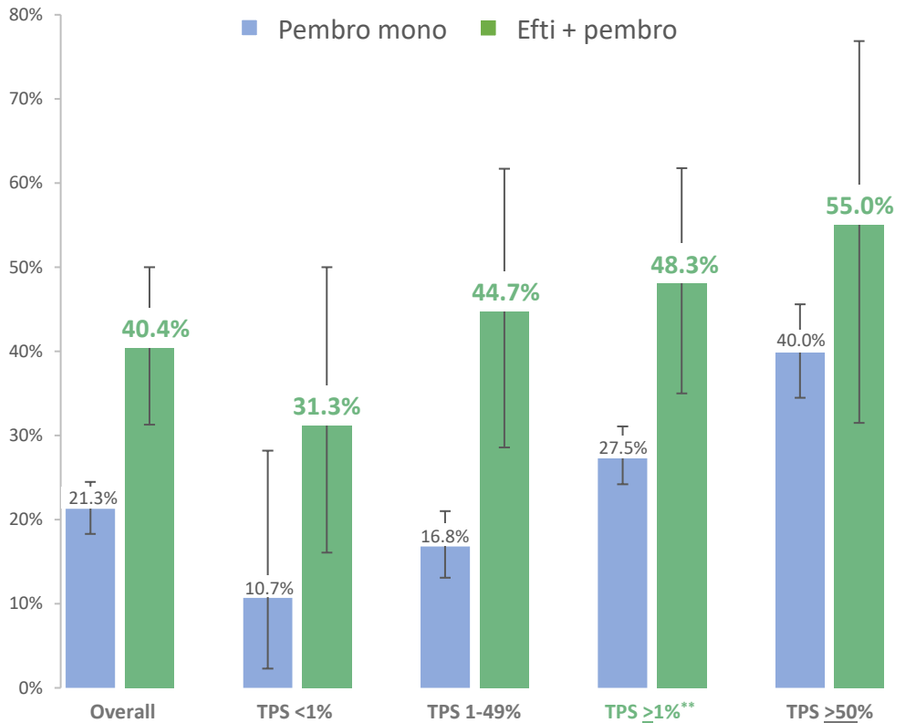
TACTI-002/KEYNOTE-798: 1L NSCLC (Part A)

Key Takeaways

- Superior ORR/PFS across all PD-L1 levels vs pembrolizumab monotherapy
- Promising interim mPFS: 6.6 months overall and 9.3 months PFS in TPS >1%
- Efti has potential to substantially increase # of patients responding to anti-PD-1 therapy

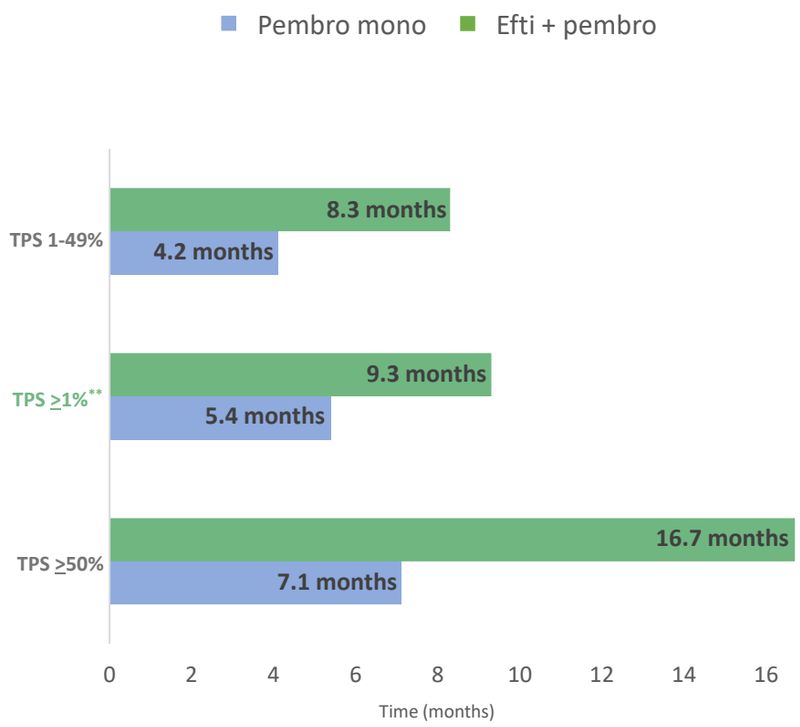
Overall Response Rate* (ORR)

