

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

Forward-Looking Statements

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Novel science and advanced pipeline

Pioneering LAG-3 immunotherapy in cancer & autoimmune diseases. Three clinical assets and two earlier stage programs.



Compelling clinical data

First-in-class eftilagimod alpha (efti) has generated compelling clinical efficacy with favourable safety across several cancers.*



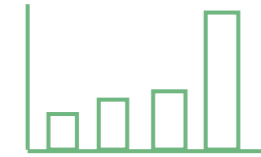
Validation through partnerships

Multiple partnerships and collaborations with large pharma.



Global presence; strong balance sheet

Global presence and strong IP across diversified LAG-3 portfolio. Well-funded.
















Substantial market opportunity

Efti has safely improved clinical outcomes for cancer patients with anti-PD-(L)1 therapies and chemo creating large opportunity.

* (1) Combining the antigen-presenting cell activator eftilagimod alpha (soluble LAG-3) and pembrolizumab: efficacy results from the 1st line non-small cell lung cancer cohort of TACTI-002 (Phase II) – SITC 2022 Oral Presentation; (2) 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 - May 2022; (3) Results from a Phase II study of eftilagimod alpha (soluble LAG-3 protein) and pembrolizumab in patients with PD-L1 unselected metastatic 2nd line head and neck squamous cell carcinoma (HNSCC) SITC 2021.

Deep Pipeline

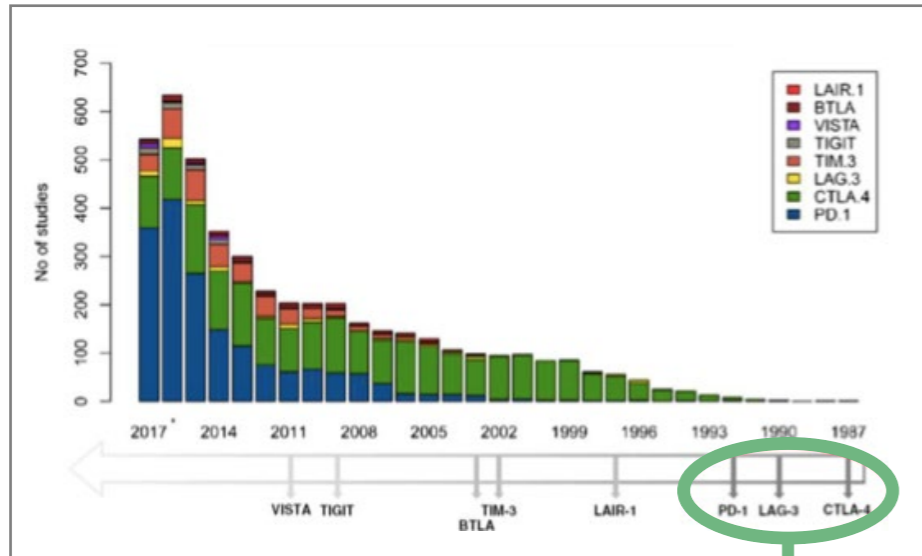
	Program	Indication	Preclinical	Phase I	Phase II	Late Stage*	Collaborations	Commercial Rights
ONCOLOGY	Eftilagimod Alpha Soluble LAG-3 Protein 	1L Head & Neck Squamous Cell Carcinoma (HNSCC)	TACTI-003 Efti+Pembrolizumab ^a				  Merck KGaA Darmstadt, Germany    	 Global Rights ex-China  Efti China Rights  Global Rights
		1L Non-Small Cell Lung Cancer (NSCLC), 2L HNSCC, PD-X Refractory 2L NSCLC	TACTI-002 Efti+Pembrolizumab ^a					
		Urothelial Cancer	INSIGHT-005 Efti+Avelumab ^{s, b}					
		1L NSCLC	INSIGHT-003 Efti+Pembro+Chemo ^s					
		Soft Tissue Sarcoma	EFTISARC-NEO Efti+Pembro+Radiotherapy ^s					
		HR+/HER2- Metastatic Breast Cancer & TNBC	AIPAC-003 Efti+Paclitaxel					
	Metastatic Breast Cancer & Solid Tumors	Efti+Paclitaxel and Efti+Pembrolizumab [#]						
	Anti-LAG-3 Small Molecule	Undisclosed						
	LAG525 Anti-LAG-3 Antibody 	Solid Tumors & Blood Cancer						 Global Rights
Triple Negative Breast Cancer								
Melanoma								
Solid Tumors								
Triple Negative Breast Cancer								
AUTOIMMUNE DISEASE	GSK'781 Depleting LAG-3 Antibody 	Ulcerative Colitis						 Global Rights
		Psoriasis						
		Healthy Subjects						
	IMP761 Agonist LAG-3 Antibody 	Undisclosed						 Global Rights

Information in pipeline chart current as of May 2023; AIPAC-003 Phase II/III trial expected to begin Q1'2023. For EOC's China rights, Immutep may receive undisclosed milestones plus royalties; [LAG525 - ClinicalTrials.gov](#) (for Novartis' global rights, Immutep may receive milestones plus royalties); [GSK2831781 - ClinicalTrials.gov](#) (for GSK's global rights, Immutep may receive milestones plus royalties), Phase II in Ulcerative Colitis discontinued. * Late stage refers to active Phase IIb clinical trials or more clinically advanced clinical trials; # Conducted by EOC in China. Immutep has no control over either the trials. ^s Investigator Initiated Trials controlled by lead investigator & therefore Immutep has no control over this clinical trial; ^a In combination with KEYTRUDA[®]; ^b In combination with BAVENCIO[®].

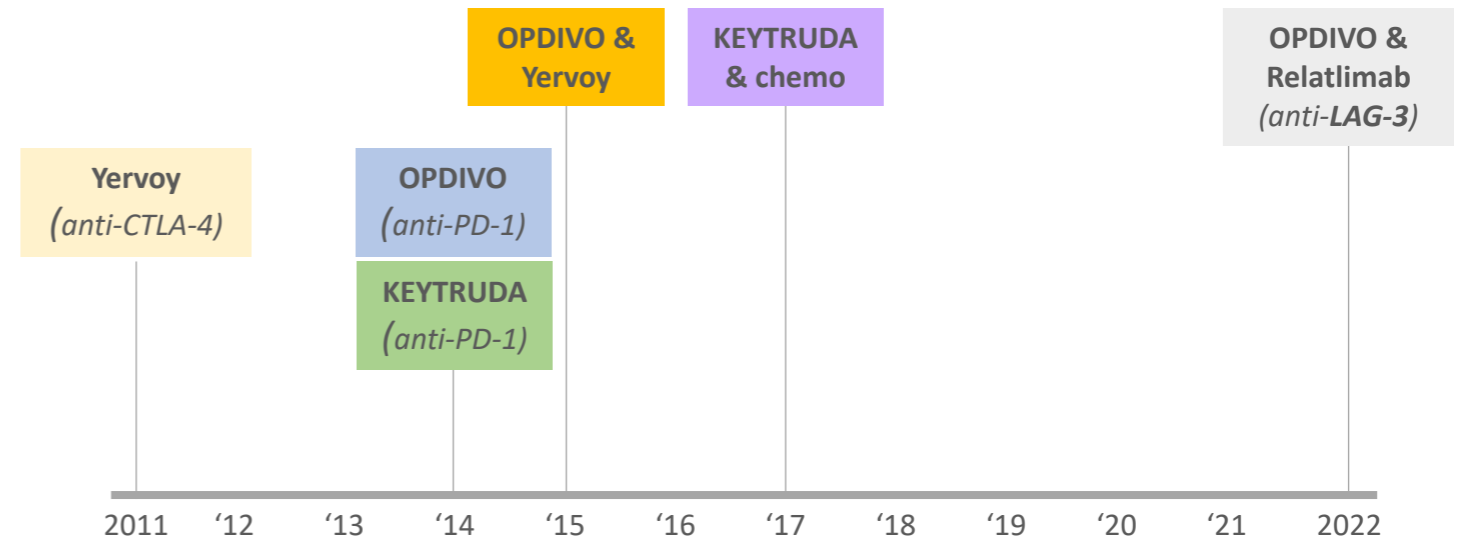
Immuno-Oncology (IO) Landscape

LAG-3 is one of three Immune Checkpoints with Regulatory Approvals

Timeline of Immune Checkpoint Discovery*



Evolution of Immuno-Oncology Therapies**

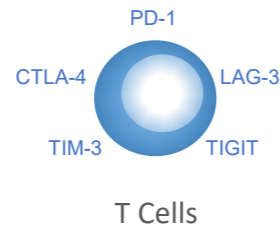


The immune system's role in fighting cancer has led to regulatory approval of immuno-oncology therapies targeting the immune checkpoints **CTLA-4**, **PD-1**, and **LAG-3**

LAG-3 is unique in that its (1) inhibition on T cell receptor signalling and (2) activation of dendritic cells both engage the immune system to fight cancer

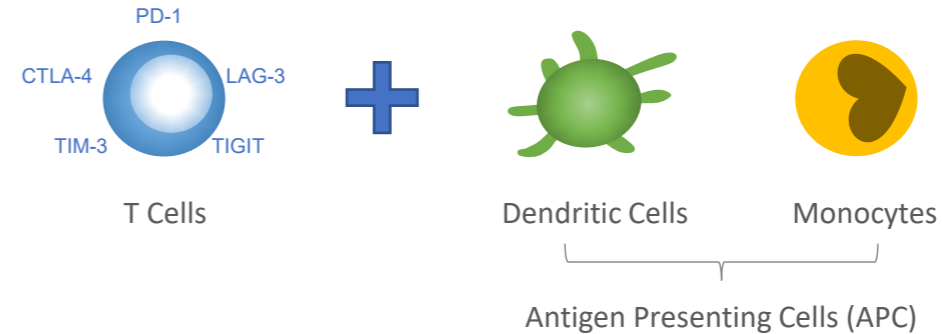
Efti Brings A Complementary Approach to IO-IO Combinations

Many IO-IO combinations focus on the same immune cell (T cells) yet target different immune checkpoints on that cell. Can work well in “hot” tumour environments.



