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LAG-3 IMMUNOTHERAPY

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

Corporate Presentation – September 2022

(ASX: IMM, NASDAQ: IMMP)

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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

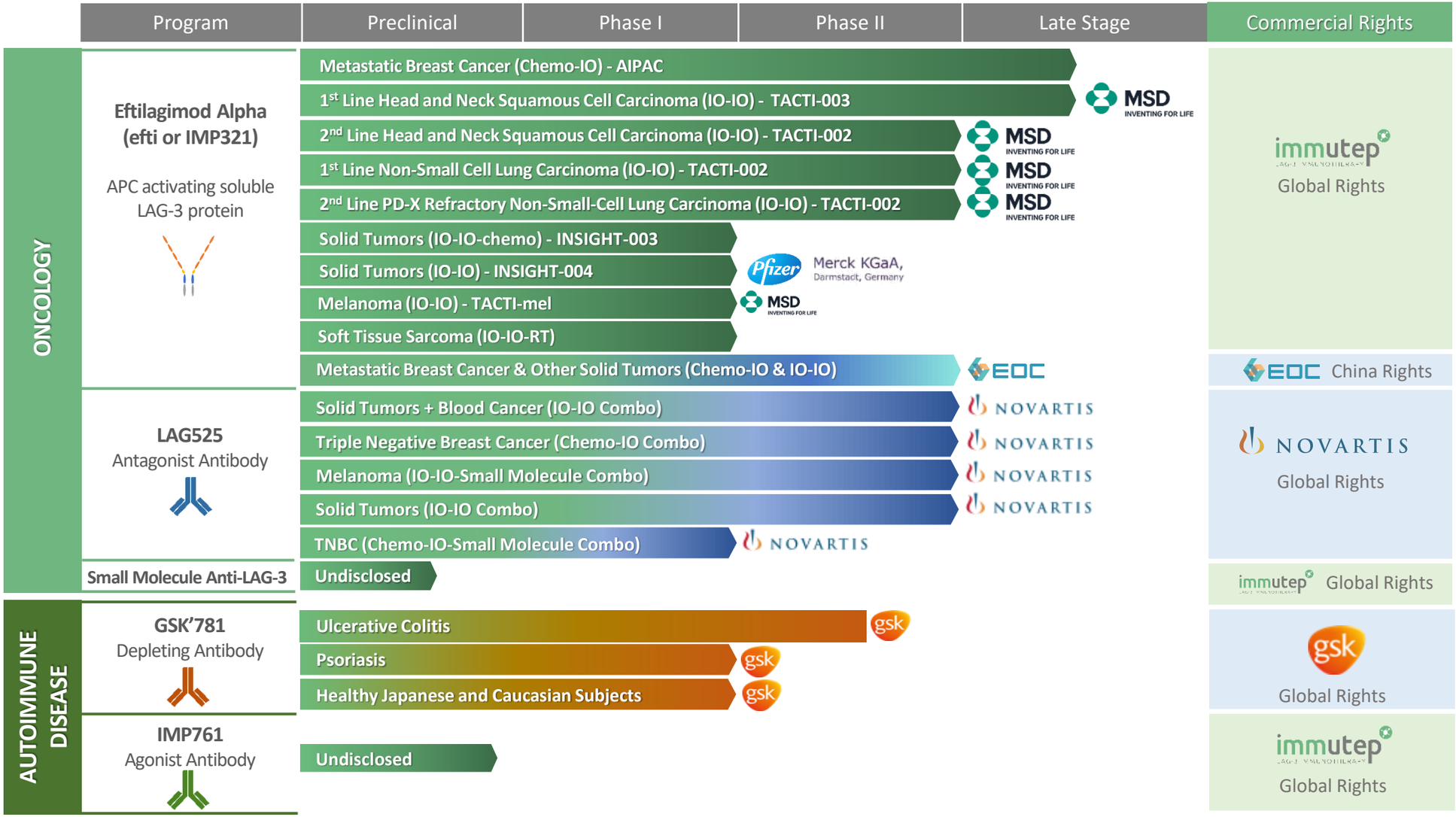
MSD INVENTING FOR LIFE · NOVARTIS · gsk GlaxoSmithKline · Pfizer · Merck KGaA, Darmstadt, Germany · LabCorp · EOC

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

Immutep LAG-3 Pipeline



Information in pipeline chart current as of September 2022; LAG525 - ClinicalTrials.gov; GSK2831781 - ClinicalTrials.gov

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

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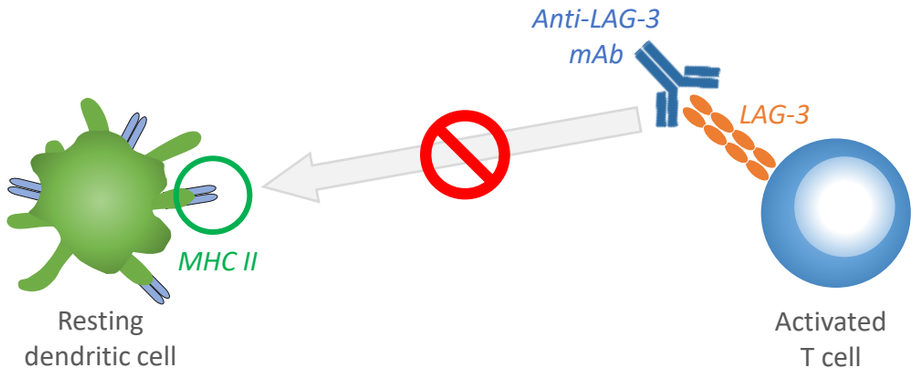
LAG-3 Therapeutics for Oncology

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



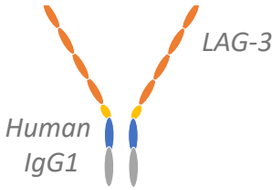
Company	Program	Phase 1	Phase 2	Phase 3	Patients
Bristol Myers Squibb	Relatlimab	7	32	2 (Approval in Mar 2022)	9,509
NOVARTIS	Ieramilimab	1	4		960
MERCK	Favezelimab	1	5		1,066
MacroGenics	Tebotelimab	3	3		1,514
Roche	RO7247669	1	2		538
Boehringer Ingelheim	BI754111	4	1		649
REGENERON	Fianlimab	1	1		836
TESARO	TSR-033	1	1		139
Incyte	INCAGN02385	1	1		74
symphogen	SYM022	3			169
F-star Therapeutics	FS-118	2			102
Innovent	IBI110	1			268
xencor	XmAb-22841	1			242