(with 95% confidence interval)



Median Progression Free Survival# (PFS)

(by PD-L1 TPS Score)



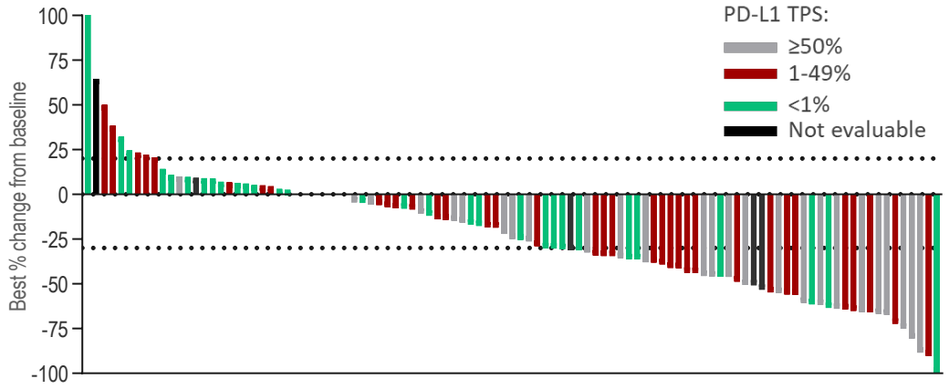
** Efti + Pembro Fast Track Designation in PD-L1 ≥1%

* Efti + Pembro ORR by iRECIST, unconfirmed, Total (N=114) and PD-L1 TPS subgroups (N=90). Data cut-off July 1, 2022. Pembrolizumab ('pembro') mono efficacy used for benchmarking for ORR: Total calculation based on KN-001; KN-042 and on adjustment for the same PD-L1 subgroup distribution as in TACTI-002. < 1 % TPS: calculation based on limited data set from KN-001 (1st & 2nd line altogether). 1-49%, ≥ 50%, and ≥ 1 % TPS based on KN-001, KN-042. # PFS by PD-L1 status (N=90) using central assessment for 90 patients. Pembro mono efficacy used for benchmarking: 1-49%, ≥ 50%, and ≥ 1 % TPS based on KN-001, KN-042. Lancet https://doi.org/10.1016/S0140-6736(18)32409-7, Oral Presentation 2018 ASCO, EPAR assessment report, N Engl J Med 2016; 375:1823-33; KN-024 update J Clin Oncol 2019, KN-024 J Clin Oncol 2021

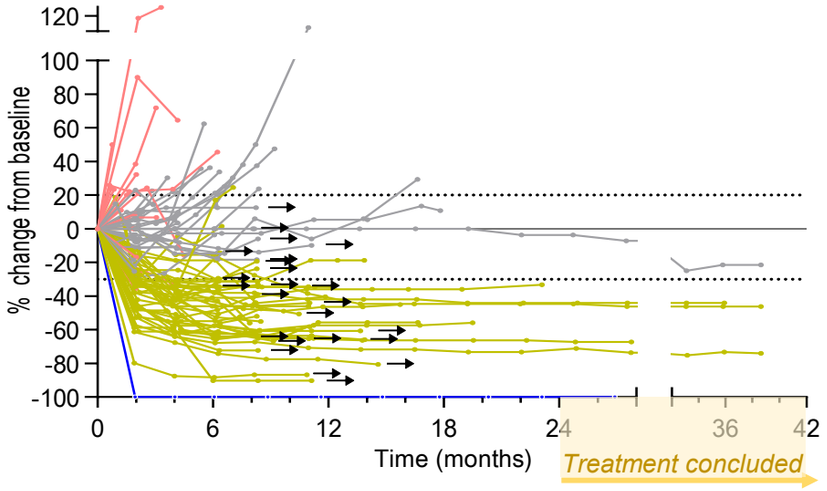
Deep and Durable Responses

TACTI-002/KEYNOTE-798: 1L NSCLC (Part A)