Adaptive Immunity

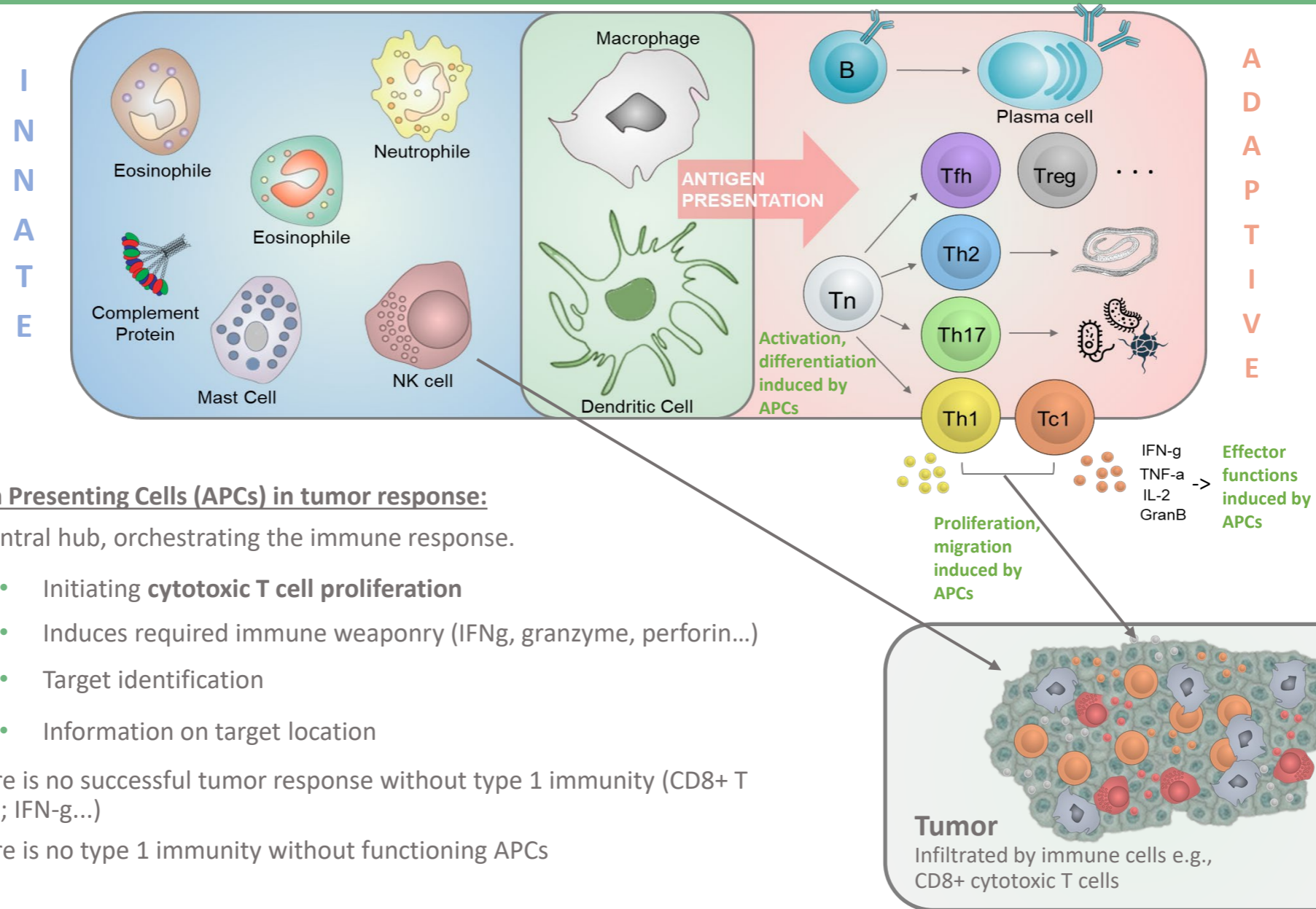
Immutep's complementary IO-IO approach focuses on targeting different immune cells, both T cells & APC (via efti), to bring multiple facets of the immune system to fight cancer. Can work well in “hot” and “cold” tumour environments.



Adaptive and Innate Immunity

Antigen Presenting Cells

Efti Activates the 'Generals of the Immune System' via MHC Class II Leading to a Broad Immune Response



Antigen Presenting Cells (APCs) in tumor response:

- A central hub, orchestrating the immune response.
 - Initiating **cytotoxic T cell proliferation**
 - Induces required immune weaponry (IFNg, granzyme, perforin...)
 - Target identification
 - Information on target location
- There is no successful tumor response without type 1 immunity (CD8+ T cells; IFN-g...)
- There is no type 1 immunity without functioning APCs

Efti’s ability to safely improve clinical outcomes of anti-PD-(L)1 therapies across the entire PD-L1 spectrum in multiple solid tumors* drives substantial commercial opportunity.

Efti + Anti-PD-(L)1

- Doubled Overall Response Rate (ORR) of KEYTRUDA® (anti-PD-1) monotherapy in 1st line non-small cell lung cancer and in 2nd line head & neck squamous cell carcinoma in all-comer PD-L1 Phase II trial
- Complete responses (CR) in negative & low PD-L1 expressing patients with KEYTRUDA® (anti-PD-1)
- Deep, durable responses in negative & low PD-L1 expressing patients with IO insensitive cancers with BAVENCIO® (anti-PD-L1)

Anti-PD-1¹

KEYTRUDA®
(pembrolizumab) Injection 100 mg
~\$20.9 billion

OPDIVO®
(nivolumab)
~\$8.2 billion

LIBTAYO®
(cemiplimab-rwlc)
Injection 350 mg
~\$468.9 million

Jemperli®
(dostarlimab-gxly) Injection 500 mg
~\$26 million

\$29.6 Billion
in 2022 sales

Anti-PD-L1¹

TECENTRIQ®
atezolizumab
~\$3.9 billion

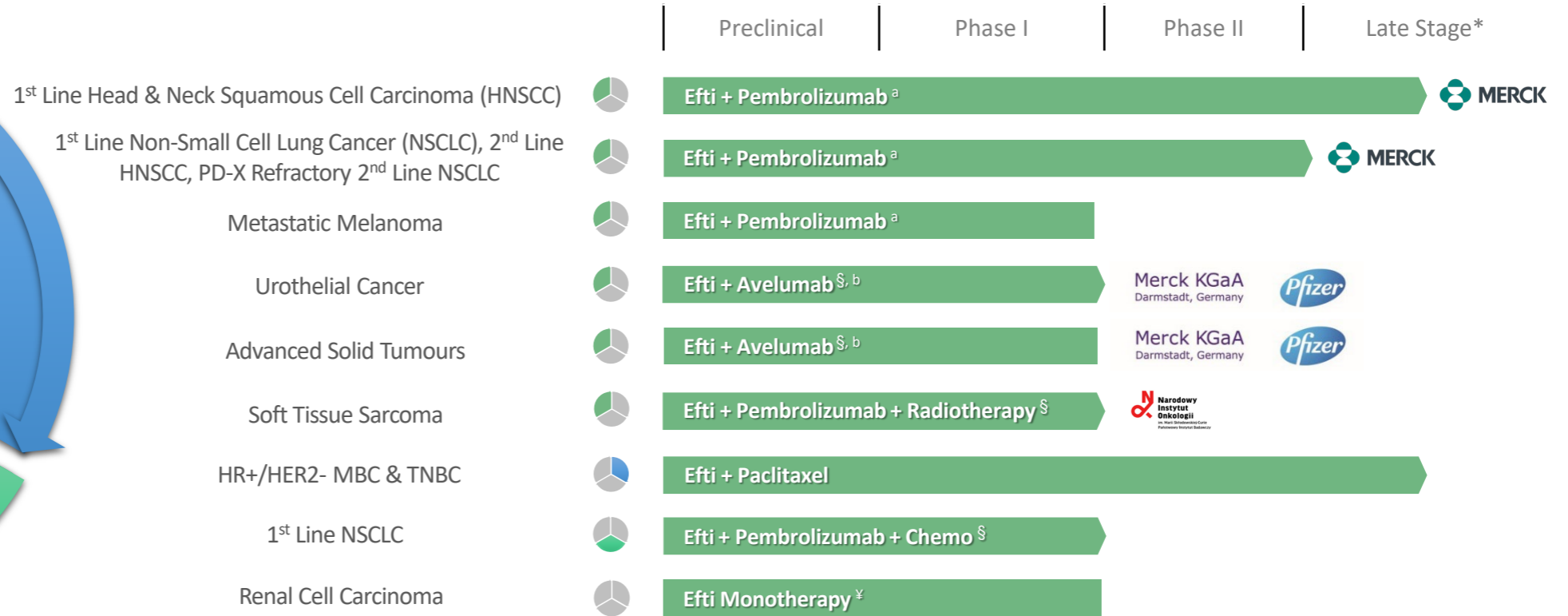
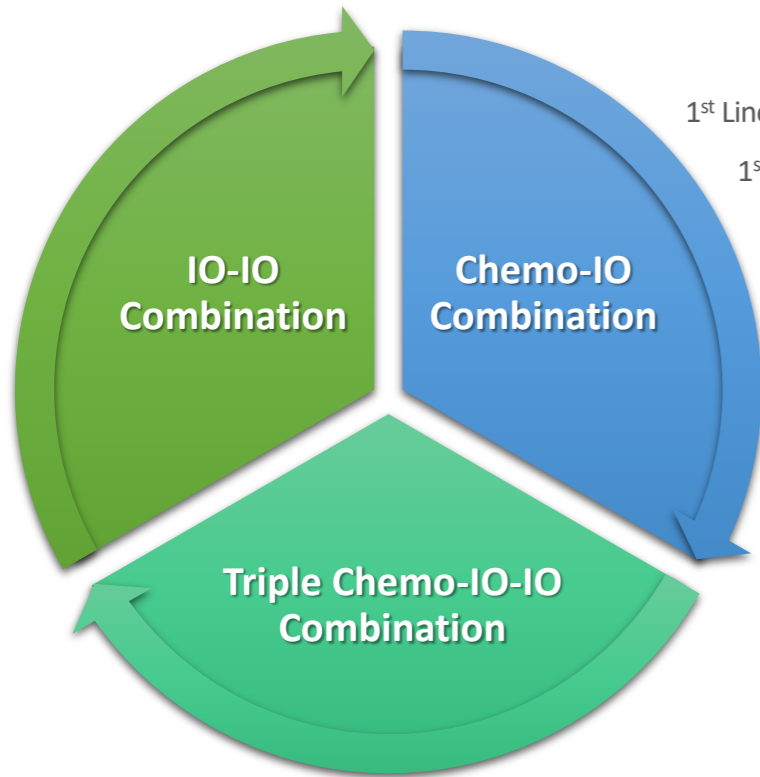
IMFINZI®
durvalumab
Injection for Intravenous Use 50 mg/mL
~\$2.8 billion