- Immutep developed 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

*Lymphocyte Activation Gene 3 in Immuno-oncology: A Soluble Protein Alternative; BioProcess International Feb 2022 (data as of April 2021); **LAG525 - ClinicalTrials.gov (for Novartis' global rights, Immutep may receive undisclosed milestones plus royalties)

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

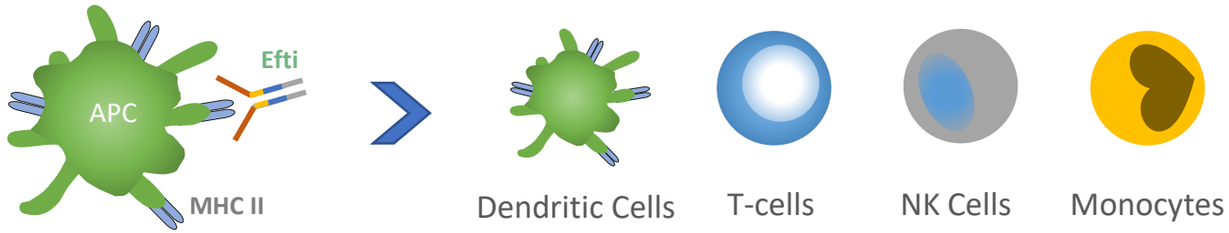
Eftilagimod alpha (Efti)



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

APC activation with Efti **Anti-tumor immune cell activation**



Broad activation of immune system

- Efti capitalizes on LAG-3's unique ability to drive adaptive & innate immune systems against cancer
- Efti has high affinity for a subset of MHC II ligand on APCs and their activation drives broad stimulation of multiple anti-tumor cells

Compelling pairing capabilities

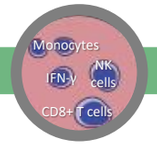
- Excellent safety profile drives high suitability for combination partnering
- Synergistic activity & encouraging clinical results with multiple agents including anti-PD-1, anti-PD-L1, and chemotherapy
- Enhances clinical activity of anti-PD-1 across PD-L1 status, including low & negative PD-L1 tumors

Efti's Synergistic Effects with Chemotherapy & Immunotherapy

Chemotherapy releases cancer antigens through cancer cell death

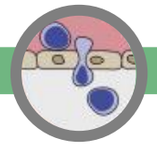
Efti expands & activates antigen-presenting cells (APC) via MHC II ligand

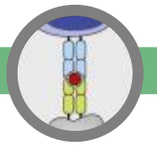
Activated APCs via **efti** acquire cancer antigens & present to cytotoxic T cells



Efti leads to large increase of CD8+ T cells, monocytes, NK cells, IFN-γ, CXCL10, etc.

Cytotoxic CD8+ T cells & other cells key to immunotherapy effectiveness infiltrate tumors





Recognition of cancer cells by T cells increased via **anti-PD-1 therapies**

Efti enhances **anti-PD-1** therapies' ability to enable adaptive immune system to find & destroy cancer cells

The Journal of Immunology

A Soluble Form of Lymphocyte Activation Gene-3 (IMP321/Efti) Induces Activation of a Large Range of Human Effector Cytotoxic Cells

Chrystelle Brignone, Caroline Grygar, Manon Marcu, Knut Schäkel and Frédéric Triebel

The Journal of Immunology September 15, 2007, 179 (6) 4202-4211; DOI: 10.4049/jimmunol.179.6.4202

nature medicine

A potential biomarker for anti-PD-1 immunotherapy - *A recent study identifies an immune cell type known as classical monocytes in the peripheral blood as a potential biomarker for response to anti-PD-1 immune checkpoint therapy in metastatic melanoma.*

Goswami, S., Basu, S. & Sharma, P.

Nat Med 24, 123–124 (2018). https://doi.org/10.1038/nm.4489

Science Immunology

CXCL9 and CXCL10 bring the heat to tumors

Robin Reschke, Thomas F. Gajewski

SCIENCE IMMUNOLOGY - 22 Jul 2022, Vol 7, Issue 73

DOI: 10.1126/sciimmunol.abq6509

Journal for ImmunoTherapy of Cancer

Monocyte-derived APCs are central to the response of PD1 checkpoint blockade & provide a therapeutic target for combination therapy

Schetters STT, Rodriguez E, Kruijssen LJW, *et al*

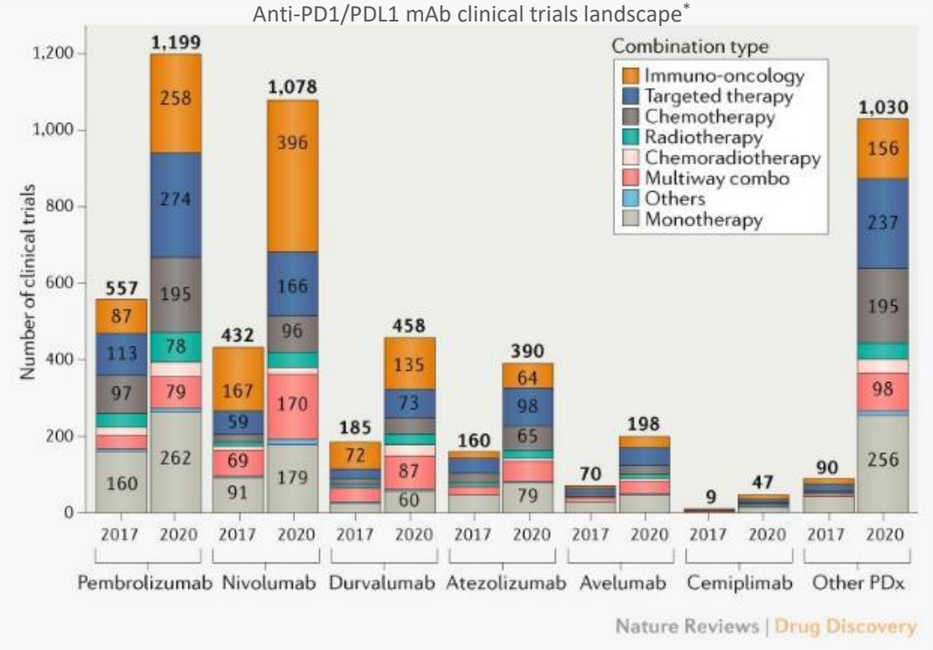
Journal for ImmunoTherapy of Cancer

2020;**8:**e000588. doi: 10.1136/jitc-2020-000588

Graphic adapted from Chen & Mellman - Oncology Meets Immunology: The Cancer-Immunity Cycle: VOLUME 39, ISSUE 1, P1-10, JULY 25, 2013

