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LAG-3 IMMUNOTHERAPY

Unlocking the power of the immune system to fight cancer and autoimmune disease

Forward-Looking Statements

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Immutep Highlights

Leader in LAG-3 immunotherapy	Four clinical-stage assets and one preclinical program designed to fight cancer and autoimmune diseases.
First-in-class lead clinical candidates	*Efti* is a novel MHC II agonist showing strong efficacy with favourable safety profile in multiple cancers and expanding/enhancing responses to world's top selling drug. *IMP761* is LAG-3 agonist antibody to treat autoimmune disorders.
Phase III in Lung Cancer with MSD	Phase III in collaboration with MSD evaluating efti + KEYTRUDA + chemo with potential to establish new standard-of-care in first line non-small cell lung cancer (blockbuster potential). Immutep retains full commercial rights to efti and freedom to operate. Additional programs with data readouts in 2025 & beyond.
Validation via collaborations	Multiple partnerships and collaborations with large pharma and leading institutions.
Strong IP and balance sheet	Strong IP portfolio and 12+ years of potential exclusivity for biologics. Cash & cash equivalents of ~A$159 million provide runway to end of CY2026.#

Aggregate cash, cash equivalent, & term deposit position of ~A$159.3 million (~US$ 99 million) as at 31 December 2024

Deep Pipeline in Oncology & Autoimmune Diseases

	Program	Indication(s)	Preclinical	Phase I	Phase II	Phase III	Collaborations	Commercial Rights
ONCOLOGY	**Eftilagimod Alfa** Soluble LAG-3 Protein & MHC Class II agonist	1L Non-Small Cell Lung Cancer (NSCLC)	TACTI-004 | Efti + Pembrolizumab + Chemo [a]				MERCK	immutep Global Rights ex-China
		1L Head & Neck Squamous Cell Carcinoma (HNSCC)	TACTI-003 | Efti + Pembrolizumab [a]				MERCK	
		1L NSCLC, 2L HNSCC, PD-X Refractory 2L NSCLC	TACTI-002 | Efti + Pembrolizumab [a]				MERCK	
		1L Non-Squamous NSCLC	INSIGHT-003 | Efti + Pembrolizumab + Chemo [§]				IKF	
		Urothelial Cancer	INSIGHT-005 | Efti + Avelumab [§, b]				Merck KGaA Darmstadt, Germany; IKF	
		Soft Tissue Sarcoma	EFTISARC-NEO | Efti + Pembro + Radiotherapy [§]				Narodowy Instytut Onkologii	
		HR+/HER2- Metastatic Breast Cancer & TNBC	AIPAC-003 | Efti + Paclitaxel					
		Metastatic Breast Cancer & Solid Tumors	Efti + Paclitaxel and Efti + Pembrolizumab [##]				EOC	EOC Efti China Rights
	Anti-LAG-3 Small Molecule	Undisclosed					CARDIFF UNIVERSITY	
	LAG525 Anti-LAG-3 Antibody	Solid Tumors, Blood Cancer, TNBC, Melanoma[#]					NOVARTIS	NOVARTIS Global Rights
AUTOIMMUNE DISEASE	**IMP731**[*] Depleting LAG-3 Antibody	Psoriasis & Ulcerative Colitis						immutep Global Rights
	IMP761 Agonist LAG-3 Antibody	Undisclosed						

Information current as of February 2025. For EOC's China rights, Immutep may receive undisclosed milestones plus royalties. For Novartis' global rights to LAG525 (ieramilimab), Immutep may receive milestones plus royalties. [#] To date Novartis has conducted five separate clinical trials with LAG525. [§] Investigator-initiated trials controlled by lead investigator and Immutep has no control over these clinical trials. [a] In combination with KEYTRUDA®. [b] In combination with BAVENCIO®. [##] Conducted by EOC in China. * Three trials for IMP731 were conducted by GSK (two Phase I studies in healthy volunteers and psoriasis and a Phase II study in ulcerative colitis), which transitioned this clinical-stage asset back to Immutep in 2024.

Efti: A Soluble LAG-3 'Key' to Stimulate Immune System via MHC II

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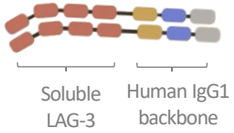
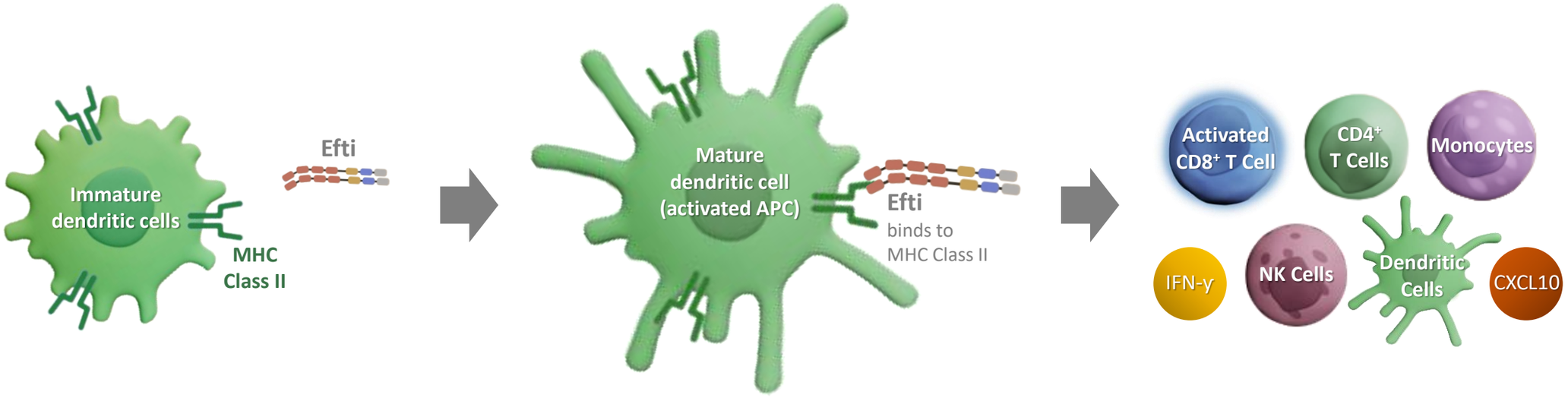
Eftilagimod alfa (efti)

A first-in-class soluble LAG-3 fusion protein with high affinity for a subset of MHC Class II molecules on antigen-presenting cells (APCs)





Efti activates powerful immune cells called dendritic cells by binding to MHC Class II. This activates a broad, sustained adaptive/innate immune response to fight cancer.*

* In clinical trials, including monotherapy and in combination with anti-PD-(L)1 therapies and with chemotherapy, efti has led to significant and sustained increases in anti-tumor cells and chemokines / cytokines including those listed in the graphic.
MHC Class II = Major Histocompatibility Complex Class II.

Systemic Immune Effect Leading to Positive Clinical Outcomes

Encouraging data from efti in combination with IO, chemotherapy, radiotherapy across multiple indications

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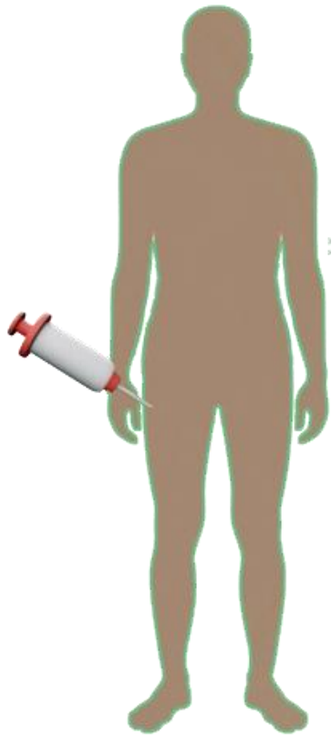
Efti's subcutaneous delivery:

- Generates systemic anti-cancer immune response
- Improves patient experience vs. intravenous (IV) administration
  - ✓ Less invasive
  - ✓ Easier to administer
  - ✓ More flexible
- Potentially increases patient access to treatments



- **Non-Small Cell Lung Cancer**
- **Head & Neck Squamous Cell Carcinoma**
- **Melanoma**
- **Advanced Solid Tumors** (e.g., gastric, cervical)
- **Breast Cancer**
- **Soft Tissue Sarcoma** (first trial in neoadjuvant setting)

Efti + Anti-PD-1 Therapy
Efti + Anti-PD-L1 Therapy
Efti + Chemotherapy
Efti + Anti-PD-1 + Radiotherapy

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Efti and Anti-PD-1 Therapy: A Unique, Complementary Combination

Limitations of Anti-PD-1 Therapy

PD-1 inhibitors have reshaped cancer treatment yet alone they're effective in just ~20% of patients and their efficacy often depends on patients' PD-L1 expression levels.

Suboptimal performance in patients with low or no PD-1 expression

	High PD-L1 (TPS ≥50%)		Low PD-L1 (TPS 1-49%)		No PD-L1 (TPS<1%)	
	US	EU	US	EU	US	EU
KEYTRUDA Monotherapy	✓	✓	✓	✗	✗	✗
OPDIVO & YERVOY	✓	✓	✓	✗	✗	✗
LIBTAYO Monotherapy	✓	✓	✗	✗	✗	✗
TECENTRIQ Monotherapy	✓	✓	✗	✗	✗	✗

Approved PD-(L)1 inhibitors in First Line Metastatic Non-Small Cell Lung Cancer

United States (US) and European Union (EU) regulatory approvals in 1L NSCLC by PD-L1 expression levels sourced from FDA/EMA and company reports.