BAVENCIO®
avelumab Injection
20 mg/mL
~\$914.6 million

\$7.6 Billion
in 2022 sales

Efti: Pipeline in a Product

With wide-ranging clinical data showing efti’s robust potential to improve anti-PD-(L)1 therapies, standard-of-care chemotherapy, and/or both together, efti defines a “pipeline in a product”



Late-Stage Clinical Development of Efti

Combination Trials with Anti-PD-(L)1 Therapy and/or Chemotherapy Focused on Large Indications

Late-Stage Clinical Development of Efti

Non-Small Cell Lung Cancer (NSCLC) – Planning Registrational Trial in 1st line NSCLC w efti + KEYTRUDA®

- Efti + KEYTRUDA® has FDA Fast Track designation in 1st line NSCLC
- 1.87 million NSCLC diagnoses per annum; highest cause of death among all cancers¹
- NSCLC drug market will nearly double to \$48 billion in 2031, and immune checkpoint inhibitors are expected to earn more than half of these sales (\$26 billion)²

Head & Neck Squamous Cell Carcinoma (HNSCC) – Ongoing Phase IIb evaluating efti + KEYTRUDA® in 1st line HNSCC

- Efti has FDA Fast Track designation in 1st line HNSCC
- 900K cases and >400K deaths per annum in HNSCC¹
- Global head and neck cancer market size is projected to hit US\$2.99 billion by 2030³

Metastatic Breast Cancer (MBC) including Triple Negative Breast Cancer (TNBC) – Initiated Phase II/III AIPAC-003 Trial

- Immunetep is focused on improving clinical responses for HR+/HER2-neg/low MBC and TNBC patients (~78% of breast cancer cases⁴)
- 2.3 million women diagnosed with breast cancer and 685,000 deaths globally in 2020⁵
- Metastatic breast cancer market to reach \$12.7 billion by 2024⁶

Earlier Stage Clinical Development of Efti

- Urothelial Cancer (*Phase I*), Soft Tissue Sarcoma (*Phase II, investigator-initiated*), and other solid tumor indications



Non-Small Cell Lung Cancer (NSCLC)



ASCO 2022 - Dr. Enriqueta Felip presenting 1L NSCLC data from TACTI-002/KN-798 in Oral Presentation



SITC 2022 – Dr. Wade Iams presenting 1L NSCLC data from TACTI-002/KN-798 in Late Breaking Abstract Oral Presentation

1st line Non-Small Cell Lung Cancer

Epidemiology & Unmet Need



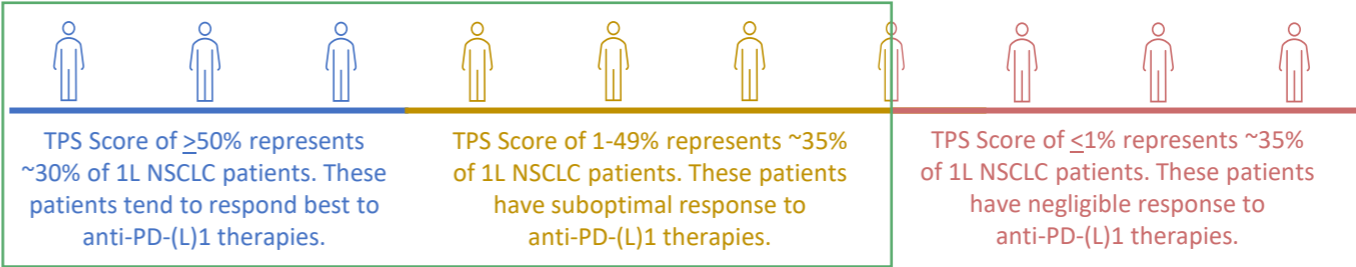
1L NSCLC Epidemiology^{1,2}

- Lung cancer is one of the leading causes of cancer death and there are ~2.2 million cases per annum
- About 80% to 85% of lung cancers are non-small cell lung cancer (NSCLC)
- Only ~20% of patients respond to immune checkpoint inhibitor (ICI) monotherapy & median Overall Survival (OS) is still under 24 months for most patients
- ICI + chemo combinations have limited Duration of Response & high discontinuation rates due to toxicity
- Total addressable market (TAM) of NSCLC drug market is expected to nearly double to US\$48 billion in 2031, and ICI are expected to generate more than half of these sales³

High unmet medical need for well tolerated, efficacious and durable treatment options, preferably chemo-free

Efti could double the addressable NSCLC patient population with an effective, safe chemo-free IO regimen (i.e., patients with either 1-49% and/or $\geq 50\%$ PD-L1 TPS)

1L NSCLC Patient Population by PD-L1 Tumor Proportion Score (TPS)⁴



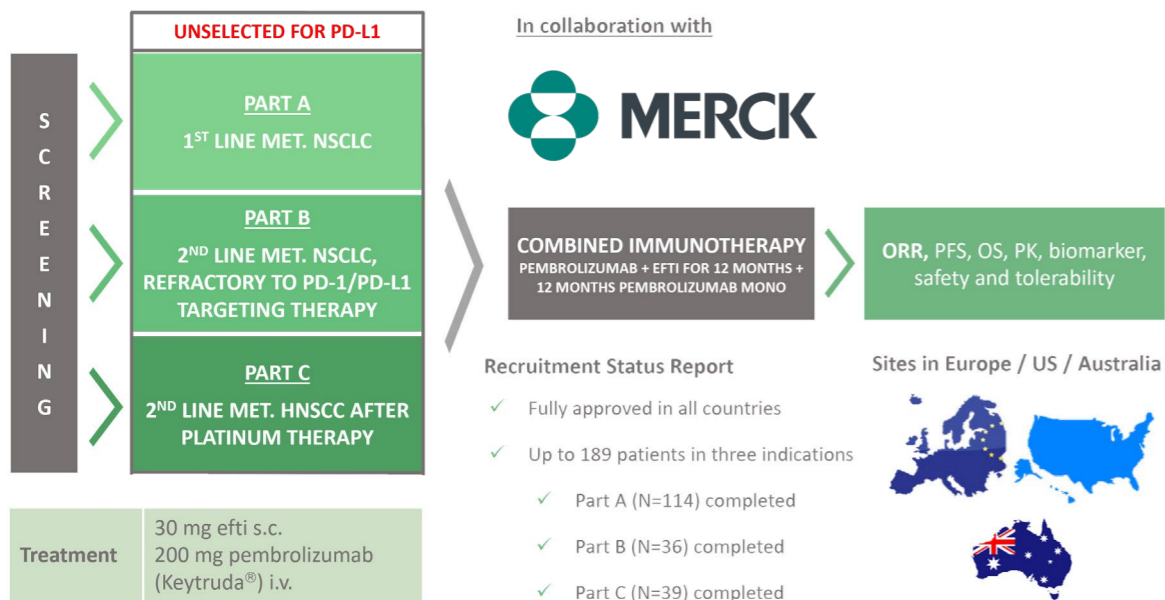
(1) Calculated from [Global Cancer Observatory \(WHO\)](#), 2020 data & American Cancer Society, [About Lung Cancer](#)
(2) Informa Pharma Intelligence Report 2018 for US, Japan and EU5
(3) Nature Reviews Drug Discovery 22, 264-265 (23 Jan 2023) doi: <https://doi.org/10.1038/d41573-023-00017-9>.

(4) Patient population estimates by PD-L1 expression: based on publications of registrational trials KN-001, KN-189, KN-407, EMPOWER-Lung 3 and TACTI-002 all comer trial
(5) 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. PMID: 35159131; PMCID: PMC8834198

Phase II All-Comer PD-L1 Trial Evaluating Efti + Pembrolizumab (KEYTRUDA®) in 1L NSCLC

TACTI-002/KEYNOTE-798: 1st Line Non-Small Cell Lung Cancer (Part A)

TACTI-002: Two ACTIVE Immunotherapeutics in NSCLC & HNSCC



Baseline characteristics for PD-L1 All Comer Trial		Part A (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%	Central only 32 (35.6)	Central + local 37 (34.3)
	1-49%	38 (42.2)	42 (38.9)
	≥ 50%	20 (22.2)	29 (26.9)
Previous therapy, n (%)	Radiotherapy	38 (33.3)	
	Surgery	23 (20.2)	
	Systemic therapy for non-metastatic disease	26 (22.8)	

All-comer trial for 1L NSCLC patients with all levels of PD-L1 expression

- ~75% of patients have PD-L1 TPS of <50%
- ~34% of patients have PD-L1 TPS of <1%
- 99.1% had metastatic disease at study entry

Compelling Clinical Results in 1L NSCLC

TACTI-002 Phase II (1L NSCLC) clinical data and key takeaways across entire patient population, regardless of PD-L1 expression

- Primary objective achieved with 40.4% Overall Response Rate (ORR)
- Promising interim median Progression Free Survival (PFS)
- Robust interim median Duration of Response (mDoR) 21.6 months
- Efti + pembrolizumab is well tolerated and safety profile is similar to pembrolizumab monotherapy
- Efti strengthens responses to anti-PD-1 therapy across entire PD-L1 spectrum

SITC 2022 Oral Presentation - Late-Breaking Abstract was among nine abstracts, out of +1,500 submissions, to be showcased at the SITC press briefing

2022
SITC
NOVEMBER 8-12 BOSTON MASSACHUSETTS

Combining the antigen-presenting cell activator eftilagimod alpha (soluble LAG-3) and pembrolizumab: efficacy results from the 1st line non-small cell lung cancer cohort of TACTI-002 (Phase II)