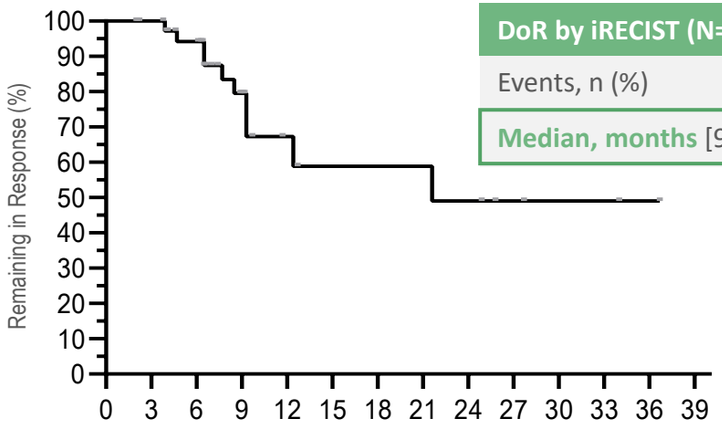
Tumor Burden Reduced in Majority of Patients



Change in Tumor Size Over Time[1]



Interim Median Duration of Response (DoR)[2, 3]



DoR by iRECIST (N=40)	
Events, n (%)	10 (25.0)
Median, months [95% CI][4]	**21.6** [17.3-30.0]

- Responses are deep and across all PD-L1 subgroups
- Response onset is early & responses are long-lasting: strong interim mDoR 21.6 months
- ~70 % of patients have a decrease of target lesions
- Less than 10% of responding patients progress within 6 months

Data cut-off July 1, 2022 [1] all pts with ≥1 post-baseline CT scan with evaluable response; N=101. Pts are listed with iPR / iCR response regardless if confirmed or unconfirmed. [2] by iRECIST. [3] all patients with confirmed response by iRECIST. [4] 95% confidence intervals calculated using Clopper-Pearson method

IO + IO + Chemo Combination Trial (INSIGHT-003)

INSIGHT-003: Phase I in Solid Tumors Focusing on NSCLC Adenocarcinomas

INSIGHT-003 - Third arm (Stratum C) of ongoing investigator-initiated study focusing on NSCLC adenocarcinomas

- Evaluating triple combination therapy consisting of efti in conjunction with carboplatin/pemetrexed & anti-PD-1 therapy
- Trial assessing safety, tolerability and initial efficacy
- 14 of 20 metastatic NSCLC patients have been enrolled[1]
- Majority of patients have PD-L1 TPS <50%
- Triple combination well tolerated & appears to be safe
- Promising early results with **72.7% response rate** and **90.9% disease control rate** in evaluable (N=11) 1st line NSCLC patients

Initial Efficacy

Tumour Response according to RECIST 1.1 (N=11)	N, (%)
Complete Response (CR)	0 (0)
Partial Response (PR)	**8 (72.7%)**
Stable Disease (SD)	2 (18.2%)
Progressive Disease (PD)	1 (9.1%)
Objective Response Rate (ORR)	8 (72.7%)
Disease Control Rate (DCR)	**10 (90.9%)**

81.8 % patients had PD-L1 TPS <50% with ORR of 66.7 %

Interim Safety

Safety Parameter (N=14)	N, (%)
Most Frequent AEs	1 (9.1)
Neutrophil count decreased (grade 1-4)	11 (78.6)
White blood cell decreased (grade 1-4)	9 (64.3)
Platelet count decreased (grade 1-3)	8 (57.1)
Anemia (grade 1-3)	8 (57.1)
Patients with at least one SAE	4 (28.6)
Patients with at least one SAE related to study treatment	1 (7.1)