Efti's Differentiated, Complementary Approach with KEYTRUDA®

COMPLEMENTARY IMMUNITY

Efti's direct activation of dendritic cells initiates a complementary immune response with KEYTRUDA (anti-PD-1) to fight cancer

EXPANDS/ENHANCES RESPONSES

Efti + KEYTRUDA drives high-quality responses regardless of PD-L1 levels including in patients who typically don't respond well to anti-PD-1

FAVORABLE SAFETY PROFILE

Efti + KEYTRUDA has similar toxicity profile to KEYTRUDA alone yielding sought-after alignment of stronger efficacy & favourable safety

Significant Immune Activity with Efti + KEYTRUDA

Biomarker analyses of blood from multiple trials shows efti's positive impact on immune system

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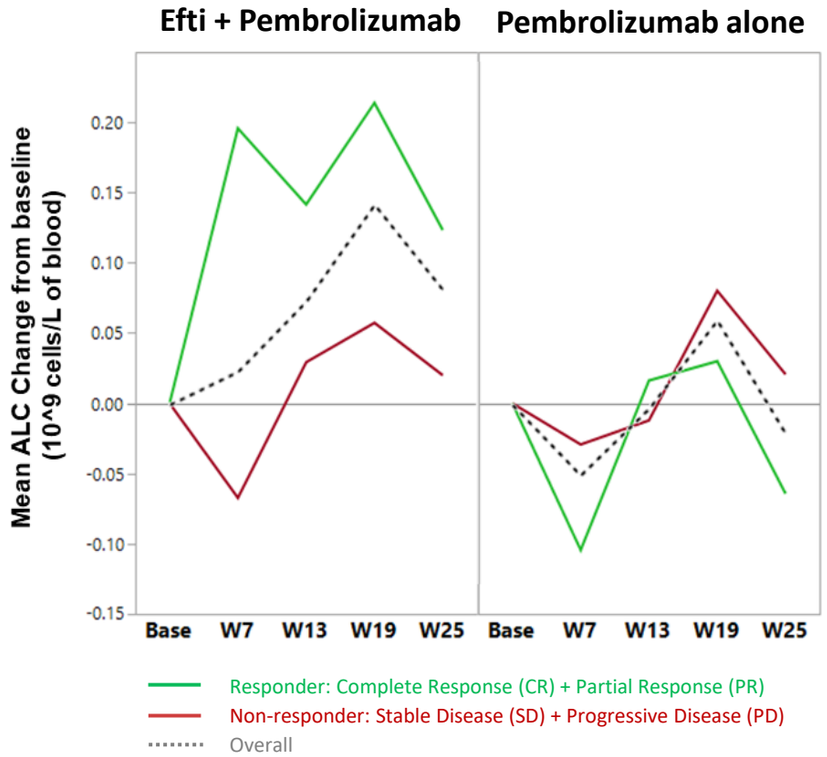
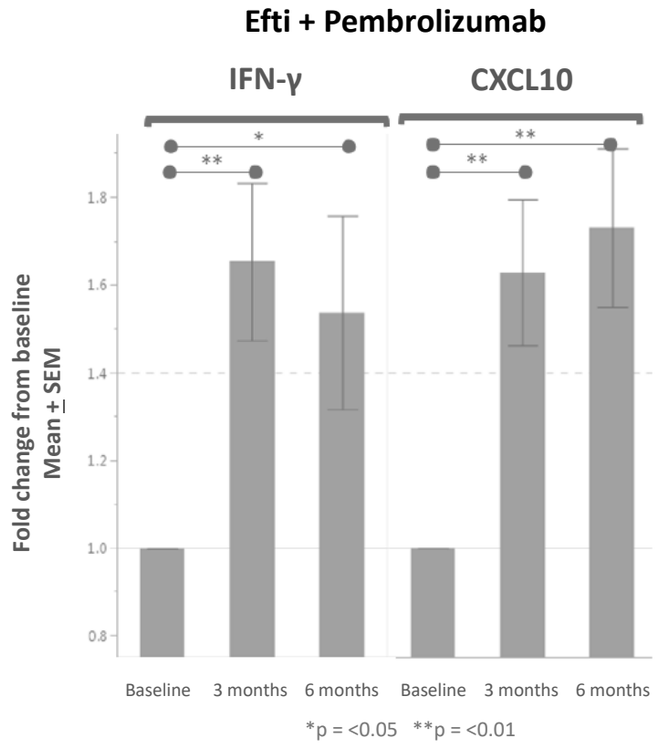
Significant increase in absolute lymphocyte count (ALC) linked to improved responses & shows efti's biological activity in randomised setting[1]



Significant increases in Th1 biomarkers (IFN-γ & CXCL10) and absolute lymphocyte count driven by efti led to improved clinical outcomes[2]



1. Data from TACTI-003 Phase IIb trial in randomised Cohort A. 2. Data from TACTI-002 Phase II trial; increases in Th1 biomarkers as well as absolute lymphocyte count (not pictured here for TACTI-002) were also seen in randomised AIPAC Phase IIb trial in which efti was combined solely with chemotherapy.

Efti's Potential to Extend Exclusivity for PD-1 Inhibitors

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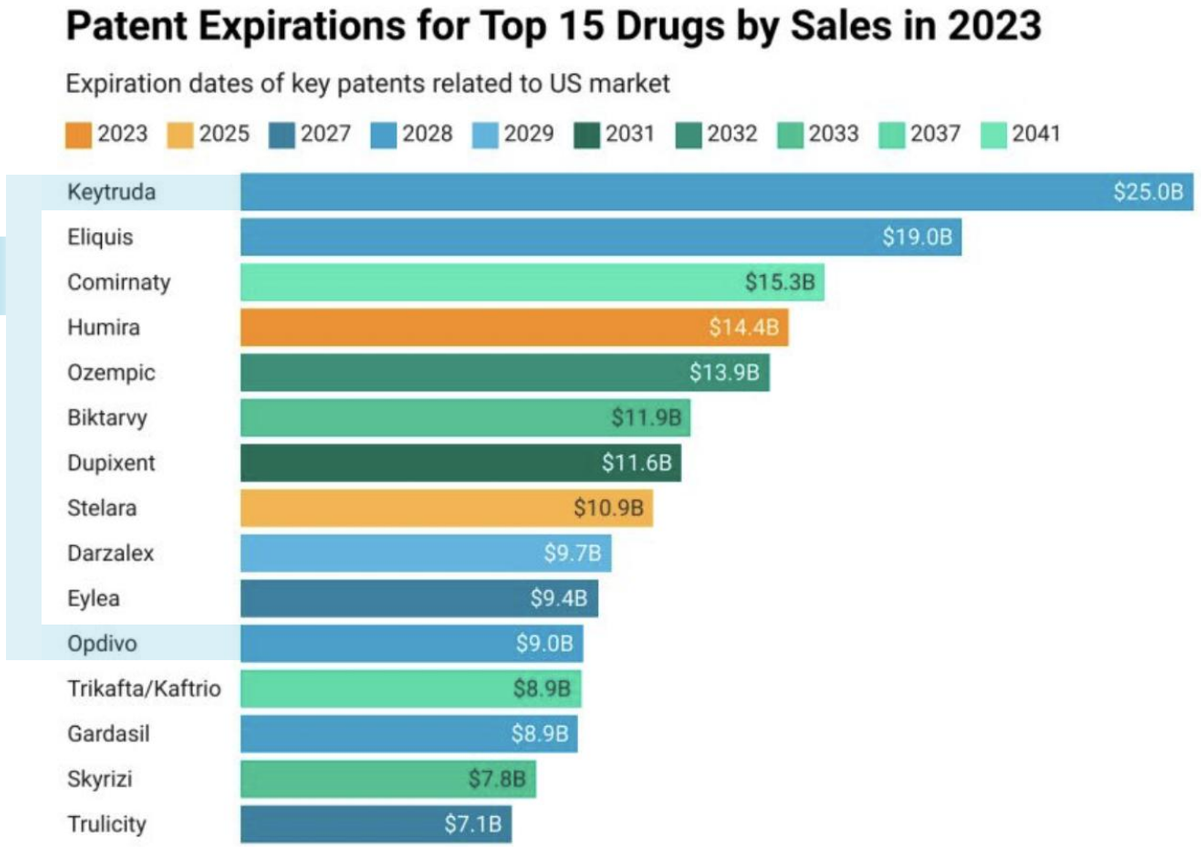
~$34 Billion **of the pharma patent cliff in 2028 stems from PD-1 inhibitors[1]**

Immutep's comprehensive patent portfolio for efti provides an opportunity to enhance and substantially extend established or new PD-(L)1 franchises



1. Based on 2023 sales. Graphic by Arjun Murthy posted on LinkedIn and created with Datawrapper (source: company reports).

Efti in First Line Non-Small Cell Lung Cancer: The Key Value Driver

NSCLC Overview

- Lung cancer is leading cause of cancer death and 80-85% of lung cancers are non-small cell lung cancer (NSCLC)[1,2]
- ~2.0 million NSCLC diagnoses annually
- Despite advances, Overall Survival still under 2 years for most patients
- Total addressable NSCLC drug market expected to reach US$48 billion in 2031 with >50% sales from ICIs (e.g. anti-PD-1)[3]

1. Calculated from Global Cancer Observatory (WHO), 2022 data & American Cancer Society, About Lung Cancer; 2.Tang S et al. Immune Checkpoint Inhibitors in Non-Small Cell Lung Cancer: Progress, Challenges, and Prospects. Cells. 2022 Jan 19;11(3):320. doi: 10.3390/cells11030320; 3. Nature Reviews Drug Discovery 22, 264-265 (23 Jan 2023) doi: https://doi.org/10.1038/d41573-023-00017-9.

TACTI-002 / KN-798 Trial Overview and Baseline Characteristics

Part A: Large Phase II trial in advanced/metastatic first line non-small cell lung cancer (1L NSCLC)

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TACTI-002 (Part A) Phase II: Overview & Trial Design

Overview
- **Status**: Completed
- **Enrolment**: 114 patients
- **Locations**: 18 centers across six countries: US, UK, ES, PL, UA, and AU

In collaboration with MSD

Screening incl. PD-L1 testing
- Advanced/metastatic 1L NSCLC
- 0-100% PD-L1 expression
- EGFR/ALK negative

Treatment Phase

Combination Therapy
30mg efti Q2W + 200 mg pembrolizumab Q3W for 8 cycles, followed by 30mg efti + 200mg pembrolizumab for 9 cycles
Up to 1 year

Monotherapy
200 mg pembrolizumab Q3W for 16 cycles
Up to 1 year

Follow Up Phase

Primary endpoint: ORR by iRECIST
Secondary Endpoints: ORR by RECIST 1.1, PFS, OS, DOR, safety, PK/PD

Baseline patient characteristics		N=114	
Age, median (range), years		67 (44-85)	
Sex, n (%)	Female / Male	30 (26.3) / 84 (73.7)	
ECOG PS score, n (%)	0 / 1	43 (37.7) / 71 (62.3)	
Smoking status, n (%)	Current or Ex-smoker / Non-smoker	108 (94.7) / 6 (5.3)	
Histology, n (%)	Squamous / Non-squamous / Unknown	40 (35.1) / 72 (63.2) / 2 (1.8)	
Metastatic disease, n (%)	Yes / No	113 (99.1) / 1 (0.9)	
PD-L1 expression TPS, n (%)	< 1% 1-49% ≥ 50%	*Central only* [1] 32 (35.6) 38 (42.2) 20 (22.2)	*Central + local* [2] 37 (34.3) 42 (38.9) 29 (26.9)
Previous therapy, n (%)	Radiotherapy Surgery Systemic therapy for non-metastatic disease	38 (33.3) 23 (20.2) 26 (22.8)	

TACTI-002 enrolled 1L NSCLC patients regardless of PD-L1 expression and ~25% had high PD-L1 (TPS ≥50%), a lower proportion than typically would be expected.