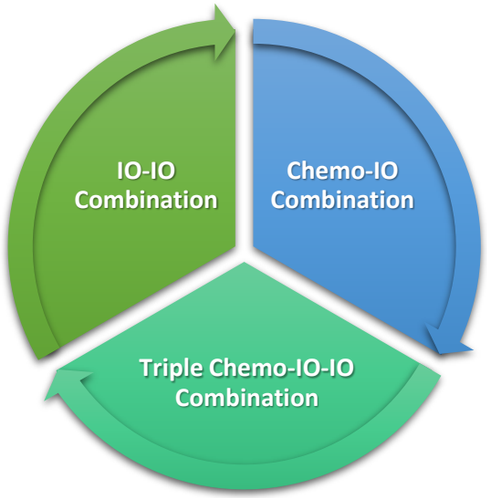
Pipeline in a Product with Broad Potential

Anti-PD1/PDL1 mAb clinical trials landscape*



- Combination approaches comprise ~90% of all anti-PD-1/PD-L1 trials to enable more efficacious therapies as up to 80% of patients do not respond to monotherapy
- Opdualag, the first LAG-3 therapeutic candidate to receive FDA approval, is an IO-IO combination of relatlimab (anti-LAG-3) and nivolumab (anti-PD-1)

Efti Clinical Trials Confirm Broad Combination Potential



Efti + Anti-PD-1 (pembrolizumab)
Head & Neck Squamous Cell Carcinoma (1L & 2L), Non-Small-Cell Lung Carcinoma (1L & 2L), Sarcoma, Melanoma

Efti + Anti-PD-L1 (avelumab)
Solid tumors (GI, Cervical, etc.)

Efti + Chemo (paclitaxel)
HER2-negative/HR+ metastatic Breast Cancer

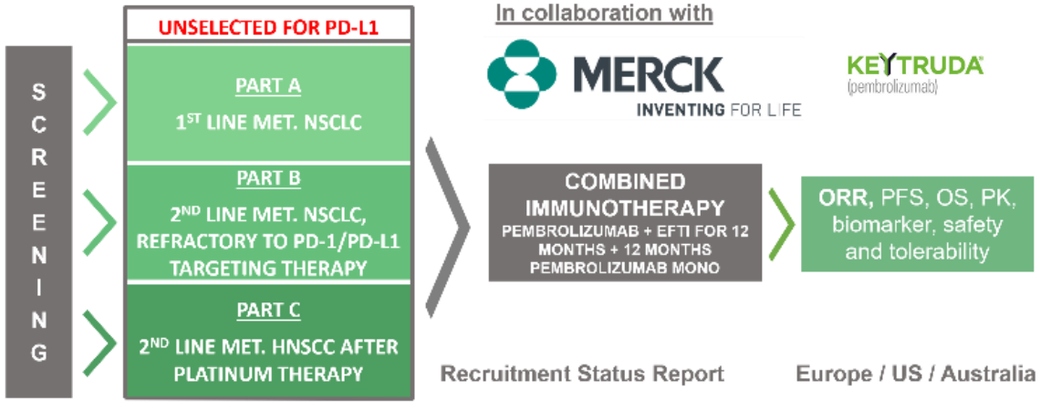
Efti + Anti-PD-1 (pembrolizumab) + Chemo (carboplatin)
Solid tumors

*Source: Nature Review Drug Discovery; March 2021 volume 20 no. 3

Phase II Trial Evaluating Efti + Pembro in 1L NSCLC

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

TACTI-002: Two ACTive Immunotherapeutics in NSCLC & HNSCC



Treatment	30 mg efti s.c. 200 mg pembrolizumab (Keytruda®) i.v.

Recruitment Status Report

- ✓ Fully approved in all countries
- ✓ Up to 189 patients in three indications
  - ✓ Part A (N=114) completed
  - ✓ Part B (N=36) completed
  - ✓ Part C (N=39) completed

Europe / US / Australia

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	106 (93.0) / 8 (7.1)
PD-L1 expression TPS[1], n (%)	< 1% 1-49% ≥ 50% Not evaluable	37 (32.5) 40 (35.1) 31 (27.2) 6 (5.3)
Previous therapy, n (%)	Radiotherapy Surgery Systemic therapy for non-metastatic disease	38 (33.3) 23 (20.2) 25 (21.9)

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

[1] Central assessment of PD-L1 TPS using Dako PD-L1 IHC 22C3 pharmDx for 87 pts. For 21 pts, local assessment was used due to non evaluable central assessment results. TPS: tumor proportion score.

Encouraging Clinical Results; Primary Objective Achieved

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

- Primary objective achieved (ORR >35%)
  - 38.6% ORR (iRECIST) & 37.7% (RECIST 1.1) in ITT population
  - 42.7% ORR (iRECIST) and 41.8% (RECIST 1.1) in evaluable[1] population
  - 35% ORR (iRECIST) in squamous & 38.9% in non-squamous tumors
- Superior ORR/PFS across all PD-L1 levels
- Comparable disease control rate (69-79%) across all PD-L1 levels
- Sustained, durable responses; median DoR not yet reached
- Combination safe, well tolerated & discontinuation rate of 9.6% in line with pembro monotherapy[##]

	Efti + Keytruda Combination*	Keytruda Monotherapy	Keytruda Monotherapy
Clinical Trial & Phase	P2 (TACTI-002/KEYNOTE-798)	P3 (KEYNOTE-042)	P3 (KEYNOTE-024)
Patient Number / tumor type	114 / 1L NSCLC	637 vs. 637 / 1L NSCLC	154 vs. 151 / 1L NSCLC
PD-L1 Status	All comer PD-L1 TPS ≥0%	PD-L1 TPS ≥1%	PD-L1 TPS ≥50%
Complete Response (CR) %	**1.8%** (TPS ≥ 0%)	**0.5%** (TPS ≥ 1%)	**3.9%** (TPS ≥ 50%)
Partial Response (PR) %	**36.8%** (TPS ≥ 0%)	**26.8%** (TPS ≥ 1%)	**40.9%** (TPS ≥ 50%)
Stable Disease (SD) %	**35.1%** (TPS ≥ 0%)	**38.6%** (TPS ≥ 1%)	**24.7%** (TPS ≥ 50%)
Overall Response Rate (ORR) %	**38.6%** (TPS ≥ 0%)	**27%** (TPS ≥ 1%)	**44.8%** (TPS ≥ 50%)
ORR in PD-L1 TPS <1%	**28.1%**	*n/a*	*n/a*
ORR in PD-L1 TPS ≥1%	**45.5%**	**27%**	*n/a*
ORR in PD-L1 TPS 1-49%	**41.7%**	**16.6%**	*n/a*
ORR in PD-L1 TPS >50%	**52.6%**	**39%**	**44.8%**
Median PFS (months)	**6.9**** (TPS ≥ 0%)	**5.4** (TPS ≥ 1%)	**10.3** (TPS ≥ 50%)
mPFS in PD-L1 TPS<1%	**4.2**#	*n/a*	*n/a*
mPFS in PD-L1 TPS ≥1%	**8.4**#	**5.4**	*n/a*
mPFS in PD-L1 TPS 1-49%	**9.3**#	**4.2**	*n/a*
mPFS in PD-L1 TPS ≥50%	**11.8**#	**7.1**	**10.3**