Iams W¹; Felip E²; Majem M³; Doger B⁴; Clay T⁵; Carcereny E⁶; Bondarenko I⁷; Peguero J⁸; Cobo Dols M⁹; Forster M¹⁰; Ursol G¹¹; Kalinka E¹²; Garcia Ledo G¹³; Vila Martinez L¹⁴; Krebs M.G¹⁵; Campos Balea B¹⁶; Kefas J¹⁷; company authors

¹Iams: Vanderbilt Ingram Cancer Center Division of Hematology/Oncology, Nashville, Tennessee, United States; ²Felip: Vall d'Hebron University Hospital, Barcelona, Spain; ³Majem: Hospital de la Santa Creu i Sant Pau, Barcelona, Spain; ⁴Doger: Fundación Jiménez Díaz, Madrid, Spain; ⁵Clay: St John of God Subiaco Hospital, Perth, Australia; ⁶Carcereny: Catalan Institute of Oncology Badalona-Hospital Germans Trias i Pujol, Badalona, Spain; ⁷Bondarenko: City Clinical Hospital № 4^{*} of Dnipro Regional Council, Dnipro, Ukraine; ⁸Peguero: Oncology Consultants, P.A., Houston, USA; ⁹Cobo-Dols: Hospital Regional Universitario de Málaga, Málaga, Spain; ¹⁰Forster: UCL Cancer Institute / University College London Hospitals NHS Foundation, London, UK; ¹¹Ursol: St. Luke's Hospital - Medical and Diagnostic Center "Acinus", Kropyvnytskyi, Ukraine; ¹²Kalinka: Instytut Centrum Zdrowia Matki Polki, Lodz, Poland; ¹³Garcia Ledo: HM Universitario Sanchinarro, Madrid, Spain; ¹⁴Vila Martinez: Parc Tauli Sabadell Hospital Universitari, Barcelona, Spain; ¹⁵Krebs: Division of Cancer Sciences, University of Manchester and Christie NHS Foundation Trust, Manchester, UK; ¹⁶Campos Balea: Hospital Lucus Augusti, Lugo, Spain; ¹⁷Kefas: University College London Hospitals NHS Trust, London, United Kingdom



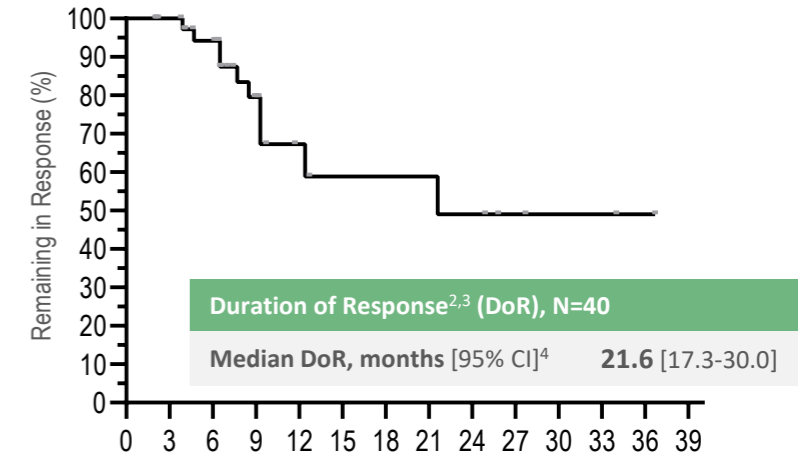
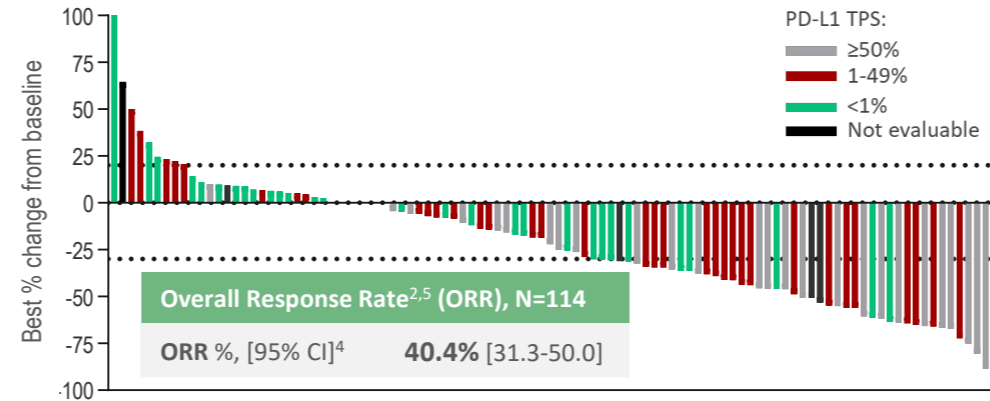
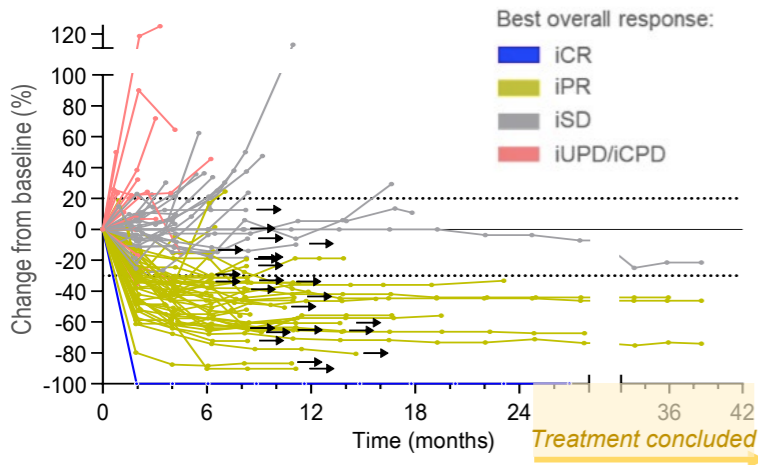
37th Annual Meeting and Pre-Conference Programs #SITC22

Efti + pembrolizumab received Fast Track Designation from FDA in $\geq 1\%$ TPS in 1L NSCLC in Q4'2022 on strength of clinical results

Deep and Durable Responses Translating Into Overall Survival

PD-L1 TPS 0 – 100%

Deep and durable responses across all PD-L1 expression levels¹; interim median Duration of Response of 21.6 months



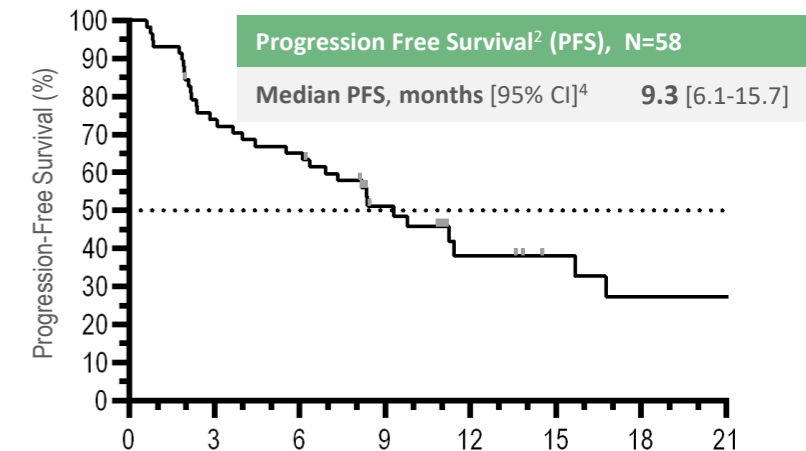
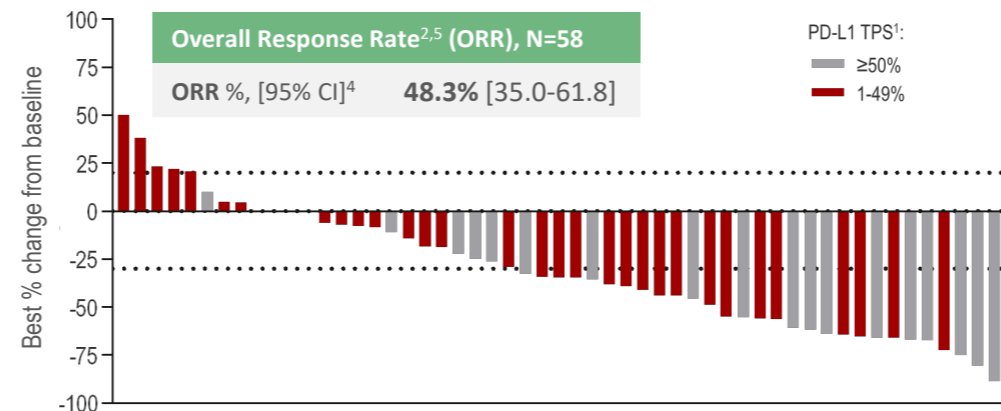
PD-L1 TPS ≥1% (FDA Fast Track designation)

Strong ORR, DoR and PFS translating into

25.0 months

Interim median Overall Survival

new cut-off Mar 2023



General overview of AEs

Safety parameter ¹	n (%)
Adverse reactions with fatal outcome ²	3 (2.6)
Serious adverse reactions ²	12 (10.5)
Grade ≥ 3 adverse reactions ²	14 (12.3)
Adverse reactions leading to discontinuation of treatment ²	11 (9.6)

¹AEs rated according to NCI CTCAE (v5.0)

²relationship to efti and/or pembrolizumab could not be ruled out

- Treatment with efti plus pembrolizumab is safe and very well-tolerated
- Rate of discontinuation due to drug related adverse events less than 10% and comparable to pembrolizumab monotherapy

Frequent AEs (incidence $\geq 10\%$) related to study treatment²

Adverse event (PT) ¹	Any grade N (%)	Grade 3 N (%)	Grade 4/5 N (%)
Pruritus	23 (20.2)	N/A	N/A
Asthenia	22 (19.3)	N/A	N/A
Rash	15 (13.2)	N/A	N/A
Diarrhoea	12 (10.5)	1 (0.9)	N/A
Fatigue	12 (10.5)	1 (0.9)	N/A

¹ AEs rated according to NCI CTCAE (v5.0)