[1] N=90; Central assessment of PD-L1 TPS using Dako IHC 22C3 pharmDx. [2] N=108; Central + local assessment. For 18 patients, local assessment used predominantly Dako IHC 22C3 pharmDx due to non-evaluable central assessment results.

Strong Efficacy across All PD-L1 Expression Levels in 1L NSCLC

Tumor Response by PD-L1 Expression Level[1]

	All-Comer	Negative PD-L1	Low PD-L1	Any PD-L1	High PD-L1
	TPS 0-100% N=114	TPS <1% N=32	TPS 1-49% N=38	TPS ≥1% N=58	TPS ≥50% N=20
ORR[2,3,4]	40.4%	31.3%	44.7%	48.3%	55.0%
mPFS[2], months	6.6	4.2	9.3	11.2	16.5
mDoR[2], months	21.6	20.7	NR	24.2	18.7
mOS, months	**20.2**	**15.5**	**23.4**	**35.5**	**Not Reached**

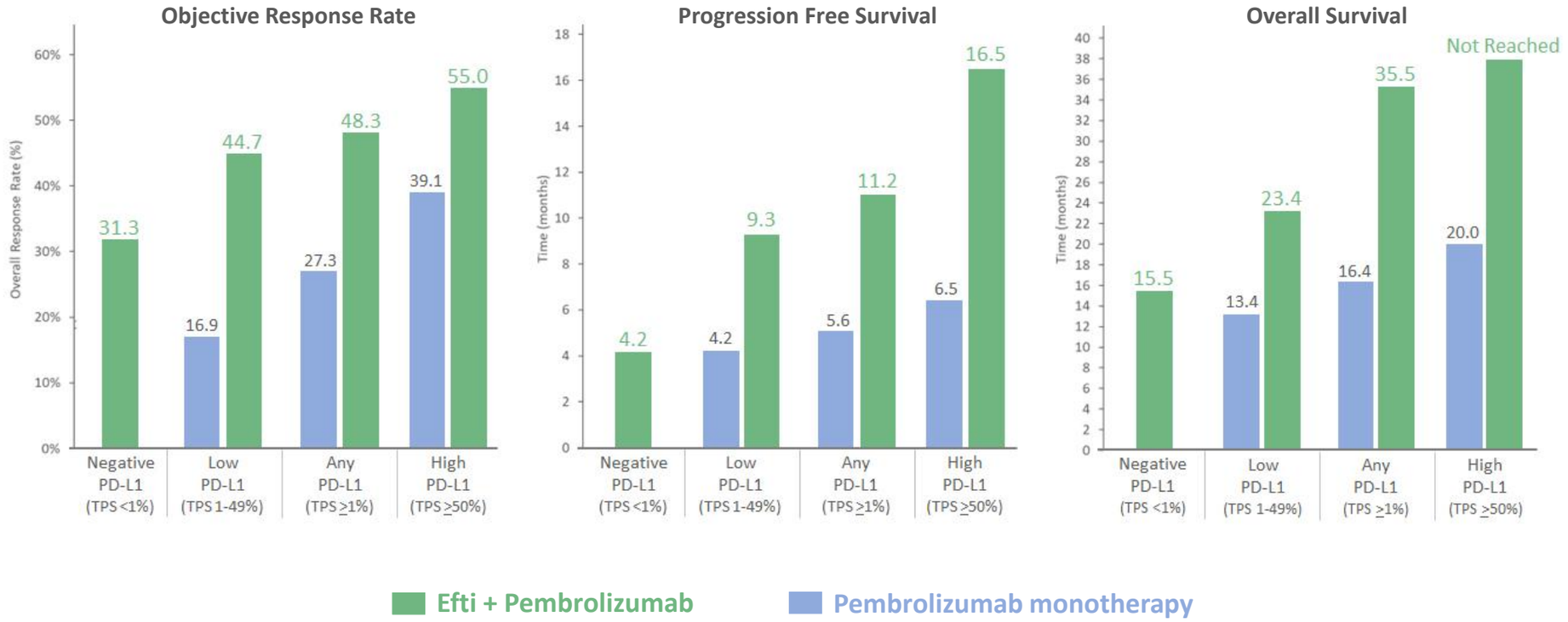
ORR – Overall Response Rate
mPFS – median Progression Free Survival
mDOR – median Duration of Response
mOS – median Overall Survival

- Results offer compelling evidence of efti's unique stimulation of patients' immune systems and its potential to fight cancer
- Strong efficacy across all PD-L1 levels differentiates efti + anti-PD-1 (KEYTRUDA) from other chemotherapy-free combinations in 1L NSCLC
- Excellent Overall Survival, the gold standard benchmark in oncology, with exceptional durability, quality of responses, and favorable safety profile

Data cut-off date: 15 August 2023. Median follow-up 25.1 months. [1] N=90; Central assessment of PD-L1 TPS using Dako IHC 22C3 pharmDx; [2] iRECIST; [3] unconfirmed; [4] calculated using Clopper Pearson method; NR: not reached. Results for PD-L1 central + local (N=108) were as follows (<1% / 1-49% / ≥50% / ≥1%): mOS, mo: 14.4 / 23.4 / 38.8 / 35.5; mPFS[2]: 4.2 / 8.3 / 16.3 / 9.8; mDoR[2]: 20.7 / 21.6 / 18.7 / 21.6.

Benchmarking TACTI-002 to KEYTRUDA

Robust response rates, durability, and progression free survival from efti plus pembrolizumab across all PD-L1 expression levels translate into compelling overall survival



Comparison of data is from different clinical trials. Pembrolizumab monotherapy data from publications/EPAR asessment report of KN-042 registrational trial. Given the lack of historical results in negative PD-L1 expressing 1L NSCLC patients who received pembrolizumab monotherapy in KN-042 and other trials, the chart only has data from patients in TACTI-002 with negative PD-L1 expression (TPS <1%). In 1L NSCLC patients with TPS ≥1%, TACTI-002 has 66% patients with TPS 1-49% and 34% with TPS ≥50%, which compares to KN-042 with ~53% patients with PD-L1 and ~47% patients with PD-L1 TPS ≥50%.

Favorable Safety and Compelling Overall Survival

Differentiated OS from Efti + Pembrolizumab achieved with a favorable safety profile

Therapy in 1L NSCLC TPS ≥1%	Drug-related Adverse Events Leading to Discontinuation[2]	Median Overall Survival[3]
Efti + Pembrolizumab	**9.6%**	**35.5 months**
Pembro + Doublet Chemo (NSQ)	20.5%	23.3 months
Pembro + Doublet Chemo (SQ)	16.8%	18.9 months
Ipilimumab + Nivolumab[1]	18.1%	17.1 months
Pembrolizumab monotherapy[1]	**9.9%**	16.4 months
Ipi + Nivo + 2 cycles of Doublet Chemo	22.1%	15.8 months

NSQ = Non-squamous; SQ = Squamous

Comparison of data is from different clinical trials. 1. Ipilimumab + Nivolumab approved in US for 1L NSCLC PD-L1 TPS >1% but not in EU; Pembro mono not approved in Europe for TPS 1-49%. 2. Treatment related adverse events leading to discontinuation taken from publications/EPAR assessments of respective trials (KN-042, KN-024, KN-189, KN-021, KN-407, CM-227, CM-9LA). 3. Arrow lengths are proportional representations of Overall Survival data. Data for standard-of-care therapies taken from publications of respective registrational trials (e.g., KN-042, KN-189, KN-407, CM-227, CM-9LA).

INSIGHT-003: Excellent Mature Survival Data

Promising efficacy & safety from first-in-human study evaluating Efti + KEYTRUDA + doublet chemo

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INSIGHT-003 (Stratum C) Phase I: Overview & Trial Design

Overview
- **Status**: Ongoing
- **Recruitment**: Completed
- **Enrolled**: 50 pts
- **Locations**: Multi-center study in Germany

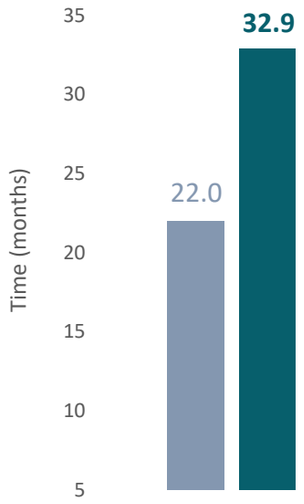
Screening incl. PD-L1 testing	Treatment Phase		Follow Up
• Advanced/metastatic 1L NSCLC (non-squamous) • 0-100% PD-L1 expression • EGFR/ALK negative	**Induction** 30mg efti Q2W + 200 mg pembrolizumab + platinum doublet chemotherapy Up to 24 weeks	**Maintenance** 30mg efti Q2W/Q3W* + 200 mg pembrolizumab + platinum doublet chemotherapy Max. total study treatment of 52 weeks	**ORR / PFS / DOR / OS / Safety**

IKF

INSIGHT-003 is an investigator-initiated, multi-centre Phase I trial led by Frankfurt Institute of Clinical Cancer Research (IKF)