No new safety signals detected thus far

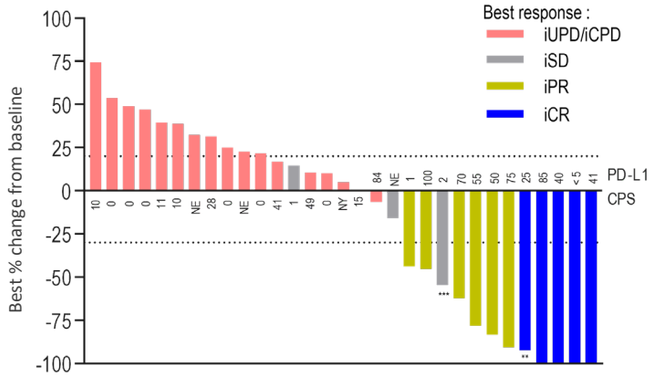
"Efti has accumulated an excellent safety profile to date, driving its high suitability for combination with standard of care therapies to address areas of unmet need for cancer patients. INSIGHT-003 represents the first triple combination therapy consisting of efti plus anti-PD-1 and chemo, and we are pleased with these promising, early results." - **Prof. Dr. Salah-Eddin Al-Batran, Lead Investigator**

Source: SITC 2022 Poster - Feasibility of eftilagimod alpha (soluble LAG-3 protein) combined with standard-of-care-therapy in advanced non-small-cell lung cancer (NSCLC). Initial results from INSIGHT 003". [1] 14th Oct 2022 data cut off.

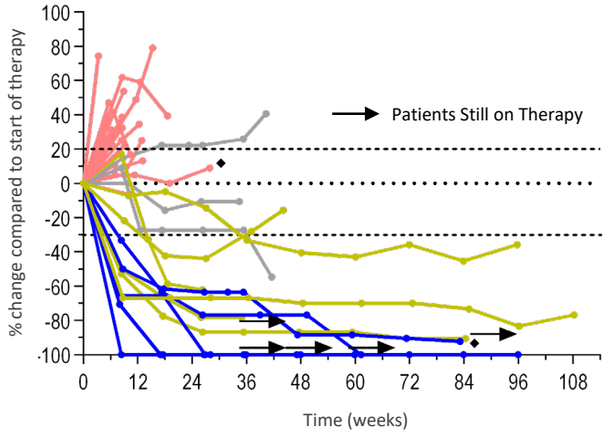
2L HNSCC: Robust ORR/CR with Long-Lasting Efficacy

TACTI-002/KEYNOTE-798: 2nd Line Head & Neck Squamous Cell Carcinoma (Part C)

Responses at all PD-L1 levels including 5 iCRs



Deep and durable responses



	Efti + Keytruda Combination*	Keytruda Monotherapy#
Clinical Trial & Phase	P2 (TACTI-002/KN-798)	P3 (KN-040)
Patient Number / tumor type	39 / 2L HNSCC	247 vs. 248 / 2L HNSCC
PD-L1 Status	PD-L1 All comer	PD-L1 All comer
Complete Response (CR) %	**13.5%**	**1.6%**
Partial Response (PR) %	**16.2%**	**13%**
Stable Disease (SD) %	**8.1%**	**22.7%**
ORR in evaluable patients %	**35.5%**	n/a
Overall Response Rate (ORR) %	**29.7%**	**14.6%**
PD-L1 CPS ≥1% group	**40.7%**	**17.3%**
PD-L1 CPS ≥20% group	**64.3%**	**21.9%**
Median PFS (months)	**2.1**	**2.1**
PD-L1 CPS ≥1% group	**4.1**	**2.2**
Median OS (months)	**12.6**	**8.4**
PD-L1 CPS ≥1% group	**12.6**	**8.7**

Eight-fold increase in CR with efti + pembro

More than double ORR across all PD-L1 levels with efti + pembro

50% increase in mOS

*SITC 2021. Data cut-off date Aug 4, 2021. #Data for Keytruda derived from KN040 (EEW Cohen et al., *The Lancet* 2018).