32.5% 1L NSCLC patients in TACTI-002 have TPS <1% and ~68% patients have PD-L1 TPS <50%

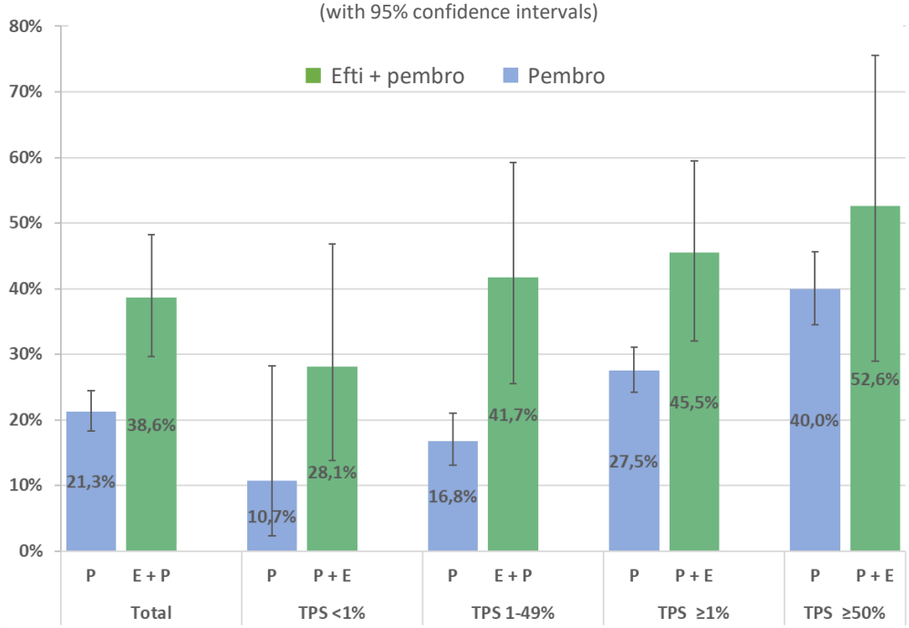
*Efti+Keytruda combination data: iRECIST by PD-L1 (central only); **Interim median PFS in the ITT (unselected for PD-L1); #PFS by PD-L1 status (N=108) using central assessment for 87 patients. For 21 patients, local assessment was used due to non evaluable central assessment results; Data cut-off April 16, 2021. Keytruda KN-042 & KN-042 mono data: The Lancet https://doi.org/10.1016/S0140-6736(18)32409-7, Oral Presentation 2018 ASCO Annual Meeting, EPAR assessment report, N Engl J Med 2016; 375:1823-33. DOI: 10.1056/NEJMoa1606774, KN-024 update J Clin Oncol 2019, KN-024 J Clin Oncol 2021:
Source: KN042; KN001; KN024, TACTI-002 trial data

Robust ORR/PFS Across Entire PD-L1 Spectrum vs Pembrolizumab

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

Overall Response Rate (ORR)

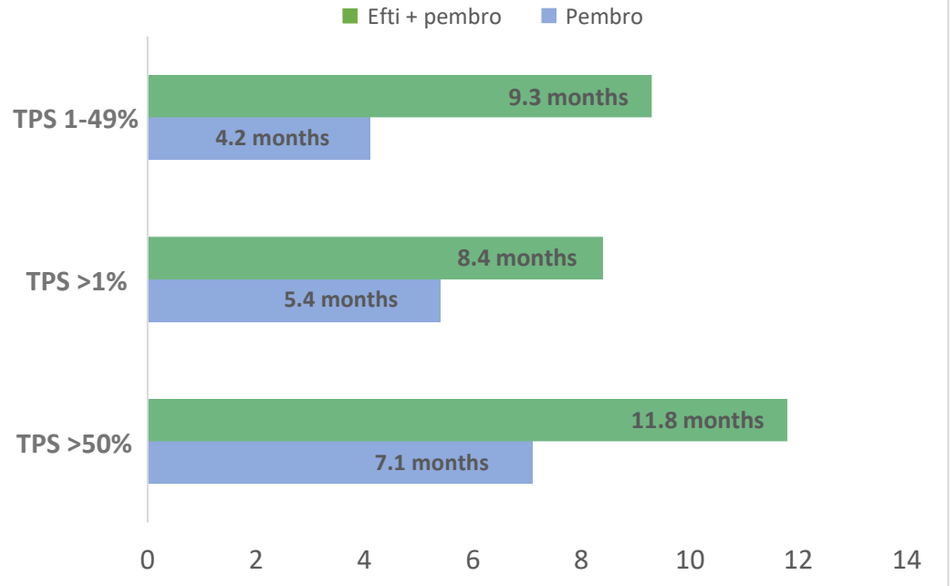
(with 95% confidence intervals)



Pembrolizumab ('pembro') mono efficacy used for benchmarking:
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 a very limited data set from KN-001. 1st and 2nd line altogether.
1-49 % TPS: calculation based on KN-001, KN-042.
≥ 50 % TPS: calculation based on KN-001, KN-042.
≥ 1 % TPS: calculation based on KN-001, KN-042.
Efti + Pembro ORR by iRECIST, unconfirmed, Total (N=114) and PD-L1 TPS subgroups (N=87). Data cut-off date: April 15, 2022
95 % CIs are internal calculations using Clopper-Pearson: https://epitools.ausvet.com.au/ciproportion

Median Progression Free Survival (PFS)

(by PD-L1 TPS Score)



Pembrolizumab ('pembro') mono efficacy used for benchmarking:
1-49 % TPS: calculation based on KN-042
≥ 50 % TPS: calculation based on KN-042
≥ 1 % TPS: calculation based on KN-042