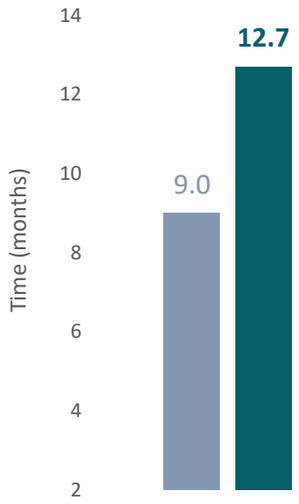
Overall Survival

TPS 0-100%, N=21*



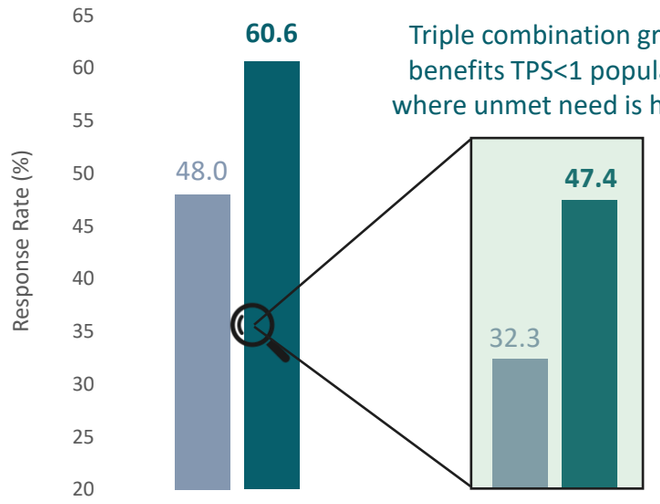
Progression Free Survival

TPS 0-100%, N=21*



Objective Response Rate

TPS 0-100%, N=40* TPS <1%, N=19



Triple combination greatly benefits TPS<1 population where unmet need is highest

Efti + Pembrolizumab + chemo[1] **Pembrolizumab + chemo[2]**

Comparison of data is from different clinical trials. 1. Data cut-off date is 15 October 2024 for INSIGHT-003. * Objective Response Rate (N=40) and Overall Survival & Progression Free Survival data from patients with mature follow up of at least 22 months (N=21) . Of note, INSIGHT-003 has ~19% patients with high PD-L1 who typically respond better to anti-PD-1 vs ~32% patients in historical control. 2. Shirish Gadgeel et al., Updated Analysis From KEYNOTE-189: Pembrolizumab or Placebo Plus Pemetrexed and Platinum for Previously Untreated Metastatic Nonsquamous Non–Small-Cell Lung Cancer. JCO 38, 1505-1517(2020). DOI:10.1200/JCO.19.03136. * After 24 weeks, efti is injected every 3 weeks when combined with the SOC therapy or every 2 weeks as monotherapy.

Immutep & MSD (Merck) Phase III Trial in 1L NSCLC

TACTI-004 / KEYNOTE-PNC-91 Phase III: Overview & Trial Design

Overview
- **Status**: Initiated
- **Details**: 1:1 randomised, double-blind, controlled study enrolling NSQ & SQ pts unselected for PD-L1 expression
- **Recruitment:** Ongoing
- **Enrolment target**: ~750 pts
- **Locations**: +150 clinical sites in +25 countries globally

Screening incl. PD-L1 testing
- Advanced/metastatic NSCLC (SQ and NSQ)
- Naïve for systemic treatment for a/m NSCLC
- EGFR/ALK/ROS negative
- **PD-L1 TPS 0-100%**
- ECOG 0 - 1

Randomization 1:1

Treatment Phase

Efti + SoC
- **Efti** q2w for 6 months, thereafter q3w
- **Pembrolizumab** q3w
- **Platinum doublet chemotherapy**

Placebo + SoC
- **Placebo** q2w for 6 months, thereafter q3w
- **Pembrolizumab** q3w
- **Platinum doublet chemotherapy**

Follow-up Phase

Dual primary endpoints: OS / PFS

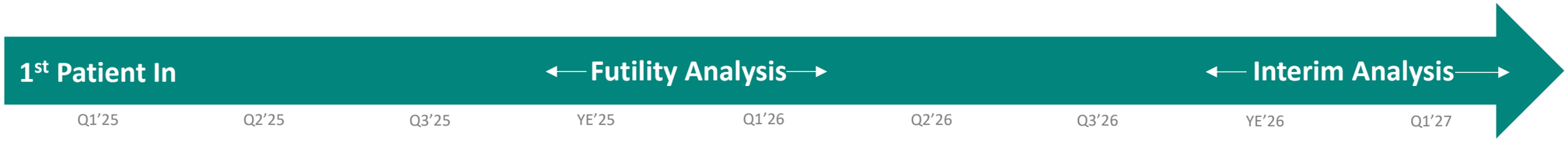
In collaboration with MSD

Third and most important collaboration and supply agreement with MSD

Immutep to conduct trial and MSD to supply KEYTRUDA
(typical ICI supply for trial this size ~US$100mm)

Immutep retains all commercial rights to efti with freedom to operate

Upcoming Milestones



* Timelines are indicative and subject to change

Global Phase III 1L NSCLC Trials with KEYTRUDA in Treatment Arm

TACTI-004 addresses the broadest 1L NSCLC patient population eligible for anti-PD-1 therapy

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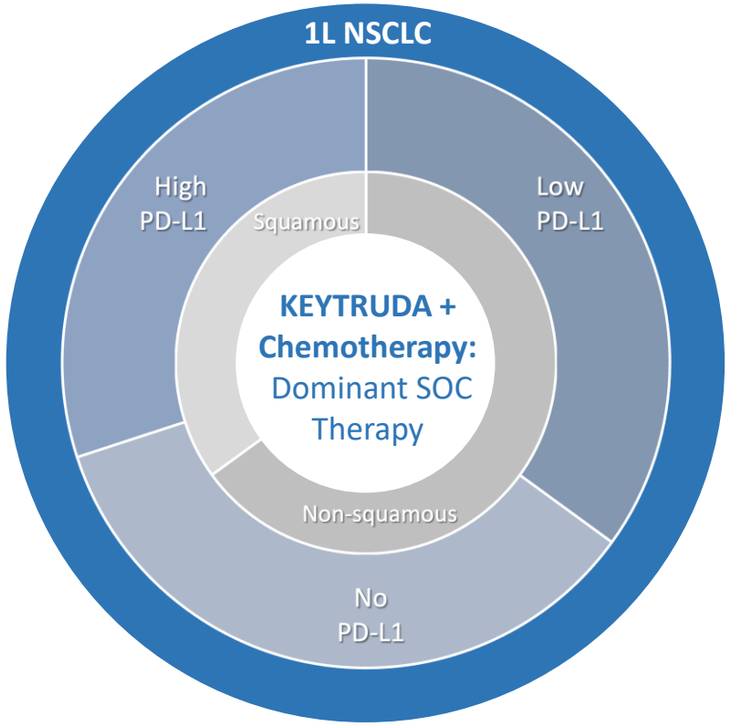
	PD-L1 TPS <1	PD-L1 TPS 1-49	PD-L1 TPS ≥50	Non-squamous	Squamous	Total Population
1L NSCLC patient population*	35%	35%	30%	70%	30%	Up to 100%
TACTI-004 (Immutep) Efti + KEYTRUDA + Chemo	✓	✓	✓	✓	✓	**100%**
TROPION-Lung07 (Daiichi Sankyo) DatoDXd + KEYTRUDA	✓	✓	✗	✓	✗	49%
EVOKE-03 (Gilead) Sacituzumab Govitecan + KEYTRUDA	✗	✗	✓	✓	✓	30%
TROPION-Lung08 (Daiichi Sankyo) DatoDXd + KEYTRUDA	✗	✗	✓	✓	✗	21%

Sources: Company reports and clinicaltrials.gov. * Patient population estimates by PD-L1 expression based on market research and enrolment across 1L NSCLC clinical trials.

Potential Blockbuster Commercial Opportunity

If TACTI-004 is successful it presents a potential multi-billion US$ opportunity for Immutep as efti will be positioned as a safe, effective addition to KEYTRUDA & chemo, the standard-of-care therapy most often chosen by physicians in 1L NSCLC:

- KEYTRUDA has revolutionized treatment landscape and MSD (Merck) captures between 7 to 8 of every 10 patients with metastatic lung cancer*
- Estimates are ~US$9 billion or +35% of KEYTRUDA's overall sales in 2023 from lung cancer**
- Potential peak sales for efti can be reached faster vs. typical therapeutic launch given KEYTRUDA + chemo's dominant position in 1L NSCLC market



* MSD Investor Event at ASCO 2024. ** Source of sales figures: Bloomberg, Wall Street research reports and Company reports..

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Additional Oncology Indications & Small Molecule Anti-LAG-3 Oncology Program

TACTI-003 / KN-C34 Trial Overview

Efti + anti-PD-1 therapy has FDA Fast Track designation in recurrent or metastatic 1L HNSCC

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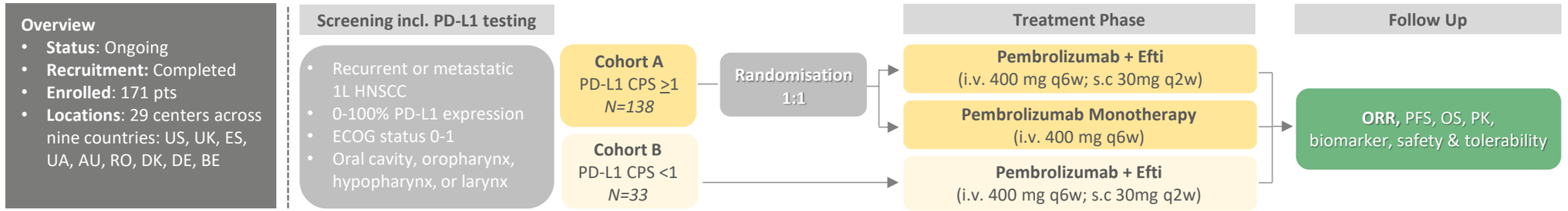
TACTI-003 / KEYNOTE-C34 Phase IIb: Overview & Trial Design