Targeting 1L HNSCC with Fast Track Designation (TACTI-003)

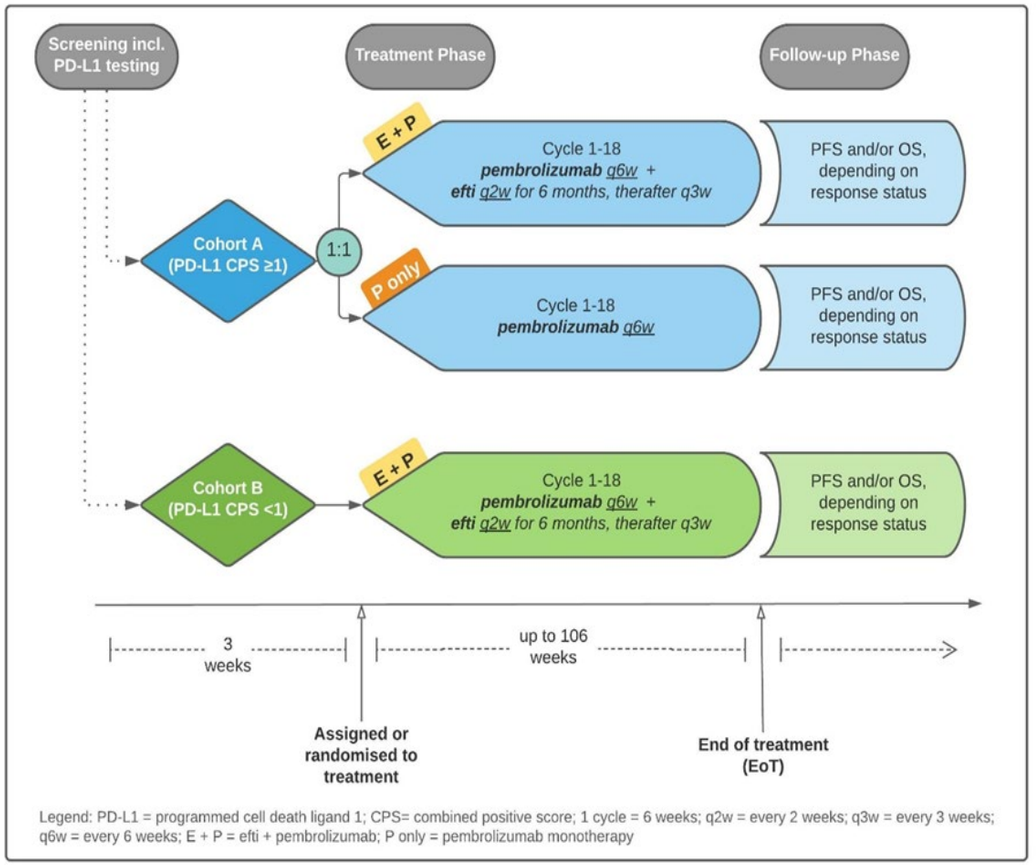
TACTI-003: Phase IIb in 1st Line Head and Neck Squamous Cell Carcinoma (HNSCC)

Design:

- Randomised trial with ORR as primary endpoint
- Sites worldwide (AU, US, Europe)
- Approximately 154 patients: either to be randomized to have sufficient patients in each group or in an experimental arm

Status:

- ✓ Received FDA Fast Track on strength of TACTI-002 data in 2L HNSCC
- ✓ Recruiting: ~38% enrolled; new sites activated & enrollment increasing*
- ✓ Independent Data Monitoring Committee (IDMC) recommended continuing trial with no modifications after review of initial safety data; also reviewed initial efficacy data yet was not primary focus of analysis
- ✓ *Trial in Progress* abstract presented at SITC 2022