Deep and Durable Responses

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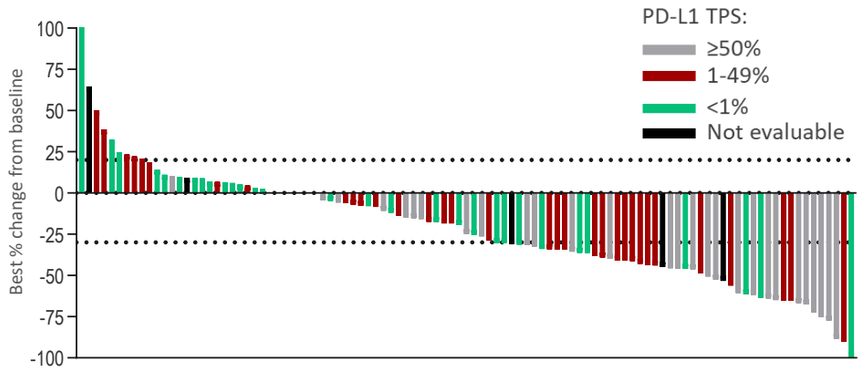
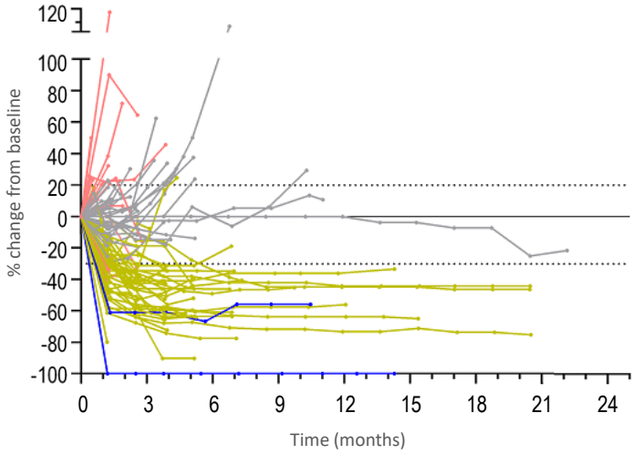
TACTI-002/KEYNOTE-798: 1L NSCLC (Part A)

Tumor Burden Reduced in Majority of Patients



Change in Tumor Size Over Time



- Responses are deep & long-lasting; median DoR not yet reached
- 80% (35) of responses[1] already confirmed & 11.4% (5) pending confirmation
- 95% of patients having a response < 4 months after study start
- Only 8.6% of patients with confirmed response[2] progressed ≤ 6 months until data cut-off
- 66% (68) of patients with post-baseline assessment had decrease in target lesions

All patients with ≥1 post-baseline CT scan; n=103; iUPD: unconfirmed progressive disease; iCPD: confirmed progressive disease; iPR: partial response; iCR: complete response. [1] by iRECIST. [2] All patients with confirmed response by iRECIST

Benchmarking against IO & IO-Chemo Combinations

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

1L NSCLC

TPS	Treatment	Efficacy[1]	Toxicity: AEs leading to disc.
≥ 1%	**Efti + Pembro**	**ORR 45.5%** **PFS 8.4 mos**	**< 10%**
	Pembro mono	**ORR 27.5%** **PFS 5.4 mos**	**1-14%**
	Ipi + Nivo[2]	**ORR 36%** **PFS 5.1 mos**	**18%**
1-49%	**Efti + Pembro**	**ORR 41.7%** **PFS 9.3 mos**	**< 10%**
	Doublet Chemo + Pembro	**ORR 49.2% (NSQ) & 50% (SQ)** **PFS 7.2 (SQ) & 9.2 (NSQ) mos**	**14%**
	Pembro mono	**ORR 16.8%** **PFS 4.1 mos**	**1-14%**
≥ 50%	**Efti + Pembro**	**ORR 52.6%** **PFS 11.8 mos**	**< 10%**
	Pembro/Atezo/Libtayo mono	**ORR 35-45%** **PFS 7-10 mos**	**1-14%**
0-100%	**Efti + Pembro**	**ORR 38.6%** **PFS 6.9 mos**	**< 10%**
	Doublet Chemo	**ORR 19-30%** **PFS 5-9 mos**	**8-22%**
	Doublet Chemo + Pembro	**ORR 48% (NSQ) & 63% (SQ)** **PFS 6 (SQ) & 9 (NSQ) mos**	**14%**
	Doublet Chemo + Atezo + Beva	**ORR 56%** **PFS 8.4 mos**	**33%**
	Doublet Chemo + Ipi + Nivo	**ORR 38%** **PFS 6.7 mos**	**19%**

- ✓ Low efficacy of anti-PD-(L)1 monotherapy for patients with TPS <50% *(~70% of total population)*
- ✓ Double chemo + anti-PD-(L)1 → increased ORR & OS but shorter DoR due to chemo & more toxic; Ipi & Beva combos → high burden in terms of toxicity & high number of patients discontinuing
- ✓ Efti addresses both issues as shown with TACTI-002 results; INSIGHT-003 trial also exploring efti + pembro + chemo combination

Arrow lengths are not proportional representations of efficacy data. Data for Efti + Pembro derived from ASCO22 oral presentation. Data cut-off: April 15, 2022. Data for pembro derived from KN-001, KN-042, KN-189, KN-407 publications. [1] ORR and PFS results taken from respective publications of registrational trials. [2] Only approved by FDA not by EMA for TPS ≥ 1%.

Triple IO-IO-Chemo Combination Trial

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

Status:

- Recruiting (over 50% enrolled*; reported good safety from initial five patients in Dec 2021)
- Initial results to be reported by year end*

Design:

- Evaluating triple combination therapy consisting of efti in conjunction with carboplatin and anti-PD-1 therapy with solid tumors
- Trial will assess safety, tolerability and initial efficacy of the combination

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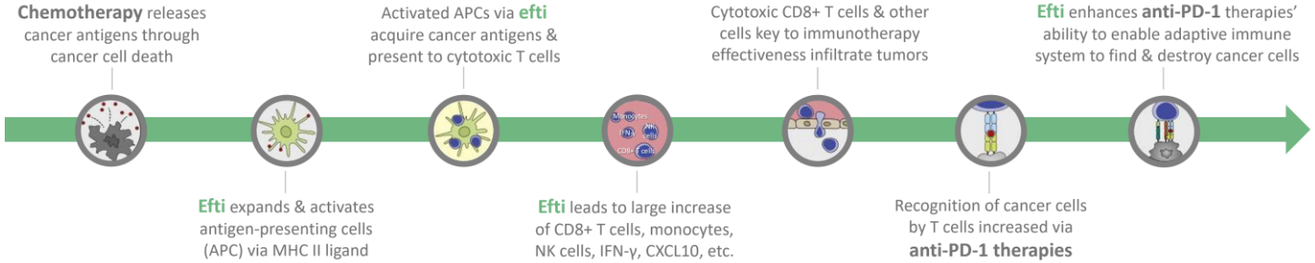
Triple Combination Approach to Capitalize on Efti's Synergistic Effects with Chemotherapy & Immunotherapy