In collaboration with

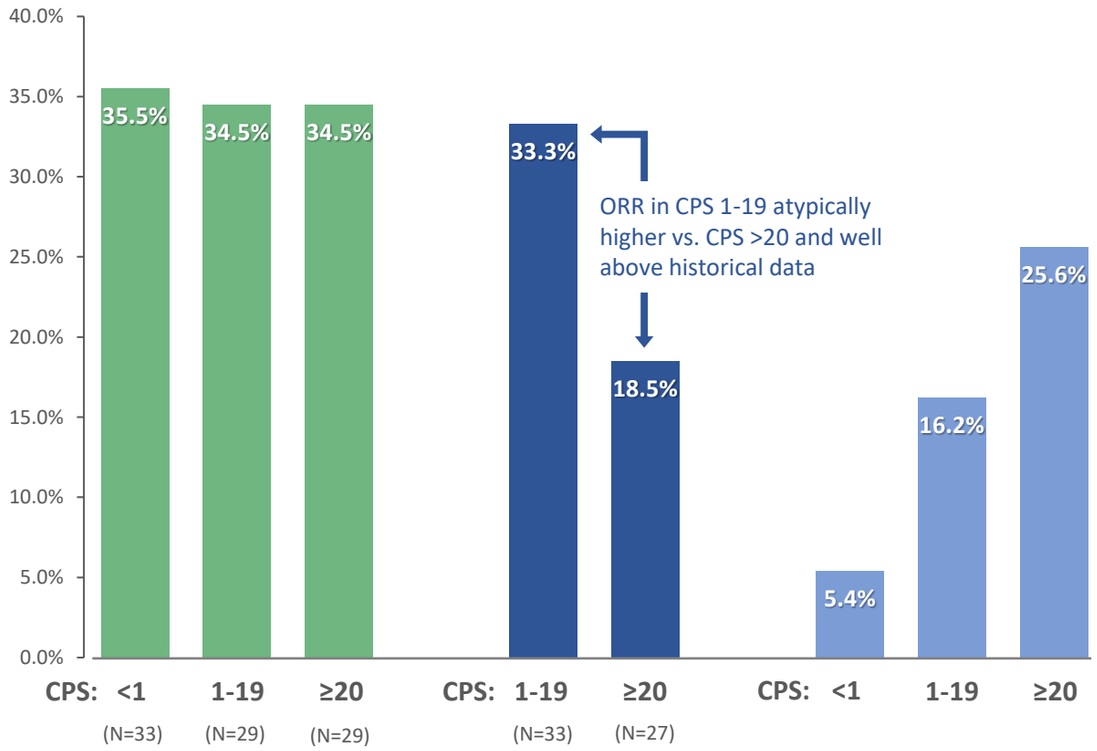
MSD

- Randomised, multicenter Phase IIb trial evaluating efti in combination with pembrolizumab (KEYTRUDA®) in first line recurrent or metastatic head and neck squamous cell carcinoma (1L R/M HNSCC):
  - *Cohort A (N=138) - Patients with any PD-L1 expression (CPS ≥1) randomised 1:1 evaluating efti + KEYTRUDA® vs. KEYTRUDA monotherapy*
  - *Cohort B (N=33) - Patients with no PD-L1 expression (CPS <1), which could not be randomised as KEYTRUDA monotherapy not approved in CPS <1*
- Primary endpoint is Objective Response Rate (ORR) among evaluable patients (≥ 1 post baseline CT), according to RECIST1.1
- Secondary endpoints include Overall Survival and Progression-Free Survival, ORR (iRECIST), and Disease Control Rate

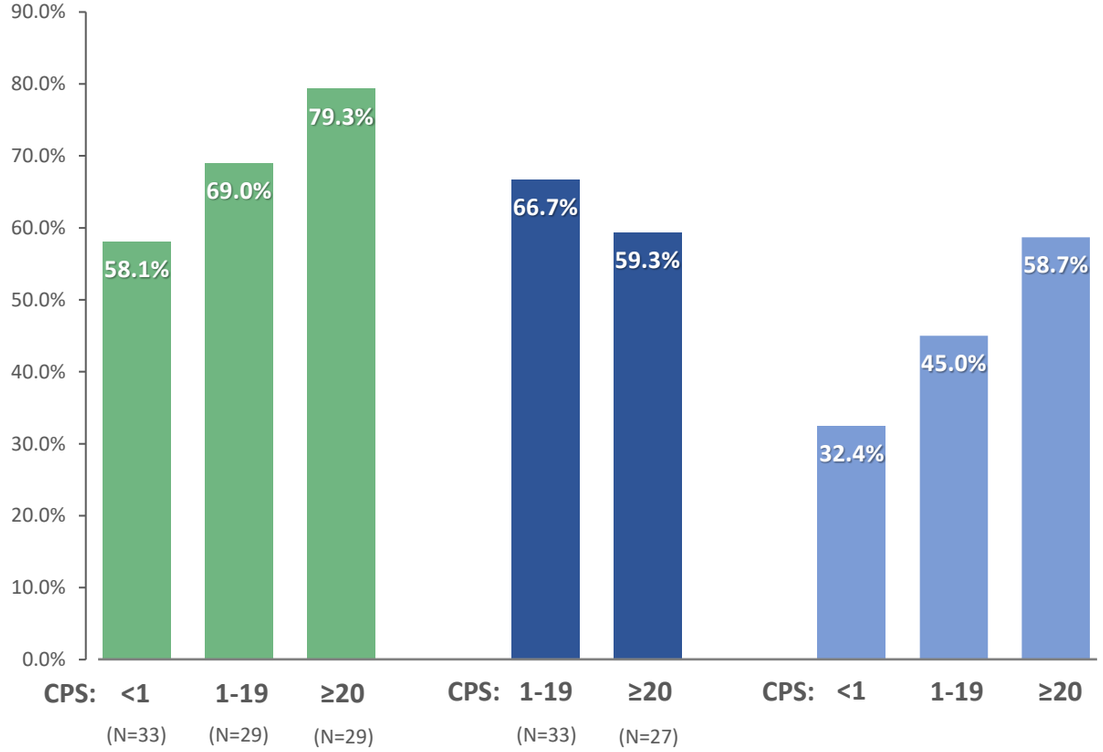
Immutep conducts this clinical trial and has a clinical trial collaboration and supply agreement with Merck & Co., Inc., Kenilworth, NJ, USA (known as MSD outside the US and Canada).

Cohorts A/B: High Response Rates Regardless of PD-L1 Expression

Objective Response Rate (ORR)



Disease Control Rate (DCR)



Efti + KEYTRUDA (TACTI-003) | KEYTRUDA mono (TACTI-003) | KEYTRUDA mono (KN-048)*

Data cut-off date: 11 March 2024 (additional response after data cut-off was reported in CPS ≥20 leading to 34.5% ORR). * Source: Burtness, B. et al. Pembrolizumab Alone or With Chemotherapy for Recurrent/Metastatic Head and Neck Squamous Cell Carcinoma in KEYNOTE-048: Subgroup Analysis by Programmed Death Ligand-1 Combined Positive Score. *J. Clin. Oncol.* 2022 40:21, 2321-2332

Cohorts A/B: Favourable Safety Profile

Safety Parameter	KEYTRUDA alone (Cohort A, n=68) n (%)	Efti + KEYTRUDA (Cohort A, n=69) n (%)	Efti + KEYTRUDA (Cohort B, n=33) n (%)
Any TEAR Leading to Discontinuation of Study Treatment	3 (4.4%)[1]	3 (4.3%)[2]	3 (9.1%)[3]

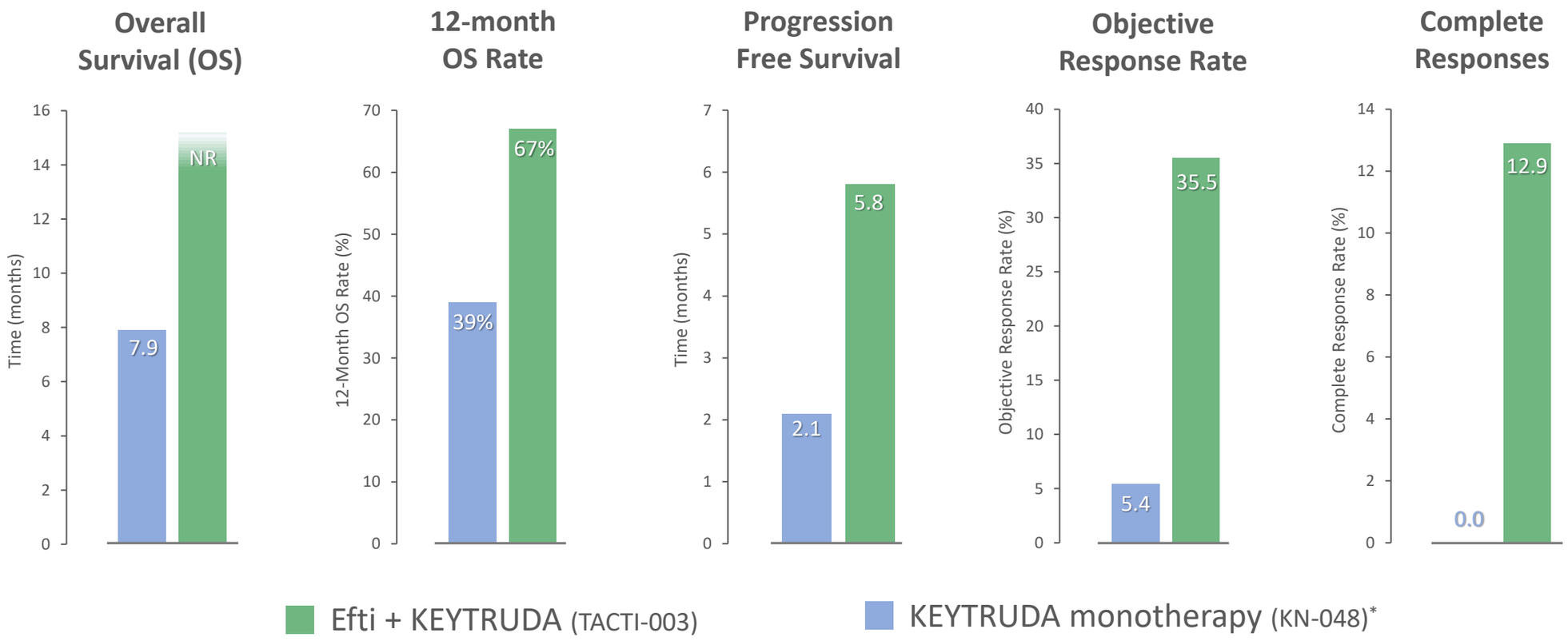
TEAR: Treatment-emergent adverse reaction

- **No new safety signals**
- **Rate of treatment related discontinuation was low and comparable between treatment regimens**
- **Safety profile comparable to KEYTRUDA monotherapy**

Data cut-off date: 11 March 2024. 1. Myocarditis (G3); Erythema multiforme (G3); Rash maculo-papular (G2) in one patient each. 2. Immune-mediated myositis (G3) & Myasthenic syndrome (G3) in one patient; Anaphylactic reaction (G4) and later Immune-mediated enterocolitis (G4) in one patient; General physical health deterioration (G2) in one patient. 3. Immune thrombocytopenia (G4), Immune-mediated hepatitis (G3), laryngeal obstruction (G4).