*As reported on September 14, 2022 in *'Immutep Clinical Development Update for its First-in-Class LAG-3 Antigen Presenting Cell Activator Candidate Eftilagimod Alpha'* press release

AIPAC Phase IIb: Driving OS Improvement with Superior QoL

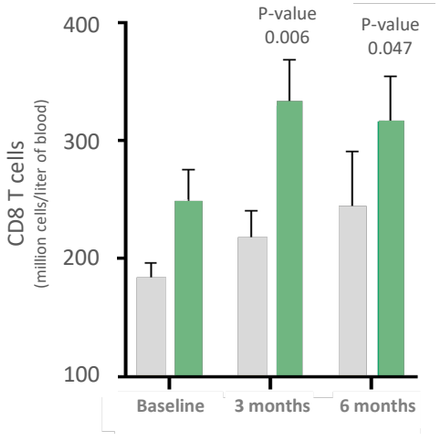
AIPAC: Active Immunotherapy PAClitaxel in HER2–/ HR+ metastatic breast cancer Phase IIb Trial

AIPAC: Multicenter, placebo-controlled, double-blind, 1:1 randomized Phase IIb study; 226 patients randomized to efti (N=114) or placebo (N=112)

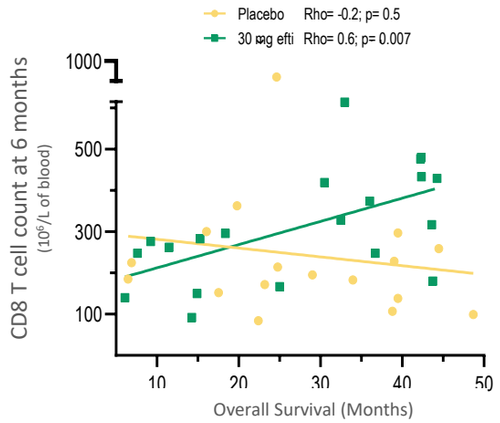
Pre-specified Subgroups	Median Overall Survival	Hazard Ratio	P-value
Low Monocytes	*+19.6 months mOS*	*HR 0.44*	*p=0.008*
Under 65 Years	*+7.5 months mOS*	*HR 0.66*	*p=0.017*
Luminal B	*+4.2 months mOS*	*HR 0.67*	*p=0.049*

- ✓ Efti + paclitaxel combination:
  - Led to significant OS improvement in three pre-specified subgroups: low monocytes, under 65 years, & luminal B
  - ORR & DCR of 48.3%/85.1% vs placebo 38.4%/75.9%
- ✓ Based on encouraging clinical data and high unmet need to improve OS while maintaining QoL, metastatic breast cancer (MBC) remains an attractive opportunity
- ✓ Immutep's preparations for future clinical development in MBC, including engagement with regulators, CROs & other stakeholders, are progressing

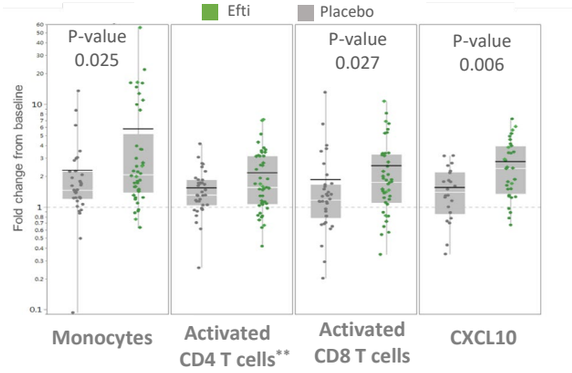
Statistically-Significant Increase of Cytotoxic CD8⁺ T Cell Count