*As reported in 2022 Annual Report on August 31st, 2022. Graphic adapted from Chen & Mellman - Oncology Meets Immunology: The Cancer-Immunity Cycle: VOLUME 39, ISSUE 1, P1-10, JULY 25, 2013

Strong, Long-Lasting Efficacy in 2L HNSCC

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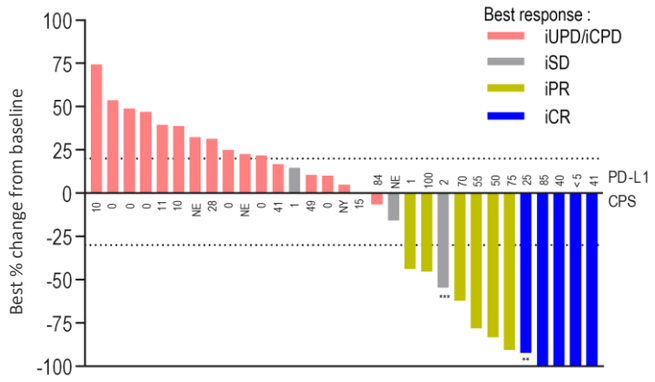
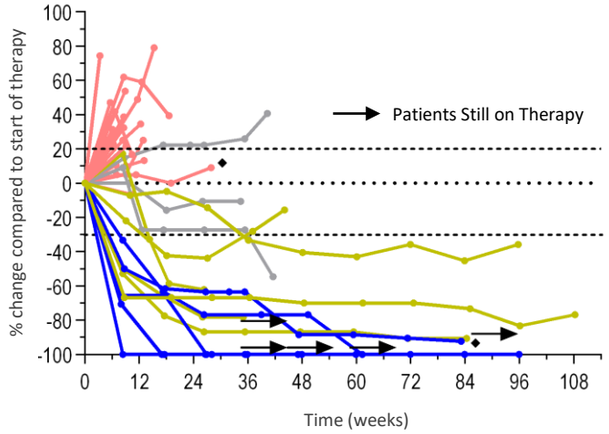
TACTI-002/KEYNOTE-798: 2nd Line Head & Neck Squamous Cell Carcinoma (Part C)

Responses at all PD-L1 levels including 5 iCRs



Deep and durable responses



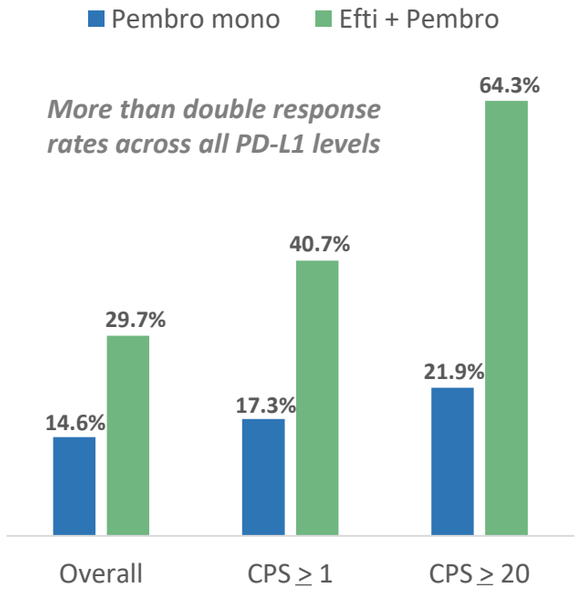
	Efti + Keytruda Combination*	Keytruda Monotherapy#
Clinical Trial & Phase	P2 (TACTI-002/KN-798)	P3 (KN-040)
Patient Number / tumor type	39 / 2L HNSCC	247 vs. 248 / 2L HNSCC
PD-L1 Status	PD-L1 All comer	PD-L1 All comer
Complete Response (CR) %	**13.5%**	**1.6%**
Partial Response (PR) %	**16.2%**	**13%**
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**

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

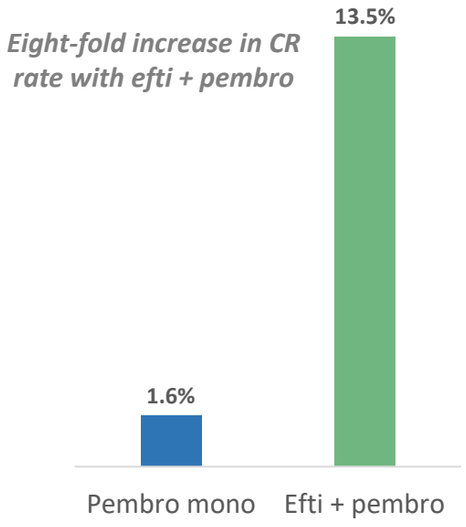
Robust ORR, CR and DoR for Efti + Pembro vs Pembro

TACTI-002/KEYNOTE-798: 2L HNSCC (Part C)

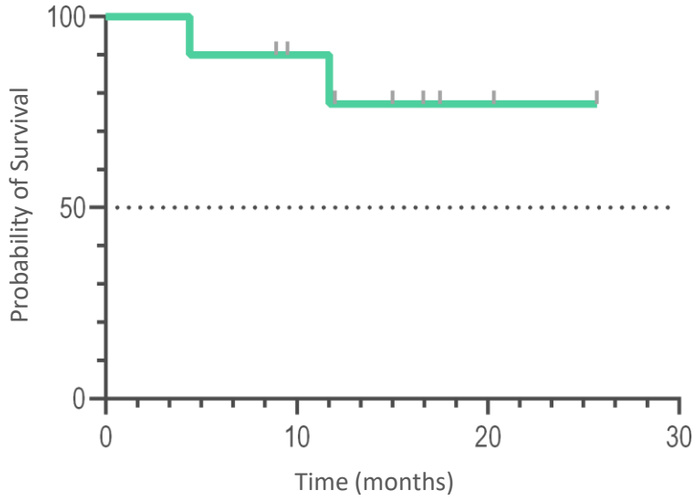
Overall Response Rate



Complete Response Rate



Duration of Response (DoR)#



Source: SITC 2021. Data cut-off date Aug 4, 2021. Data for Keytruda derived from KN040 (EEW Cohen et al., *The Lancet* 2018). # For confirmed responders (N=10)