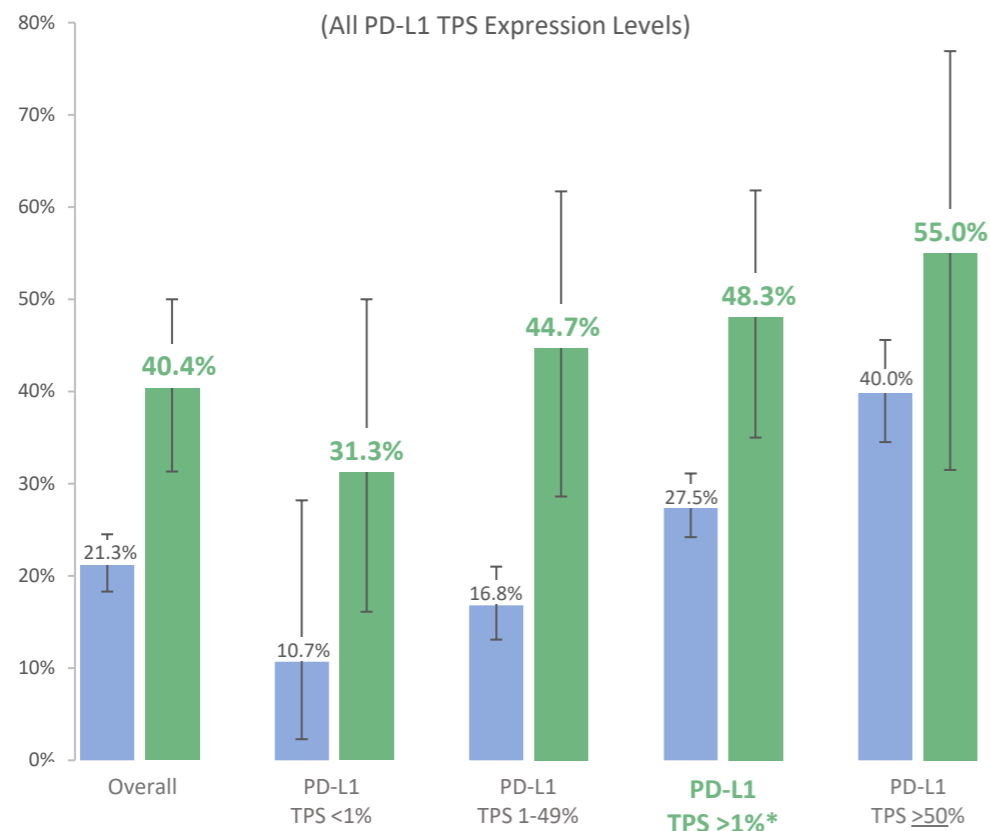
² relationship to efti and/or pembrolizumab could not be ruled out

Benchmarking against Pembrolizumab Monotherapy

Robust Overall Response Rates, Overall Survival, and Progression-Free Survival

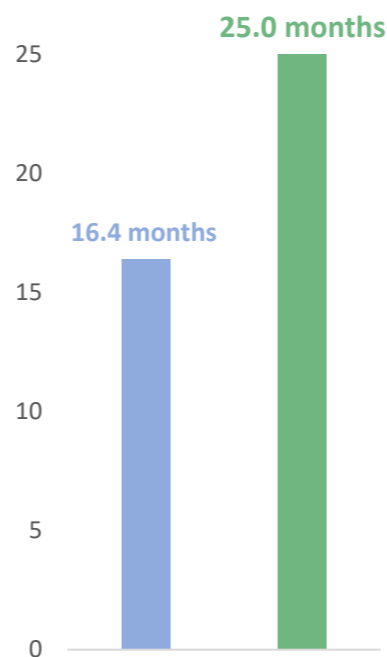
Overall Response Rate (ORR)

(All PD-L1 TPS Expression Levels)



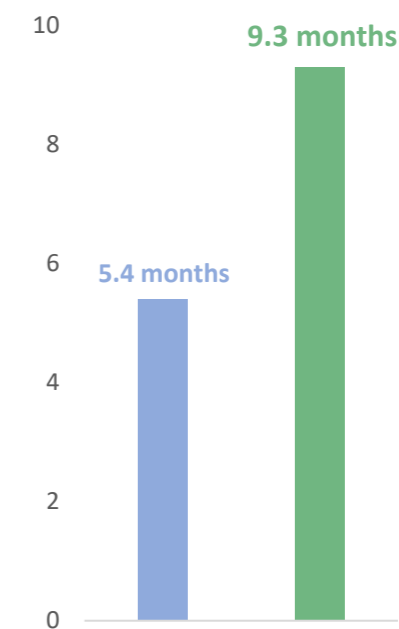
Overall Survival (mOS)

(PD-L1 TPS ≥1%*)



Progression Free Survival (mPFS)

(PD-L1 TPS ≥1%*)



■ Pembrolizumab ■ Efti + pembrolizumab

*Efti + pembrolizumab has Fast Track Designation in ≥1% TPS in 1L NSCLC

* Efti + pembrolizumab ORR by iRECIST, unconfirmed, Total (N=114) and PD-L1 TPS subgroups (N=90). 95% Confidence Interval. Data cut-off July 1, 2022. Pembrolizumab monotherapy 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. Pembrolizumab monotherapy 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](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

Strong Initial Overall Survival Benefit

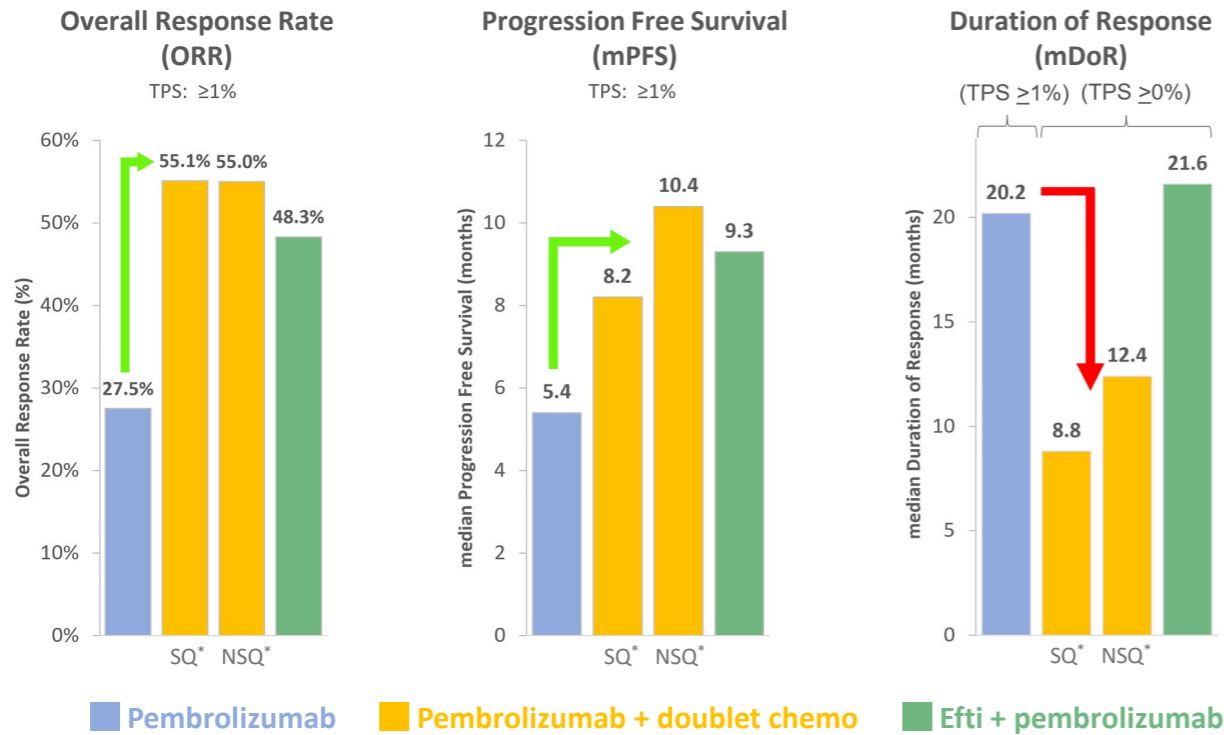
Efficacy of efti + pembro vs. selected Standard-of-Care in patients with PD-L1 TPS $\geq 1\%$ in 1st line NSCLC

Therapy	Response Rate (RR)	Progression Free Survival (mPFS)	Duration of response (DOR)	AEs leading to disc.	Median OS ²
Efti + Pembro	48.3%	9.3 months	21.6 months	9.6%	25.0 months
Pembro monotherapy ⁽¹⁾	27.5%	5.4 months	20.2 months	6-14%	16.4 months
Ipi + Nivo ⁽¹⁾	36.0%	5.1 months	23.2 months	18%	17.1 months
Ipi + Nivo + limited 2 cycles of Doublet Chemo	43.3%	7.0 months	15.4 months	19%	15.8 months

Efti + Pembro in 1L NSCLC, TPS $\geq 1\%$ population compared to other published data:

- shows **strong ORR, PFS** and most importantly **superior OS³**
- while maintaining **excellent safety profile** and **durability of responses**
- **Fast Track Status** has been granted

Benchmarking against Pembrolizumab Monotherapy & Pembrolizumab-Chemotherapy Combination in 1L NSCLC



	ORR	PFS	DoR
Efti + pembrolizumab	High	High	High*
Pembrolizumab	Low	Low	High*
Pembrolizumab + chemo	High	High	Low

*Note 34% patients in TACTI-002 have PD-L1 TPS $< 1\%$ while all pembrolizumab monotherapy patients have PD-L1 TPS $\geq 1\%$

Efti + pembrolizumab has significant promise as a chemo-free dual immuno-oncology (IO-IO) therapy to positively impact 1L NSCLC patient outcomes.