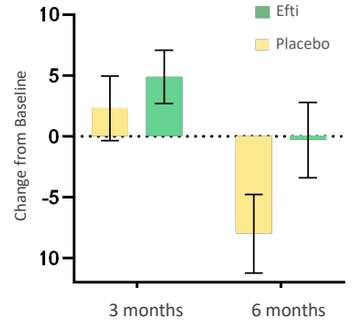
Statistically-Significant Correlation: OS & Cytotoxic CD8⁺ T cell count



Statistically-Significant Increase in Monocytes, CD8⁺ T Cells & CXCL10



Sustained Quality of Life*



Biomarker and multivariate analyses results from AIPAC: A phase IIb study comparing eftilagimod alpha (a soluble LAG-3 protein) to placebo in combination with weekly paclitaxel in HR + HER2 - metastatic breast carcinoma – ESMO 2022; *Quality of Life (QoL) as measured by Global Health Status/ QoL QLQC30-B23; ** Not statistically significant. Post-hoc analysis of (a) <5 Years Since Diagnosis showed +9.4 month improvement in mOS with HR of 0.57 and p-value =0.008, (b) High NLR ratio showed +6.9 month improvement in mOS with HR of 0.61 and p-value =0.012

Clinical Development Strategy for Efti

Encouraging clinical data supports broad therapeutic potential of efti - optionality to progress development in multiple indications.

Prioritising 1st line NSCLC

- Planning and regulatory interactions ongoing
- Late-stage trial design informed by ongoing INSIGHT-003 trial and maturing TACTI-002 data
- Fast track designation

Ongoing development in 1st line HNSCC

- Ongoing Phase IIb TACTI-003 trial
- FDA Fast Track designation

Future development in metastatic breast cancer

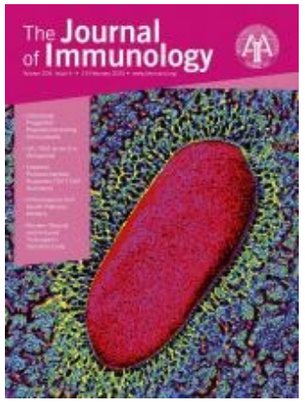
- Continuing preparations for late stage development: engagement with regulators, CROs and other stakeholders

Continued expansion of efti in additional indications and combinations

- Last example: soft tissue sarcoma trial

Immutep, or its partners, aim to obtain marketing authorisation in multiple indications to fully exploit the potential of efti with its unique mechanism of action

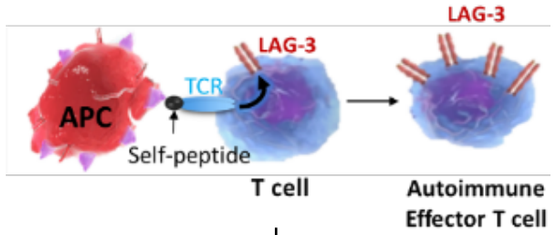
IMP761: Broad Potential Targeting Auto-Reactive Memory T Cells



A LAG-3–Specific Agonist Antibody for the Treatment of T Cell –Induced Autoimmune Diseases

Mathieu Angin, Chrystelle Brignone and Frédéric Triebel
J Immunol January 6, 2020, ji1900823

Deficiency in LAG3 Pathways Linked to Development of Autoimmune Diseases (AI)



Epigenetic Reprogramming
(DNA methlyation, histone modifications, miRNAs)

Th1	Th2	Th3	IL-23
(e.g. T1 Diabetes, Rheumatoid Arthritis)	(e.g. Allergic Asthma)	(e.g. Irritable Bowel Syndrome)	(e.g. Psoriasis)

IMP761

Immutep's proprietary humanized IgG4 LAG-3–specific antibody

As the **first LAG-3–specific agonist** acting upstream on activated T cells, the root cause of self-Ag–specific T cell–induced disease, IMP761 is a **potential game-changer** in autoimmune diseases.

J Immunol January 6, 2020, ji1900823; DOI: https://doi.org/10.4049/jimmunol.1900823

Novel Small Molecule Anti-LAG-3 Collaboration

Collaboration established in 2019 combining Immutep's deep LAG-3 biology experience and expertise of world leading scientists at Cardiff University

"We are delighted to collaborate with Immutep on this important project to develop a **small molecule anti-LAG-3** treatment for cancer patients that could offer the **convenience of a tablet or capsule at a fraction of the cost of existing anti-LAG-3 candidates**."