Fast Track Designation in 1L HNSCC

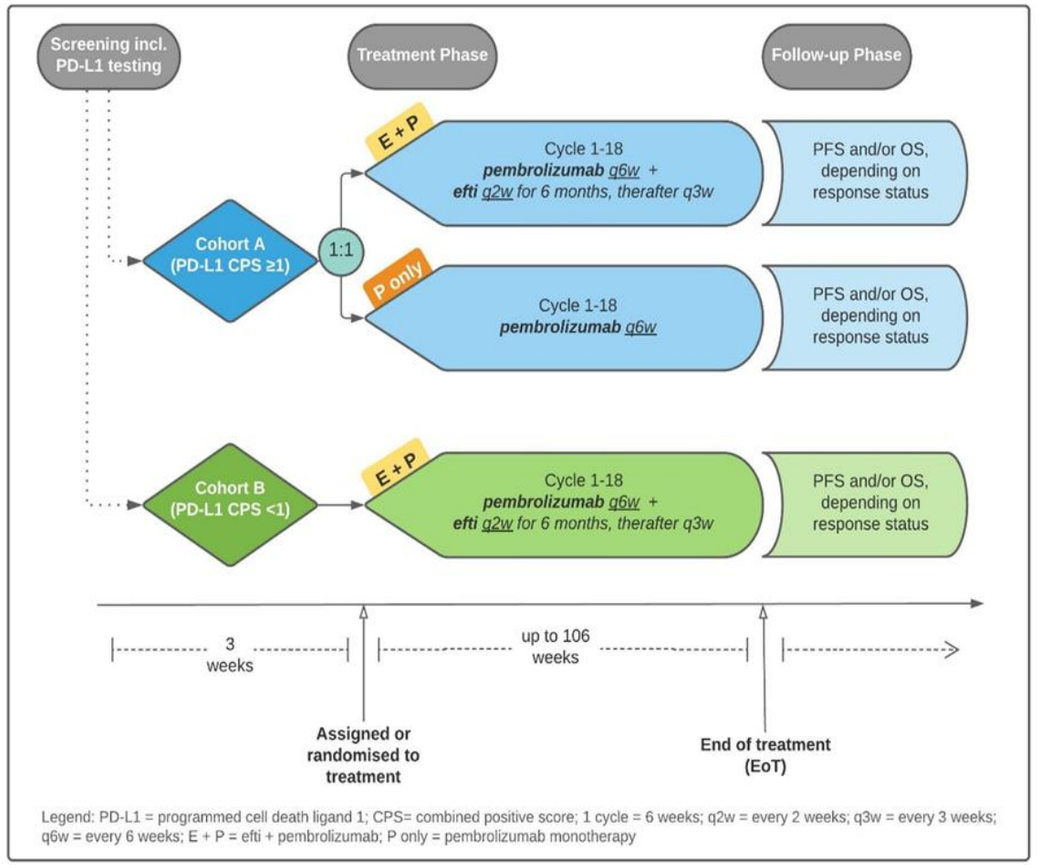
TACTI-003: Phase IIb in 1st Line Head and Neck Squamous Cell Carcinoma (HNSCC)

Status:

- Recruiting (~30% enrolled; recruitment accelerating as further sites have been activated*)
- **FDA Fast Track designation on strength of TACTI-002 data in 2L HNSCC**

Design:

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



*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

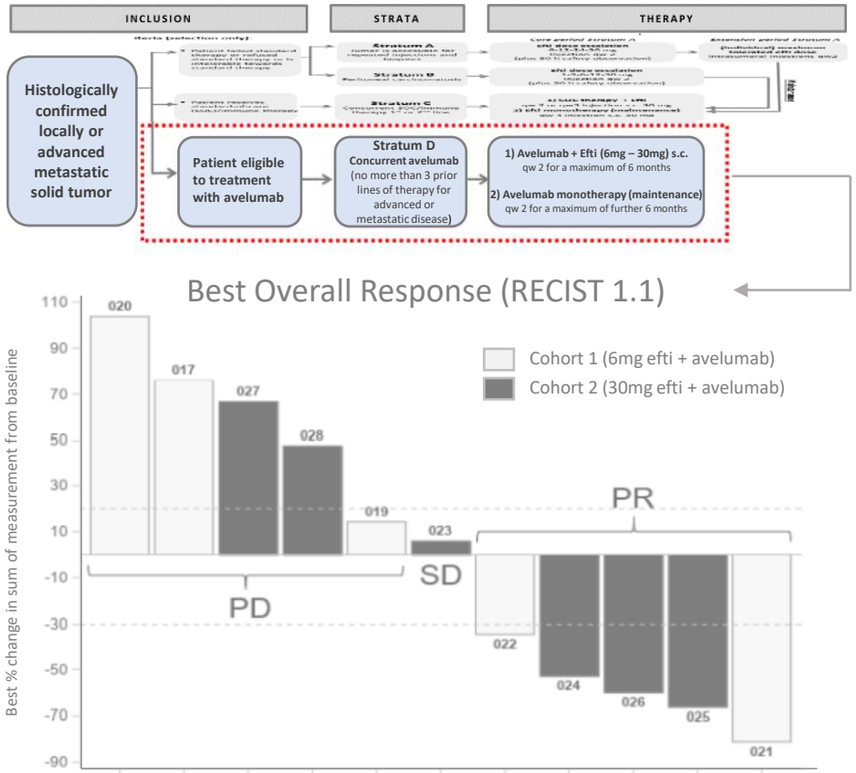
Efti + Anti-PD-L1 (Avelumab) in Advanced Solid Tumors

INSIGHT-004: Phase I in Various Advanced Solid Tumors

Merck KGaA, Darmstadt, Germany

KRANKENHAUS NORDWEST

Dose escalation study evaluating efti in combination with BAVENCIO (avelumab)



Key Takeaways*:

- Combination safe with promising signals of efficacy including durable responses
- 5/12 (42%) partial responses in different indications: (1) 1st line MSI high colorectal cancer; (2) 1st line pleural mesothelioma; (3) after radio-chemo in squamous anal cell; (4) pre-treated squamous cervical cancer (PD-L1 TPS < 1%) carcinoma; (5) 3rd line gastroesophageal junction
- Activity also observed in pre-treated non-immunogenic tumors

*ASCO 2021: J Clin Oncol 39, 2021 (suppl 15; abstr 2518); DOI 10.1200/JCO.2021.39.15_suppl.2518