IO-IO-Chemo Combination Trial (INSIGHT-003) in 1L NSCLC

Promising initial efficacy & safety from first-in-human study evaluating efti + anti-PD-1 + doublet chemo¹

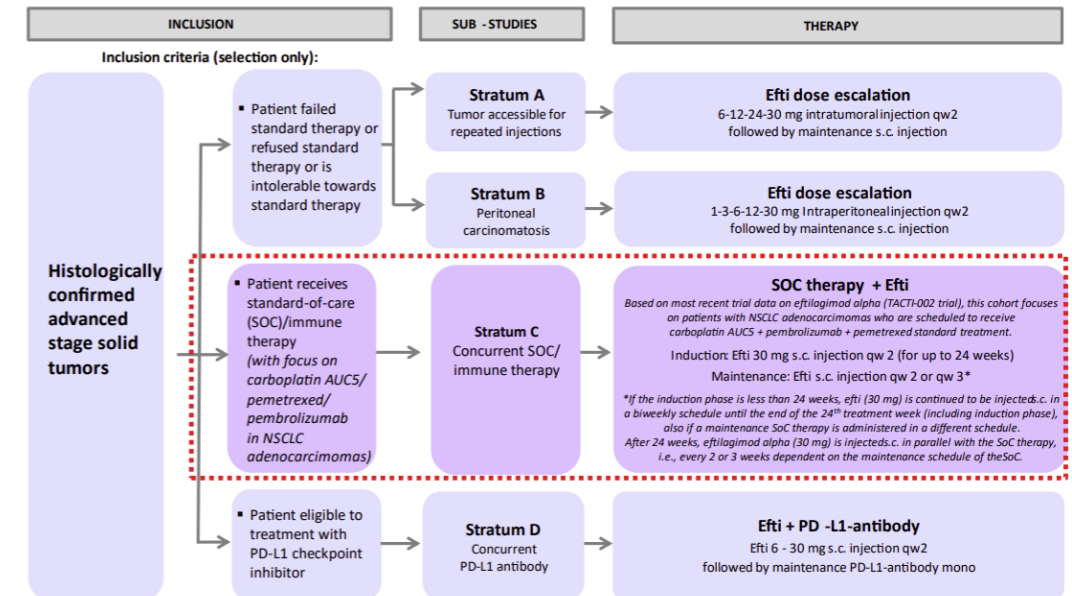
INSIGHT-003: Phase I in 1st line Non-Small Cell Lung Cancer

INSIGHT-003 - Third arm (Stratum C) of investigator-initiated study in metastatic 1st Line NSCLC patients evaluating triple combination therapy of efti in conjunction with doublet chemo & anti-PD-1 therapy



- Promising **67% overall response rate (ORR)** and **91% disease control rate (DCR)** in evaluable 1st line non-squamous NSCLC patients (N=21) despite 81% of patients having PD-L1 TPS <50%.¹
- The triple combination's 67% ORR regardless of PD-L1 expression and 65% ORR in patients with PD-L1 TPS <50% (N=17) compare favourably to reported results from a registrational trial of anti-PD-1 and doublet chemo that yielded a 48% ORR regardless of PD-L1 expression and 40.8% ORR in patients with PD-L1 TPS <50%.²
- Triple combination well tolerated & appears to be safe
- Will have additional data updates in CY2023

INSIGHT-003 Study Design



Head and Neck Cancer

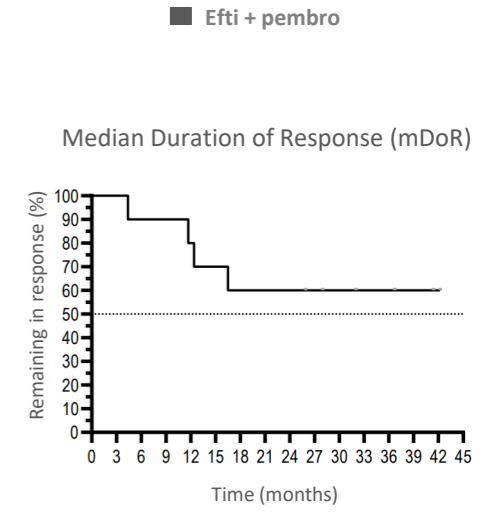
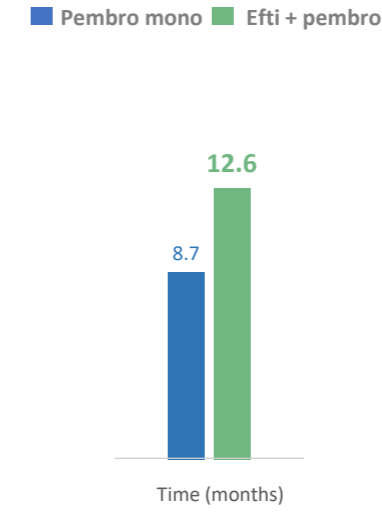
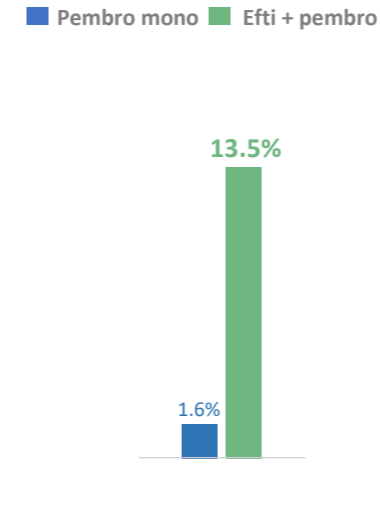
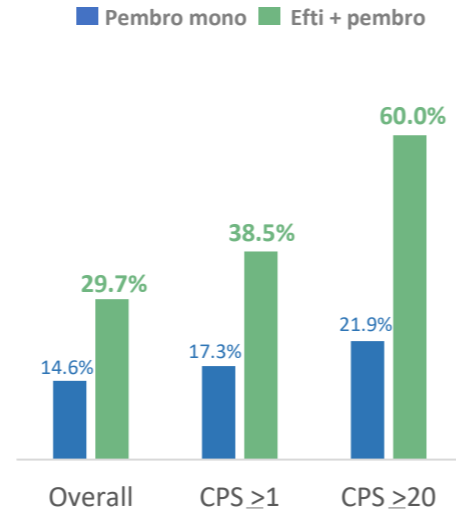
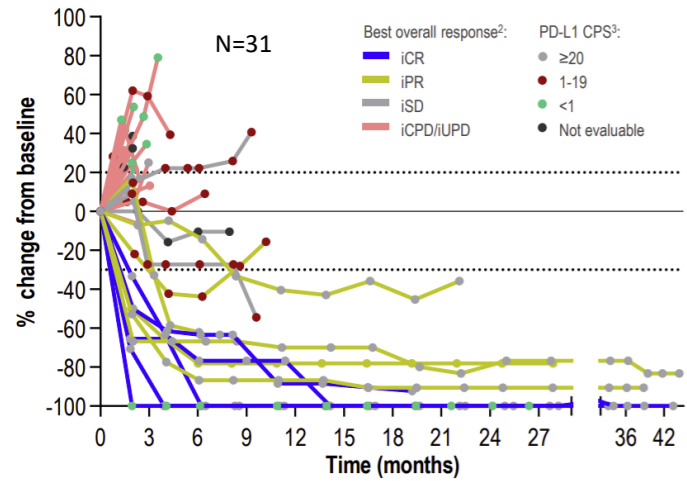
Data Presented at ASCO 2023

2nd Line Head & Neck Squamous Cell Carcinoma

Strong, Long-Lasting Efficacy and Favorable Safety; Positive Benchmarking to Pembro Monotherapy

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

Deep, durable responses from efti + pembro across all PD-L1 levels including 5 Complete Responses¹ ➔ More than double Overall Response Rates ➔ Eight-fold increase in Complete Response rate ➔ ~50% increase in Overall Survival in CPS ≥ 1 ➔ mDoR Not Reached! (vs 18.4 months for pembro mono)



In addition to its impressive efficacy, this dual immuno-oncology approach continues to be safe and well tolerated with adverse reactions leading to treatment discontinuation in only two patients (5.1%)*, which compares favorably to pembro mono (6.1%)#.

Efficacy Endpoints Across PD-L1 Subgroups in 2nd line HNSCC

Encouraging Overall Survival, Progression-Free Survival, and Duration of Response

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

	PD-L1 CPS ≥ 1			
	Efti + Pembro Overall ITT (N=37)	Efti + Pembro CPS ≥ 20 (N=15)	Efti + Pembro CPS ≥ 1 (N=25)	Pembro Mono ^{**} CPS ≥ 1
Overall Response Rate (ORR), %	29.7	60.0	38.5	17.3
Median Progression-Free Survival (PFS), months	2.1	13.6	2.3	2.2
6-month PFS rate, %	32.4	53.3	40.0	28.7
Median Overall Survival (OS), months	8.7*	15.5*	12.6*	8.7
12-month OS rate, %	46.0	66.7	52.0	40.0
Median Duration of Response* (DoR), months	Despite a long median follow up of 39 months, median Duration of Response was Not Reached*			18.4

* ASCO 2023. Data cut-off date March 31, 2023. Despite a long median follow up of 39 months, median Duration of Response was not reached in the TACTI-002 trial.

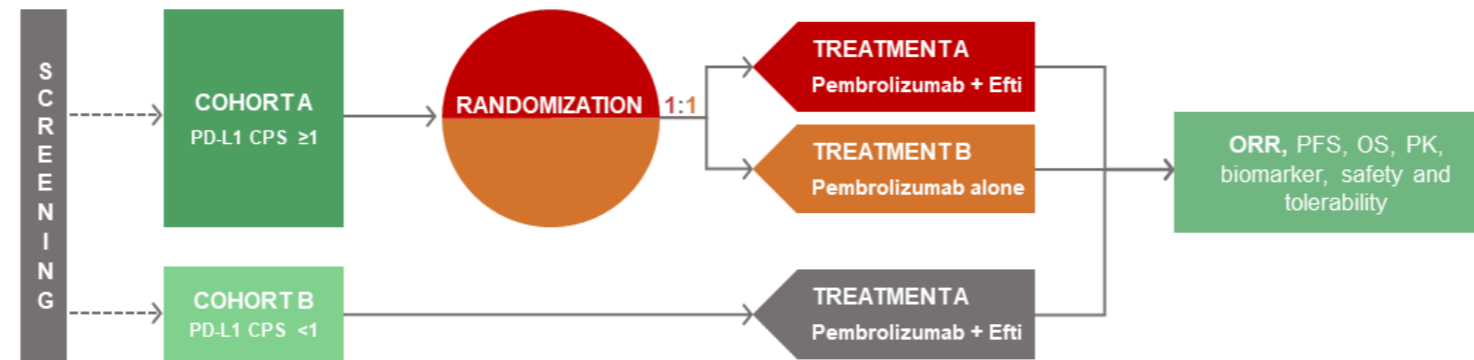
** Pembro mono data from KEYNOTE-040; *The Lancet* 2018 and EPAR Assessment Report (page 61 of Keytruda-H-C-3820-II-0042 : EPAR - Assessment Report – Variation).