Cohort B: Exceptional Results for a Chemo-Free Regimen

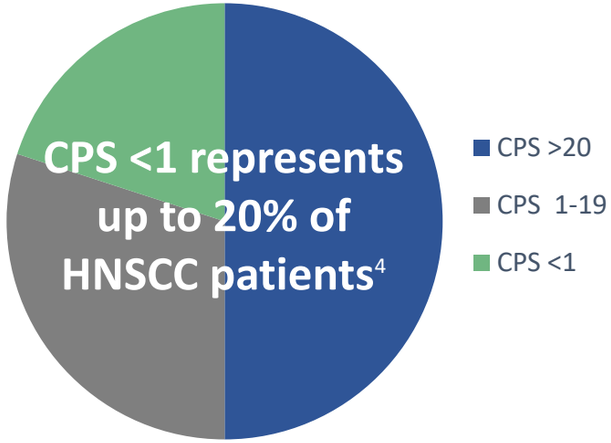
Benchmarking to KEYTRUDA monotherapy in patients with PD-L1 expression below 1 (CPS <1)



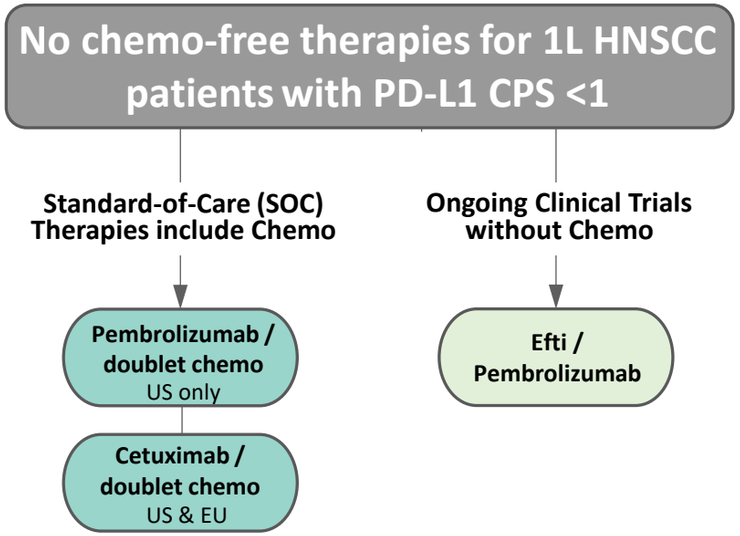
Comparison of data is from different clinical trials. Data according to RECIST 1.1. * Data for pembrolizumab monotherapy in 37 evaluable patients with CPS <1 from KN-048 trial (https://ascopubs.org/doi/10.1200/JCO.21.02198).

Limited Competition in CPS <1: A Valuable Market

Head & Neck Cancer
$2.8 billion market[1]



>890,000 HNSCC diagnoses per annum worldwide with ~100,000 patients who develop metastatic disease.[1,2,3]



Efti + KEYTRUDA shows superior OS, PFS, and durability with less toxicity as compared to SOC therapies & generates high response rates.

Next Steps

- Discuss the path forward in 1L HNSCC CPS <1 with regulatory agencies
- Discuss results with key stakeholders (investigators etc.)

1. Extracted from GlobalData in June 2024, 8 Major Markets: US, China, Japan, France, Germany, Italy, Spain, UK. 2. Gormley, M., Creaney, G., Schache, A. et al. Reviewing the epidemiology of head and neck cancer: definitions, trends and risk factors. *Br Dent J* (2022). https://doi.org/10.1038/s41415-022-5166-x. 3. Johnson, D.E., Burtness, B., Leemans, C.R. et al. Head and neck squamous cell carcinoma. Nat Rev Dis Primers 6, 92 (2020), https://doi.org/10.1038/s41572-020-00224-3. 4. Burtness, B. et al. Pembrolizumab alone or with chemotherapy versus cetuximab with chemotherapy for recurrent or metastatic squamous cell carcinoma of the head and neck (KEYNOTE-048): a randomised, open-label, phase 3 study The Lancet Volume 394, Issue 10212, P1915-1928, Nov 2019.

Positive Data in Soft Tissue Sarcoma Presented at CTOS 2024

Phase II studying novel triple combination of Efti + Radiotherapy + KEYTRUDA in soft tissue sarcoma (STS)

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EFTISARC-NEO Phase II: Overview & Trial Design

Overview
- **Status**: Ongoing
- **Recruitment:** Ongoing
- **Enrolment target**: 40 pts
- **Location**: Poland's national reference centre for sarcoma

Screening (4 weeks)
- Primary or locally recurrent STS
- Grade 2 or 3; primary tumor size 5cm or locally recurrent of any size
- Measurable disease (RECIST 1.1)

Study Treatment (11 – 12 weeks)

Triple Combination Therapy
- 30mg efti Q2W (W1, W3, W5, W7, W9)
- 200 mg pembrolizumab Q3W (W1, W4, W7)
- Radiotherapy (50 Gy) for 5 weeks between W2 & W7

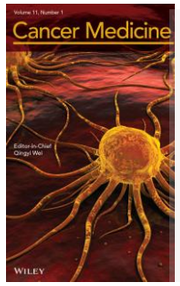
Surgery

Follow Up (up to 24 mos)
- **Primary endpoint:** tumour hyalinization
- **Secondary Endpoints**: DFS, LRFS, DMFS, OS & Safety*

Narodowy Instytut Onkologii
im. Marii Skłodowskiej-Curie
Państwowy Instytut Badawczy

EFTISARC-NEO is an investigator-initiated trial conducted at Poland's national reference centre for sarcoma, the Maria Skłodowska-Curie National Research Institute of Oncology.

Strong efficacy in patients assessed for tumour hyalinization/fibrosis, trial's primary endpoint associated with improved survival in STS patients[1]



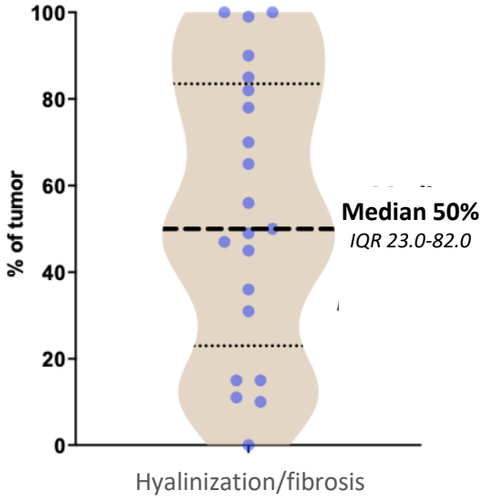
RESEARCH ARTICLE

Cancer Medicine WILEY

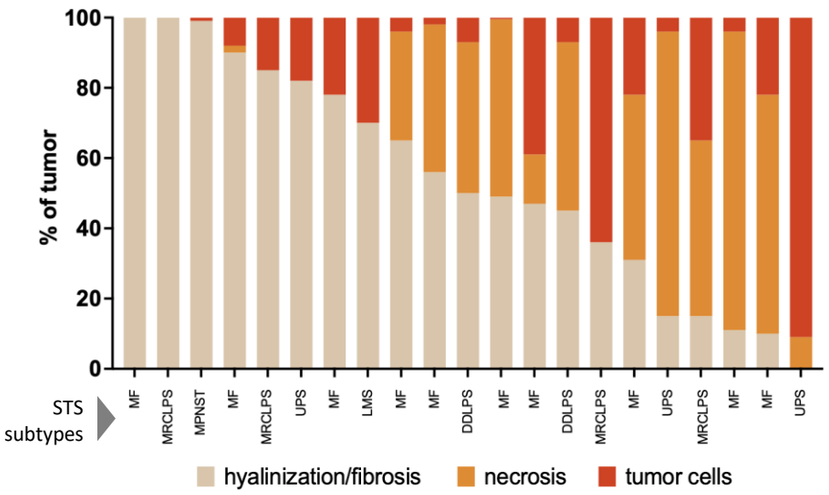
Extent of tumor fibrosis/hyalinization and infarction following neoadjuvant radiation therapy is associated with improved survival in patients with soft-tissue sarcoma

Sneha R. Rao[1] | Alexander L. Lazarides[1] | Bruce L. Leckey[2] | Whitney O. Lane[3] | Julia D. Visgauss[1] | Jason A. Somarelli[4] | David G. Kirsch[5] | Nicole A. Larrier[5] | Brian E. Brigman[1] | Dan G. Blazer[3] | Diana M. Cardona[2] | William C. Eward[1]

50% tumour hyalinization/fibrosis vs. 15% from RT alone[2]



71.4% patients achieved pathologic response (hyalinization ≥35%) across five STS subtypes

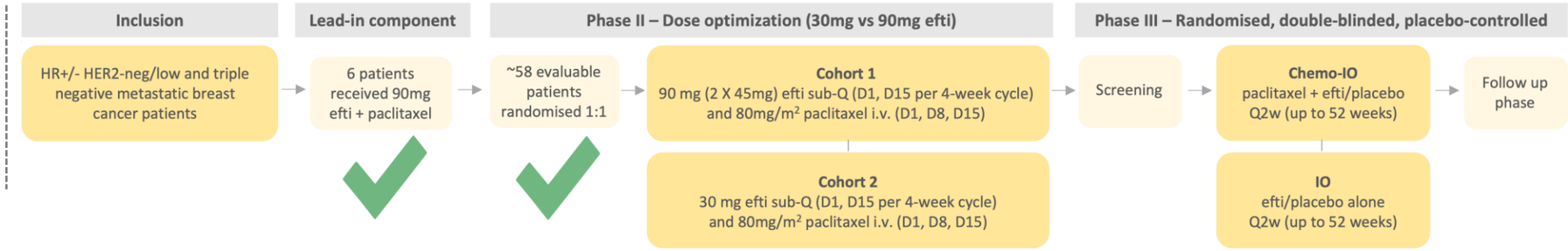


Data cutoff 20 Oct 2024; 21 patients available for primary endpoint assessment. * DFS=Disease free survival, LRFS=Local recurrence free survival, DMFS=Distant metastasis-free survival, OS=Overall Survival. 1. Rao SR et al.. Extent of tumor fibrosis/hyalinization and infarction following neoadjuvant radiation therapy is associated with improved survival in patients with soft-tissue sarcoma. Cancer Med. 2022 Jan;11(1):194-206. doi: 10.1002/cam4.4428. Epub 2021 Nov 27. 2. Historical data from RT alone (Schaefer M. et al) as detailed in CTOS poster.