Professor Andrew Godkin, Theme Lead in Immunology in the College of Biomedical Life Sciences, Cardiff University

Key Financials

- Revenue and other income increased mainly due the recognition of a net gain in FX of A$1.2M and an increase in R&D tax rebates. A$4.5M from the Australian and French governments was recognised in FY22 compared to A$3.4M in FY21.
- R&D and IP expenses significantly increased as expected due to the increased clinical trial activity for TACTI-003 and increased manufacturing activities
- Strengthened cash balance with A$67.2 million two-tranche placement and share purchase plan (Share purchase plan and tranche two placement completed in July 2021)
- Loss after tax for FY22 was higher compared to FY21 mainly due to the increase in R&D expenses

	FY22	FY21
Revenue and other income	A$6.8M	A$4.0M
G&A Expenses	A$7.2M	A$6.3M
R&D and IP expenses	A$31.3M	A$17.2M
Net loss	A$32.2M	A$29.9M
Net operating cash outflow	A$30.2M	A$17.6M
Cash and cash equivalents at the end of the financial year	A$80.0M	A$60.6M
Cash and cash equivalents at 30 September 2022	A$73.9M	

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Milestones ahead

2022

- Year to date:*
  - ✓ 1L NSCLC Oral Presentation at ASCO (TACTI-002; Part A)
  - ✓ 2L NSCLC PD-X refractory data at ELCC & WCLC 2022 (TACTI-002; Part B)
  - ✓ Fast Track Designation granted in 1L NSCLC
  - ✓ New, significant data from AIPAC study
  - ✓ IP expansion for eftilagimod alpha
  - ✓ New data from Phase II TACTI-002 in 1L NSCLC at SITC 2022
  - ✓ Initial results from INSIGHT-003 (triple-combo) at SITC 2022
  - ✓ Trial in progress poster on randomized trial in 1L HNSCC at SITC 2022
- Expansion of existing programs (i.e., new sarcoma trial)
- Regulatory updates
- Manufacturing scale up to 2,000L
- Updates on IMP761 & partnered programs

2023

- TACTI-003 updates and top line readout
- TACTI-002 data updates
- INSIGHT-003 updates and readout
- Start soft tissue sarcoma study
- Preparations for late-stage development in NSCLC
- Preparations for late-stage development in MBC
- Manufacturing updates (e.g. comparability)
- Regulatory updates (e.g. FDA, EMA)
- Expansion of the clinical trial pipeline
- Preclinical development of IMP761
- Update from partnered programs
- Partnering updates

* A tick symbol indicates a completed item.

Corporate Snapshot

Pioneering LAG-3 portfolio in oncology and autoimmune diseases with four product candidates in multiple clinical trials

- First-in-class positioning with eftilagimod alpha (efti)
- Multiple big pharma partnerships & collaborations, while retaining full control of efti (ex-China) & IMP761
- Well funded with ~A$73.9 million* in cash
- Cash runway to H1 CY2024*
- Market cap ~A$264M / ~$175M US**
- Ticker symbols: IMM (ASX) & IMMP (NASDAQ)
- Total institutional ownership of ~57% includes:
  - Fidelity (FIL Ltd.) ~7.41%
  - Australian Ethical ~4.98%***

Analyst research coverage

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Jefferies

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MAXIM GROUP

PETRA CAPITAL

TAYLOR COLLISON

WILSONS

*As reported in Quarterly Activities Report for quarter ended 30 September, 2022 (Q1 FY23); ** As of 21 November, 2022. 26.76% of ordinary shares outstanding are represented by ADSs listed on NASDAQ.
***Based on latest substantial holder notices and Orient Capital Report reflecting the register as at 14 October 2022.

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Thank You