Ongoing Phase IIb Trial in 1st Line Head & Neck Squamous Cell Carcinoma (with Fast Track Designation)

TACTI-003: Phase IIb in 1st Line Head and Neck Squamous Cell Carcinoma (1L HNSCC; app. 154 patients)

TACTI-003 - Randomized Phase IIb Trial in 1L HNSCC patients utilizing efi + pembrolizumab versus pembrolizumab (KEYTRUDA®) monotherapy*

- FDA Fast Track designation in 1L HNSCC on strength of the clinical results from TACTI-002 trial (Part C) in 2L HNSCC
- Clinical trial and supply agreement with Merck & Co., Inc., Kenilworth, NJ, USA (known as MSD outside the US and Canada)
- Recruiting: 75% enrolled; >25 sites activated; expect to complete enrolment by mid-2023 and have top line readout 2H of CY2023**



Metastatic Breast Cancer

Efti Well Positioned to Enhance Standard-of-Care Chemotherapy in Metastatic Breast Cancer



AIPAC Phase IIb: Active Immunotherapy (Eftilagimod Alpha) and PAclitaxel (double blind, 1: 1 randomized study with 226 patients)

Efti's activation of APCs as a novel MHC Class II agonist includes significant increase in cytotoxic CD8+ T cells that can be armed with chemo-induced tumor antigens to target cancer. This synergy was demonstrated by AIPAC Phase IIb trial's encouraging results:

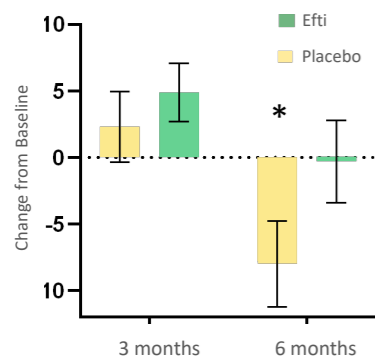
Positive trends in ORR, DCR and OS

	Efti + paclitaxel	Paclitaxel
Overall Response Rate	48.3%	38.4%
Disease Control Rate	85.1%	75.9%
Overall Survival	20.4 months	17.5 months

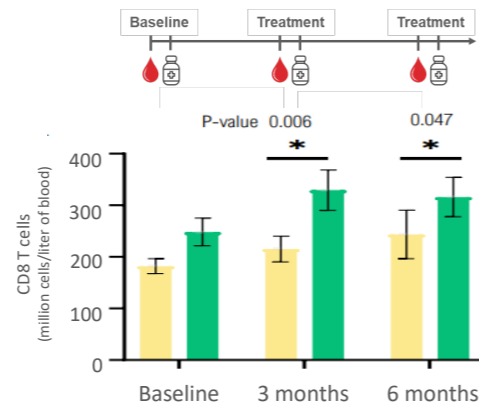
Significant OS improvement in three pre-specified subgroups

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

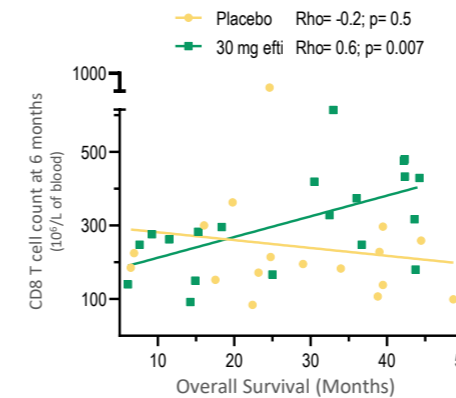
Sustained Quality of Life (QoL) vs significant decline in placebo group*



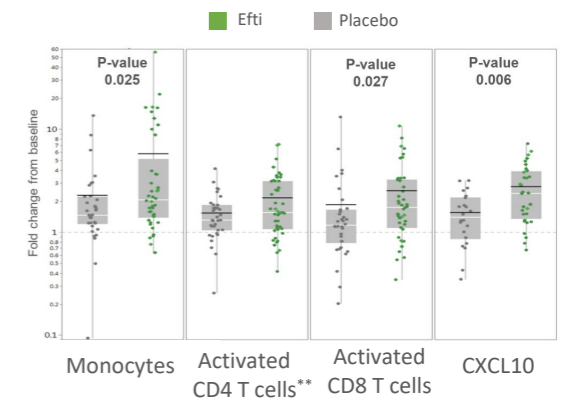
Significant increase of CD8+ T cell count
Minimal Residual Effect: samples taken just before next treatment



Significant correlation between Overall Survival & Cytotoxic CD8+ T cell count in Efti arm



Significant increase in anti-tumor cells and biomarkers



Phase II/III Trial Underway in Metastatic Breast Cancer

AIPAC-003: Active Immunotherapy (Eftilagimod Alpha) and **PAC**litaxel

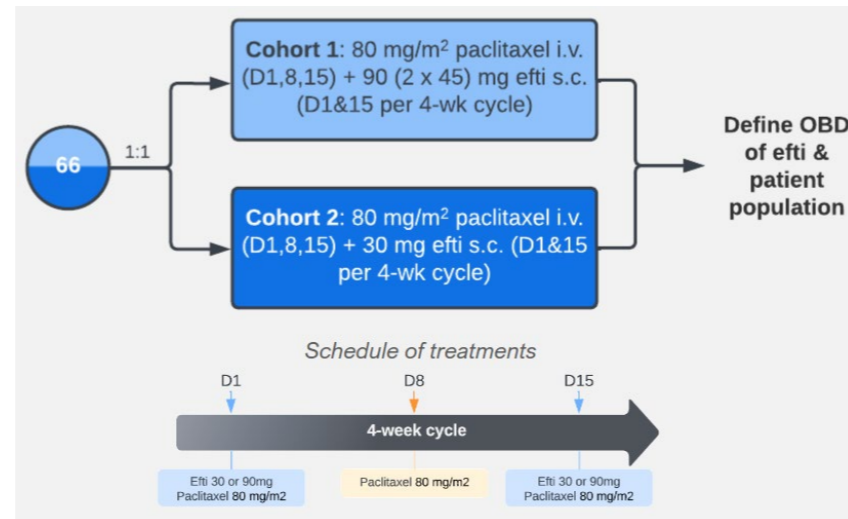
AIPAC-003: Integrated Phase II/III trial in Metastatic Breast Cancer (MBC) initiated in March 2023

- Unlike previous AIPAC Phase IIb trial that administered efti and paclitaxel on different days and ceased paclitaxel at six months, AIPAC-003 patients will receive both on same day and efti + paclitaxel treatment can continue until disease progression
- Trial design provides risk-balanced approach and incorporates feedback from FDA & EMA, including expansion of HR+/HER2-neg/low MBC patient population to include triple-negative breast cancer that together account for ~78% of breast cancer cases
- First patient enrolled in May 2023*

Open-label lead-in component

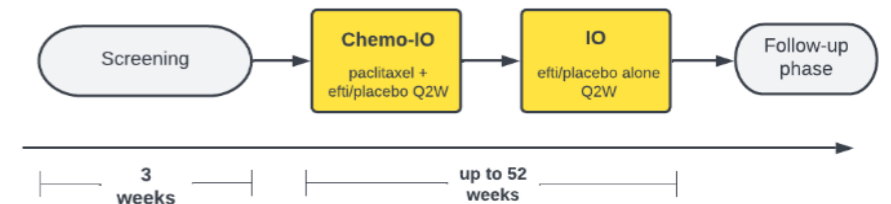
6 to 12 patients to test 90mg efti dosing in combination with paclitaxel driven by efti's excellent safety and FDA's Project Optimus initiative.

Dose Optimisation Phase II



Phase III**

Randomised, double-blinded, placebo-controlled with overall survival (OS) as primary objective, which may include a specific patient population



Additional Oncology Indications

Efti + Anti-PD-L1 (Avelumab) in Urothelial Cancer & Advanced Solid Tumors

INSIGHT-004: Phase I in Various Advanced Solid Tumors & INSIGHT-005: Phase I in Metastatic Urothelial Cancer

INSIGHT-004 – Phase I dose escalation study in advanced solid tumors*

- Efti in combination with avelumab (BAVENCIO®) safe with promising signals of efficacy in 12 patients
- Deep & durable responses in patients with low/no PD-L1 expression and in non-immunogenic tumors
- 5/12 partial responses (42%) in different solid tumors**



INSIGHT-005 – Phase I study in metastatic urothelial cancer***

- Investigator-initiated study evaluating safety & efficacy of efti and avelumab (BAVENCIO®) in 30 patients with metastatic urothelial cancer
- Study jointly funded by Immunetep & Merck KGaA, Darmstadt, Germany
- Expansion into urothelial cancer builds on core strategy to increase target indications to exploit efti's full potential
- First patient expected to be enrolled & dosed in first half of CY2023

Merck KGaA
Darmstadt, Germany

immunetep
LAG-3 IMMUNOTHERAPY

**KRANKENHAUS
NORDWEST**

Soft Tissue Sarcoma: Orphan Disease with High Unmet Need

Investigator-Initiated Trial Studying Novel Triple Combination of Efti + Radiotherapy + KEYTRUDA



EFTISARC-NEO: Open-label Triple Combination (Efti+Radiotherapy+Anti-PD-1) Phase II trial in Soft Tissue Sarcoma (STS)



- Novel triple combination of efti with radiotherapy and anti-PD-1 therapy KEYTRUDA® (pembrolizumab) has potential to generate a robust anti-tumor immune response
- First time efti will be studied in neoadjuvant, non-metastatic cancer setting, which importantly will provide access to tumor tissue prior to and after treatment, where the impact of this novel triple combination on the tumor microenvironment (TME) can be assessed
- Cost-efficient Phase II study predominantly funded by an approved grant from the Polish government
- Up to 40 patients will be enrolled and dosing of first patient is anticipated in H1 of CY2023

“We are excited to begin this chemotherapy-free study combining radiotherapy with the novel immunotherapy, eftilagimod alpha, and pembrolizumab. Given efti’s synergistic effects with immune checkpoint inhibitors and its ability to arm, activate, and proliferate cytotoxic T cells with radiotherapy-induced cancer antigens, this combination has a strong foundation to drive effective immunity against soft tissue sarcoma, a rare and aggressive disease in immense need of new therapeutic approaches.”