AIPAC-003 Phase II/III Trial in Metastatic Breast Cancer

AIPAC-003: Overview and Trial Design

Overview
- **Status**: Ongoing
- **Recruitment:** Phase II complete
- **Enrolled**: 65 pts in Phase II and 6 pts in lead in component
- **Location**: 22 centres across five countries



- HR+/- HER2-negative/low and triple negative metastatic breast cancer (MBC) patients represent ~78% breast cancer cases[1]
- Patients receive efti + paclitaxel on same day; IO-chemo treatment can continue until disease progression
- Trial design incorporates feedback from FDA & EMA and provides risk-balanced approach
- Randomised Phase II dose optimization underway to find optimal biological efti dosing (e.g. 30mg or 90mg)

AIPAC-003: Active Immunotherapy (Eftilagimod Alfa) and PAClitaxel. 1. Cancer Stat Facts: Female Breast Cancer Subtypes - NCI SEER, World Health Organization; Breast Cancer Fact Sheet.

Efti + Anti-PD-L1 (Avelumab) in Metastatic Urothelial Cancer

INSIGHT-005 (Stratum E) Phase I: Overview & Trial Design

Overview
- **Status**: Ongoing
- **Recruitment:** Ongoing
- **Enrolment target**: 30 pts
- **Location**: Multi-centre study in Germany

Screening	Treatment Phase	Follow Up
• Metastatic or unresectable locally advanced urothelial carcinoma (UC) • 0-100% PD-L1 expression • Enrolment in 3 subgroups	30mg efti s.c. + 800 mg avelumab i.v. on same day Q2W for a maximum of 24 cycles	**Feasibility / Safety / ORR / DOR / PFS / OS**

INSIGHT-005 is an investigator-initiated, multi-centre Phase I trial led by Frankfurt Institute of Clinical Cancer Research (IKF)

In collaboration with

Merck KGaA
Darmstadt, Germany

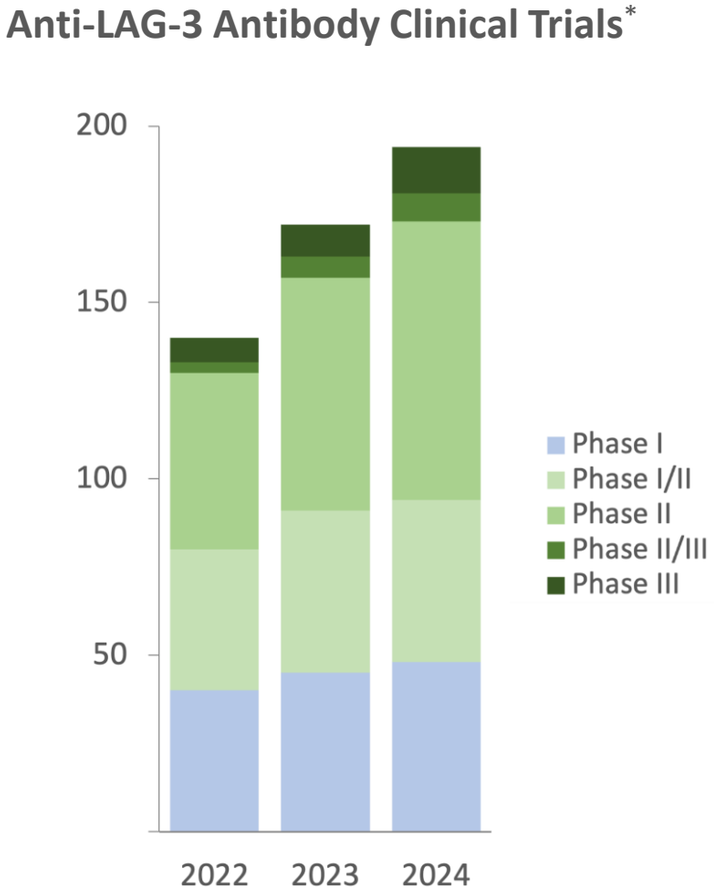
- INSIGHT-005 evaluating safety & efficacy of efti and avelumab (BAVENCIO®), which has previously shown promising efficacy in solid tumours in Phase I trial
- Jointly funded by Immutep & Merck KGaA, Darmstadt, Germany
- Targeting area of high unmet need: patients not eligible for platinum-based chemotherapy or who are progressing during/after platinum-based chemotherapy
- Announced first patient enrolled and safely dosed in Jan 2024

Novel Small Molecule Anti-LAG-3 Preclinical Program in Oncology

Immutep aims to develop an orally-available small molecule anti-LAG-3 treatment at a lower cost compared with anti-LAG-3 antibodies commercially available (Opdualag; ~$864 million in TTM sales**) or under clinical development

"Small molecules represent the next generation of anti-LAG-3 therapies and hold tremendous promise, as they can be given to cancer patients as a convenient oral pill."

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



25 June 2024, Immutep Signs Exclusive License Agreement with Cardiff University for Next Generation Anti-LAG-3 Molecules for Cancer. * Cumulative clinical trials as per GlobalData. ** Opdualag trailing twelve-month sales (TTM) sourced from Bloomberg and company reports

IMP761: First-in-class LAG-3 Agonist Antibody for Autoimmune Diseases

Targeting Autoimmune Diseases with a LAG-3 Checkpoint Agonist

New paradigm to treat the cause -- as opposed to the symptoms -- of autoimmune disorders

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*"These findings further support the potential clinical benefits of a **LAG-3 agonist** in the treatment of human autoimmunity"*[1]

*"**LAG-3 agonism** could be a potential target for future treatment in rheumatoid arthritis"*[2]

*"The manipulation of the **LAG-3 pathway** can serve as a promising therapeutic strategy"*[3]

Unique advantages of LAG-3 make it an ideal target for an agonist antibody to treat autoimmune diseases

LAG-3 is highly-specific to disease sites enabling targeted approach with less potential side effects

Level of LAG-3^{+} T cells in blood is low, unlike other checkpoints (e.g. PD-1), allowing for lower dosing

LAG-3 expressed on clonotypically expanded autoimmune T cells at sites of chronic inflammation

1. Britta E. Jones, Megan D. Maerz, Henry T. Bahnson, Ashwin Somasundaram, Lucas H. McCarthy, Cate Speake, Jane H. Buckner; Fewer LAG-3+ T Cells in Relapsing-Remitting Multiple Sclerosis and Type 1 Diabetes. J Immunol 1 February 2022; 208 (3): 594–602. https://doi.org/10.4049/jimmunol.2100850. 2. Pedersen, J.M., Hansen, A.S., Skejø, C. et al. Lymphocyte activation gene 3 is increased and affects cytokine production in rheumatoid arthritis. Arthritis Res Ther 25, 97 (2023). https://doi.org/10.1186/s13075-023-03073-z. 3. Zhou, X., Gu, Y., Wang, H. et al. From bench to bedside: targeting lymphocyte activation gene 3 as a therapeutic strategy for autoimmune diseases. Inflamm. Res. 72, 1215–1235 (2023). https://doi.org/10.1007/s00011-023-01742-y

LAG-3: An Important Immune Checkpoint in Autoimmunity

Learnings from immune checkpoint inhibitors (ICI) in oncology

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ICI therapies (e.g. anti-PD-[L]1, anti-CTLA-4, anti-LAG-3) are effective in many oncology indications

Main side effects of ICIs are emergence of autoimmune disorders (e.g. immune-mediated pneumonitis, colitis, hepatitis, thyroiditis, etc.) due to overactivation of the immune system

Immune checkpoints are controlling autoimmunity

Addition of relatlimab (anti-LAG-3) mostly *doubled frequency of immune mediated AEs* vs. nivolumab (anti-PD-1)[1]

RELATIVITY-047 Phase III trial in Melanoma

Adverse Events (AE) %	Relatlimab + Nivolumab (N = 355)	Nivolumab alone (N = 359)
Hypothyroidism or thyroiditis	18.0	13.9
Arthralgia	14.4	7.2
Diarrhea or colitis	6.8	3.1
Hepatitis	5.6	2.5
Adrenal insufficiency	4.2	0.8
Pneumonitis	3.7	1.7
Hypophysitis	2.5	0.8
Myocarditis	1.7	0.6

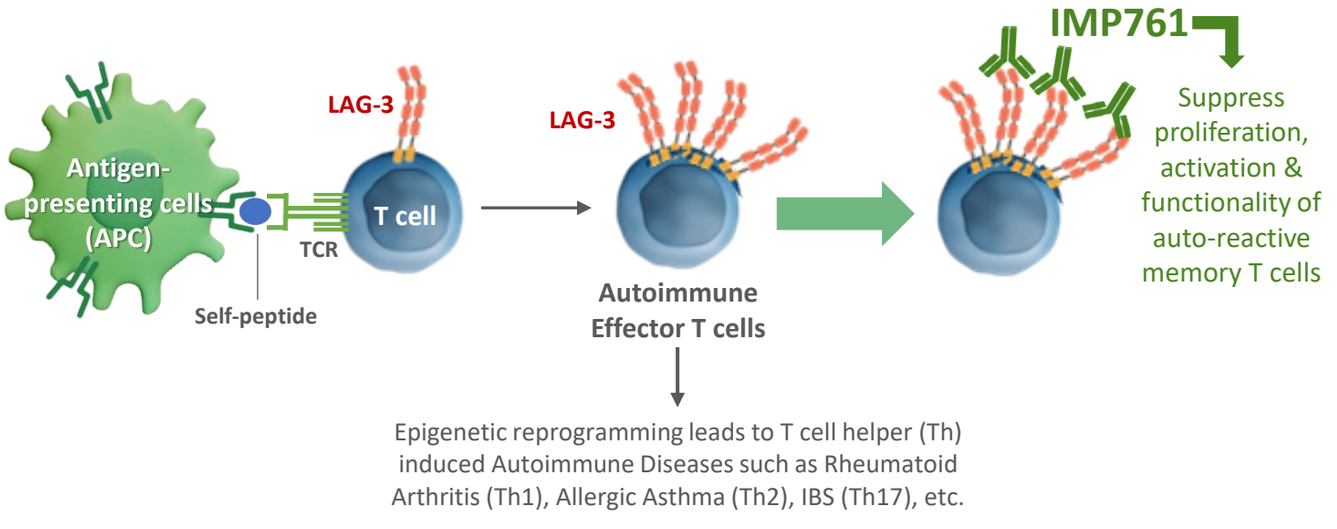
LAG-3 is an important checkpoint in autoimmunity

1. Tawbi HA, Schadendorf D, Lipson EJ, Ascierto PA, Matamala L, Castillo Gutiérrez E, Rutkowski P, Gogas HJ, Lao CD, De Menezes JJ, Dalle S, Arance A, Grob JJ, Srivastava S, Abaskharoun M, Hamilton M, Keidel S, Simonsen KL, Sobiesk AM, Li B, Hodi FS, Long GV; RELATIVITY-047 Investigators. Relatlimab and Nivolumab versus Nivolumab in Untreated Advanced Melanoma. N Engl J Med. 2022 Jan 6;386(1):24-34. doi: 10.1056/NEJMoa2109970. PMID: 34986285; PMCID: PMC9844513.