- Dr. Paweł Sobczuk, Maria Skłodowska-Curie National Research Institute of Oncology

Preclinical Programs

Novel Small Molecule Anti-LAG-3 Collaboration



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

"We are delighted to collaborate with Immunetep 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*



Current Opinion in Immunology

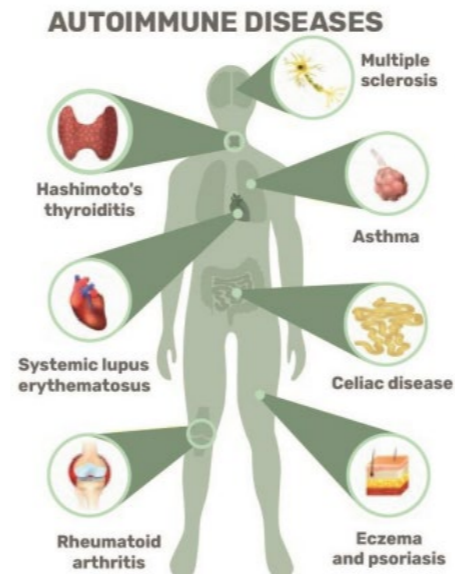
Volume 67, December 2020, Pages 1-9



Inhibitory receptor agonists: the future of autoimmune disease therapeutics?

Stephanie Grebinoski^{1,2}, Dario AA Vignali¹ ✉

Central and peripheral tolerance both contribute to protection against autoimmunity. The pathogenesis of autoimmunity, however, can result from critical deficits or limitations in peripheral and/or central tolerance mechanisms, presenting an opportunity for therapeutic intervention. Recent advances highlight the substantial impact of inhibitory receptors (IRs), which mediate peripheral tolerance, in autoimmunity. Deletion and blockade studies in mice, IR disruption in humans, and correlation with positive disease outcomes all highlight potential clinical benefits of enhancing IR signaling (agonism)—specifically CTLA4, PD1, **LAG3**, TIM3 and TIGIT—to treat autoimmune disease. Although critical questions remain, IR agonists represent an unappreciated and untapped opportunity for the treatment of autoimmune and inflammatory diseases.



Present Approaches Target Symptoms of Autoimmune Diseases

Corticoids, methotrexate, TNF & interleukin inhibitors (anti-TNF- α , -IL-6, -IL-17, -IL-23 mAbs)

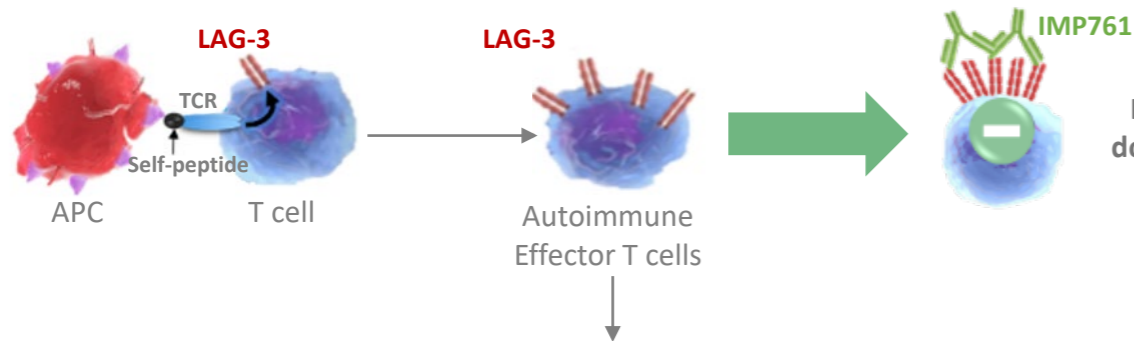


Future Approaches Target Causes of Autoimmune Diseases

Targeting autoimmune memory T cells with LAG-3 antibodies

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

As the world's first immunosuppressive agonist antibody to LAG-3 acting upstream on activated T cells, IMP761 targets the root cause of many autoimmune diseases and represents a potential game-changer in the treatment landscape. Initiating IND-enabling studies in 1H'2023.



IMP761 increases the natural LAG-3-mediated down-regulation of auto-reactive memory T cells (root cause of many autoimmune diseases)

Epigenetic reprogramming leads to T cell helper (Th) induced AI diseases: Th1 (e.g., Rheumatoid Arthritis), Th2 (e.g., Allergic Asthma), Th17 (e.g., IBS), etc.



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

IMP761 significantly inhibits T cell infiltration of an antigen-specific intradermal reaction in vivo in an Ag-specific delayed-type hypersensitivity (DTH) model in non-human primate study.



*Juvenile idiopathic arthritis: LAG-3 is a central immune receptor in children with oligoarticular subtypes***

Pre-clinical testing of IMP761 in oligoarticular juvenile idiopathic arthritis model showed decreased secretion of mostly all measured cytokines (IL-10, IL-12, IL-18, IL-4, IL-6 = p-value < 0.01)

Board and Management



Dr Russel Howard
Non-Executive Chairman

Dr Howard has over 45 years' experience in Australian & US biotech sectors, including the Walter & Eliza Hall Institute, Schering-Plough, GSK and as Maxygen CEO. He currently is Chairman of NeuClone Pty Ltd and a former Director of Circadian Technologies Ltd.



Pete Meyers
Deputy Chairman

Mr Meyers spent 18 years in health care investment banking before taking on CFO roles in biotechnology, including Eagle Pharmaceuticals, Inc, TetraLogic Pharmaceuticals Corp, and Motif BioSciences Inc. Based in New York, he is currently CFO of Slayback Pharma.



Lis Boyce
Non-Executive Director

Lis Boyce has over 30 years' experience as a corporate lawyer and is a partner at Piper Alderman. She has a strong focus on Life Sciences and Healthcare, and is deputy chair of AusBiotech's AusMedtech Advisory Group, as well as a member of AusBiotech's State Committee for NSW.



Marc Voigt
Executive Director & CEO

Mr Voigt has over 25 years of experience in the corporate and biotechnology sectors, including Deutsche Life Science, Revotar Biopharmaceuticals AG, Medical Enzymes AG and Allianz. He was appointed as CEO and Executive Director in July 2014. Mr Voigt is based in Berlin.



Prof. Frédéric Triebel, MD, PhD
Executive Director, CSO

Prof Triebel discovered the LAG-3 gene while working at the Gustave Roussy Institute and is a pioneer in the LAG-3 field of immunology. He was the founder of Immunetep S.A., which was acquired by the Company in 2014. Based in Paris, he holds a Ph.D. in immunology (Paris University).



Deanne Miller
COO, General Counsel

Ms Miller has broad commercial experience having held legal, investment banking, regulatory compliance and tax advisory positions at RBC Investor Services, Westpac Group, Macquarie Group, the Australian Securities and Investment Commission, and KPMG.



Florian Vogl, MD, PhD
Chief Medical Officer

Dr Vogl is a board-certified MD and has over 13 years in the biopharmaceutical industry with extensive clinical development expertise in the field of oncology in the Europe and the US through roles at Cellestia Biotech, Rainier Therapeutics, Novartis and Amgen.



Christian Mueller
VP, Strategic Development

Mr Mueller has +10 years of clinical development experience in oncology, including at Medical Enzymes AG focusing on therapeutic enzymes for cancer treatment and at Ganymed Pharmaceuticals AG developing ideal mAbs in immune oncology.



Claudia Jacoby, PhD
Director of Manufacturing

Dr Jacoby has +15 years of biotech industry experience with extensive skills in protein expression and purification as well as in analytical and preclinical development from her various positions at pre-clinical and clinical-stage pharmaceutical companies.



James Flinn, PhD
IP & Innovation Director

Dr Flinn is an Australian Patent Attorney with +20 years of professional experience in building and managing IP portfolios, including GSK, two US-based pharmaceutical companies, a major Australian retailer, and a Melbourne Patent Attorney firm.



David Fang
Finance Director

Joining Immunetep in 2018, Mr Fang has over 12 years of accounting and auditing experience across various industries including biotechnology, manufacturing and healthcare including Group Finance Manager of Kazia Therapeutics Limited and auditor at PWC.



Chrystelle Brignone, PhD
Preclinical Development Director

Dr Brignone joined Immunetep in 2004 and has more than 20 years' experience in the field of Immunology and Immune monitoring of clinical studies. As Principal Scientist since 2014, she is leading the R&D in the Immunetep laboratory in France.

Significant Milestones Ahead in 2023

- ✓ Initiated AIPAC-003 PII/PIII trial of efti + chemo in MBC/TNBC
- ✓ Initiated cost-efficient investigator-led PII study in soft tissue sarcoma
- ✓ Final data from TACTI-002 (Part B) in 2nd line anti-PD-(L)1 refractory NSCLC
- ✓ Final data from TACTI-002 (Part C) in 2nd line HNSCC
- ✓ Received regulatory approval for initiation of jointly-funded INSIGHT-005 with Merck KGaA, Darmstadt, Germany

- Data updates from TACTI-002 Phase II trial in 1st line NSCLC
- Complete enrolment (75% enrolled*) and top-line readout from randomised TACTI-003 Phase IIb trial
- Data updates from triple combination INSIGHT-003 PI trial with efti + anti-PD-1 + chemotherapy in 1st line NSCLC
- Updates from INSIGHT-005 and STS studies
- IND-enabling studies of IMP761
- Updates from partnered programs
- Updates regarding expansion of clinical trial pipeline, e.g. Phase III trial planning in 1L NSCLC



Thank You