IMP761: First-in-Class LAG-3 Agonist is a Potential Game-Changer

Many autoimmune diseases can potentially be targeted including several large disorders

IMP761 increases "brake" function of the LAG-3 immune checkpoint and its natural down-regulation of auto-reactive memory T cells, which represent the root cause of many diseases



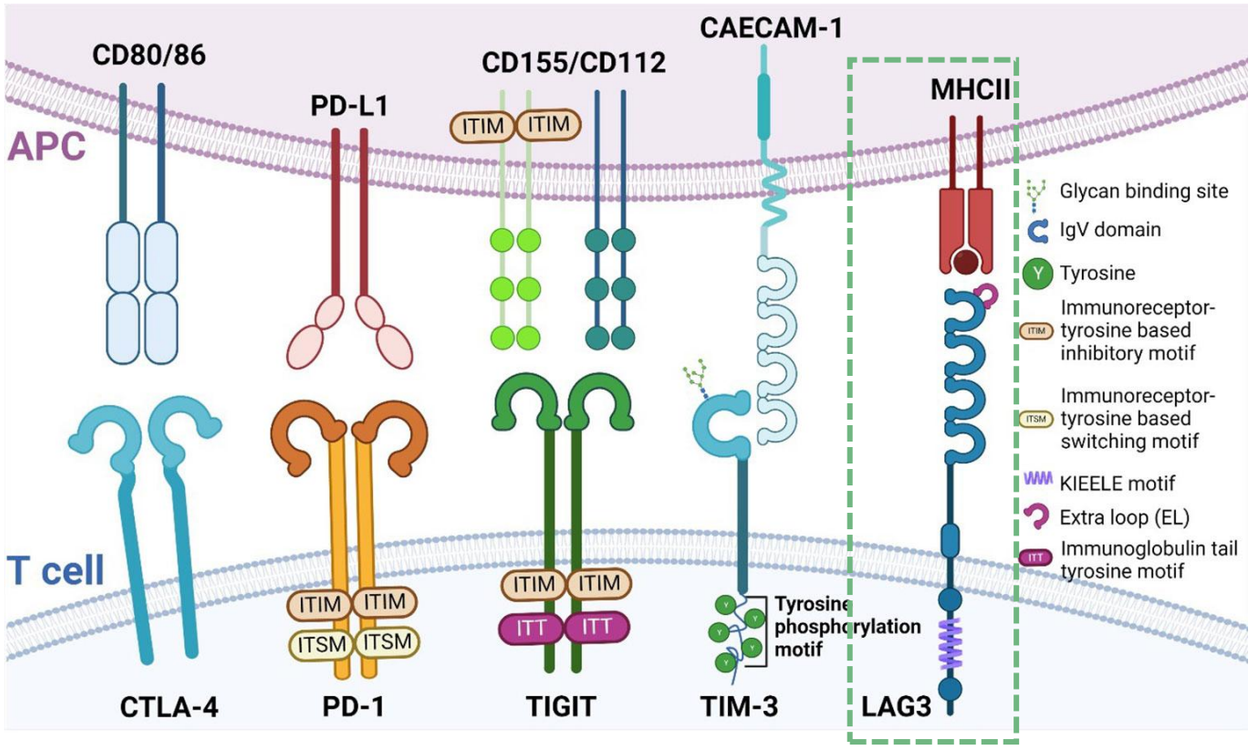
IMP761 as a LAG-3 agonist can target numerous autoimmune diseases including:

- Rheumatoid arthritis: market size est. $29.6 billion*
- Type 1 diabetes: market size est. $9.9 billion*
- Multiple sclerosis: market size est. $32.9 billion*

Market estimates sourced from GlobalData: rheumatoid arthritis market estimate of ~$29.6 billion in 8MM countries in 2029, Type 1 diabetes market estimate of ~$9.9 billion in 7MM countries in 2033, multiple sclerosis market estimate of ~$32.9 billion in 7MM countries in 2028

IMP761: Strong Inhibition of TCR Signalling & T cell Activation

Unique LAG-3 Signalling Pathway



- Unlike 100+ inhibitory receptors (including PD-1, TIGIT, BTLA), LAG-3 has no tyrosine-based ITIM motif[1] in its cytoplasmic domain
- The inhibitory motifs unique to LAG-3[2] explain in part ***clear & rapid inhibition of T cell receptor (TCR) signalling*** induced by IMP761 in preclinical studies
- IMP761 also ***strongly blocks T cell activation*** via the TCR in preclinical studies

1. ITIM motif (S/I/V/LxYxxI/V/L). 2. Three unique inhibitory motifs (KIEELE, repeated EP, F*XX*L). Lui, Y., Davis, S.J. LAG-3: a very singular immune checkpoint. Nat Immunol 19, 1278–1279 (2018) https://doi.org/10.1038/s41590-018-0257-1. N Jantz-Naem et al, Front. Oncol., 17 February 2023, Sec. Cancer Metabolism, Vol 13 -https://doi.org/10.3389/fonc.2023.1060112. Maeda, Takeo K. et al. Atypical motifs in the cytoplasmic region of the inhibitory immune co-receptor LAG-3 inhibit T cell activation Journal of Biological Chemistry, April 2019, Volume 294, Issue 15, 6017 - 6026

Clinical Development of IMP761

Leading world-class research institute appointed to conduct first-in-human study

Overview / Key Milestones:

- Placebo-controlled, double-blind Phase I (N = 49)
- Centre for Human Drug Research (CHDR) has been selected to conduct
- First participant enrolled in August 2024
- Favourable initial safety data reported in December 2024
- Additional data and study completion expected in 2025

Single Ascending Dose (SAD): Healthy volunteers

Part A: Healthy N=5 Cohort 1-SAD-A : 3 Subjects 0.0075 mg/kg + 2 placebo COMPLETED	FIH Microdosing	Single IV	
Part B: Healthy N=30 Cohort 2-SAD-B : 4 Subjects 0.03 mg/kg + 1 placebo Cohort 3-SAD-B : 4 Subjects 0.1 mg/kg + 1 placebo Cohort 4-SAD-B : 8 Subjects 0.3 mg/kg + 2 placebo Cohort 5-SAD-B : 8 Subjects 0.9 mg/kg + 2 placebo ONGOING	3x KLH immunization, DTH	PK/PD	Single IV

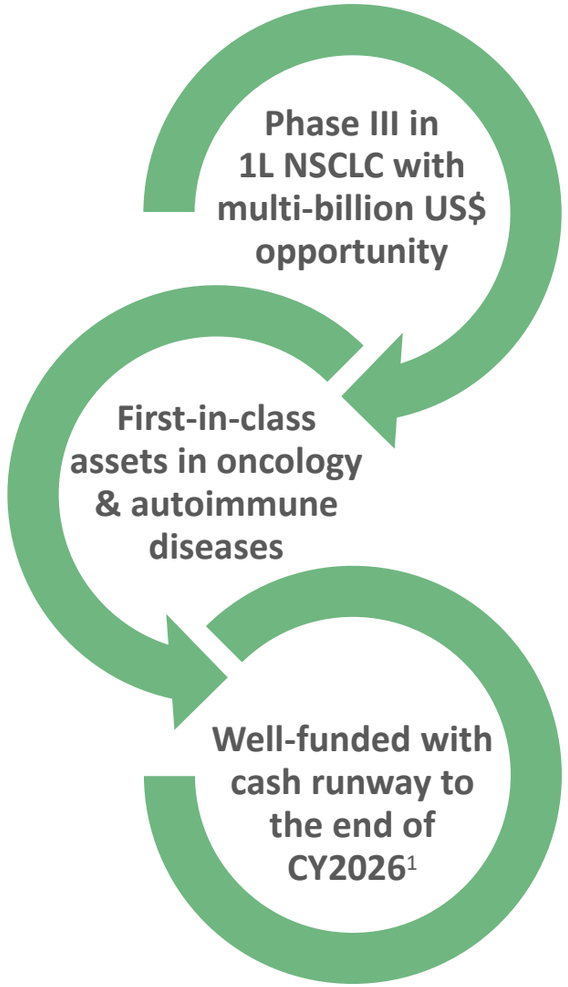
Multiple Ascending Dose (MAD): Healthy volunteers

Part C: Healthy N=14. 3 dosing (3 months) Cohort 6-MAD-C : 5 Subjects 0.3 mg/kg + 2 placebo Cohort 7-MAD-C : 5 Subjects 0.9 mg/kg + 2 placebo	PK	Multiple (Q4W) IV

CHDR Centre for Human Drug Research

- World-class research institute in Leiden, the Netherlands
- CHDR offers a unique KLH challenge model allowing for evaluation of IMP761's pharmacological activity at early stages of development

Outlook



2025 Milestones

- Non-Small Cell Lung Cancer:
  - FPI in TACTI-004 Phase III in Q1 CY2025
  - TACTI-004 potential futility analysis by year end CY2025 or early 2026*
  - Update from investigator-initiated INSIGHT-003 trial
- Metastatic Breast Cancer – Update from AIPAC-003 trial
- Head and Neck Squamous Cell Carcinoma – Update from TACTI-003 trial
- Soft Tissue Sarcoma – Update from investigator-initiated EFTISARC-NEO trial
- Metastatic Urothelial Carcinoma – Update from investigator-initiated INSIGHT-005 trial
- Autoimmune Diseases – Update from IMP761 first-in-human Phase I trial
- Additional Updates – From ongoing clinical trials, partnered programs, and potential expansion of clinical trial pipeline

1. Cash, cash equivalent and term deposits totalling ~A$159.3 million (~US$ 99 million) as at 31 December 2024. * Timelines are indicative and subject to change.

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Thank You