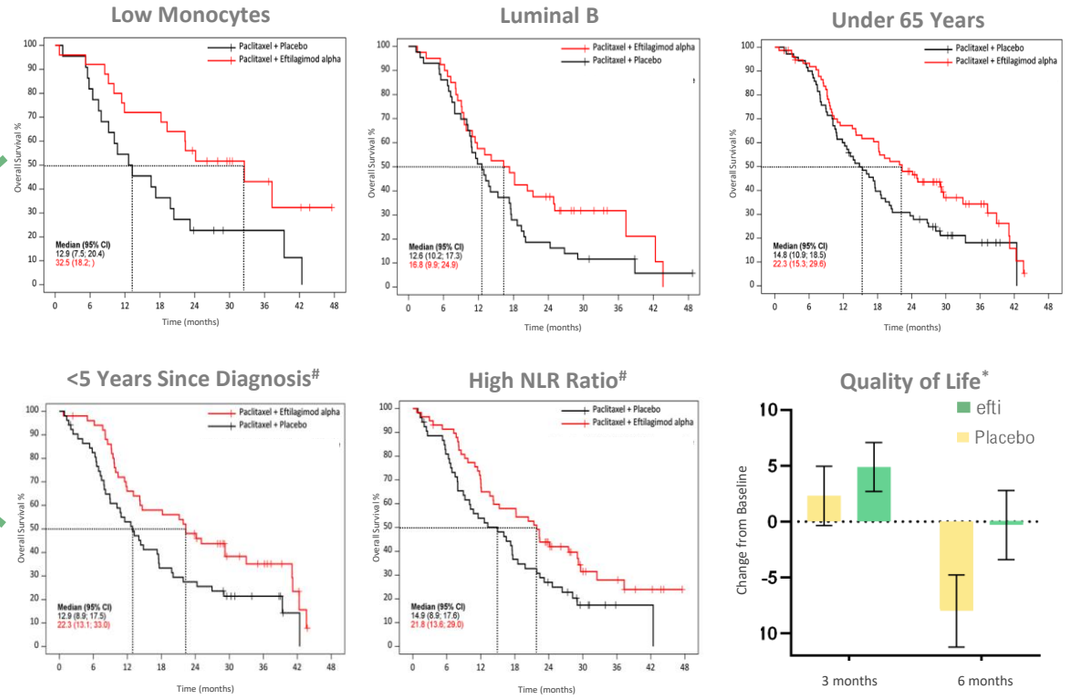
AIPAC Phase IIb: Significant OS Improvement Across Multiple Pre-Specified Subgroups with Superior QoL

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)

Subgroup Analysis	Median Overall Survival	Hazard Ratio	P-value
Low Monocytes	*+19.6 months mOS*	*HR 0.44*	*p=0.008*
<5 Years Since Diagnosis#	*+9.4 months mOS*	*HR 0.57*	*p=0.008*
Under 65 Years	*+7.5 months mOS*	*HR 0.66*	*p=0.017*
High NLR Ratio#	*+6.9 months mOS*	*HR 0.61*	*p=0.012*
Luminal B	*+4.2 months mOS*	*HR 0.67*	*p=0.049*
No Prior Taxanes	*+4.8 months mOS*	*HR 0.74*	*p=0.076*

- Efti + paclitaxel had ORR & DCR of 48.3% and 85.1% vs placebo ORR & DCR of 38.4% and 75.9%, respectively
- Efti + paclitaxel led to +2.9 month increase in median OS to 20.4 months, and +0.46 month increase in PFS to 7.12 months** *(Effect on PFS observed until paclitaxel discontinued at 6 months under European trial design)*



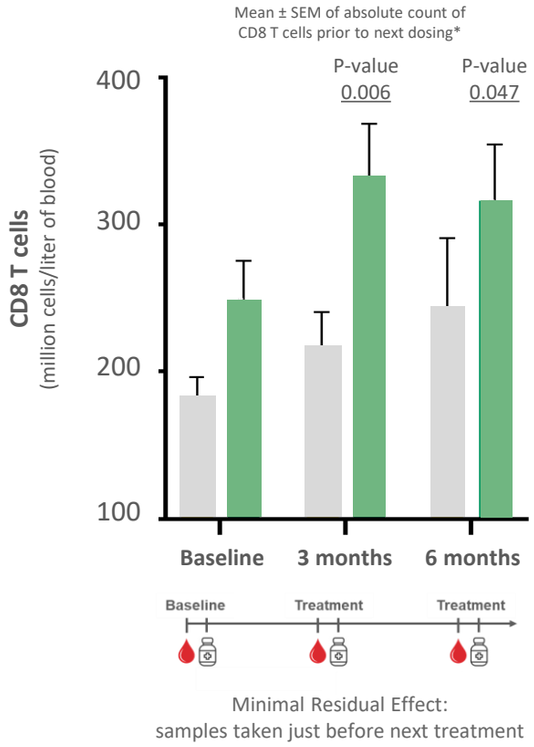
Statistically-significant OS improvement in multiple pre-specified subgroups, with no Quality of Life deterioration observed in efti group at 6 months versus significant deterioration in placebo group

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; # High NLR Ratio & <5 Years Since Diagnosis post-hoc analysis subgroups

Substantial Increase in Monocytes, CXCL10 & Cytotoxic CD8+ T Cells Correlated to Stronger OS

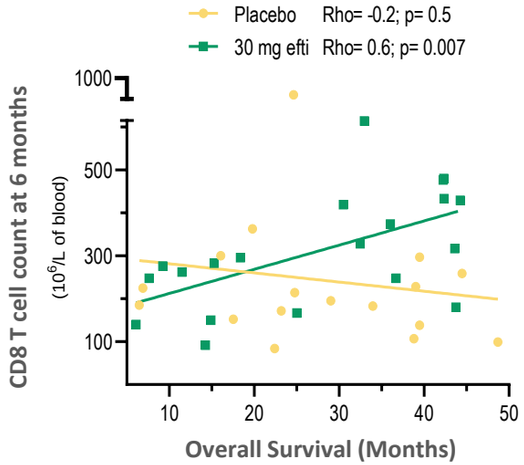
AIPAC: Active Immunotherapy PAClitaxel in HER2–/ HR+ metastatic breast cancer Phase IIb Trial

Statistically-Significant Increase of Cytotoxic CD8+ T Cell Count



Minimal Residual Effect:
samples taken just before next treatment

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



Fold Change of CD8+ & CD4+ T Cells, Monocytes, and CXCL10

Biomarker	Treatment	Fold change mean ± SEM Median (25%Q-75%Q)	p-value*
Monocytes	efti (n=42)	5.81 ±1.49 2.07 (1.40-5.16)	0.025
	Placebo (n=34)	2.29 ±0.44 1.47 (1.21-2.23)	
Activated CD8 T cells	efti (n=45)	2.54 ±0.35 1.76 (1.10-3.25)	0.027
	Placebo (n=35)	1.86 ±0.40 1.17 (0.79-1.67)	
Activated CD4 T cells	efti (n=42)	2.17 ±0.23 1.56 (1.07-3.14)	0.206
	Placebo (n=34)	1.54 ±0.13 1.31 (1.05-1.84)	
CXCL10	efti (n=32)	2.78 ±0.30 2.39 (1.36-3.93)	0.006
	Placebo (n=22)	1.56 ±0.18 1.40 (0.86-2.18)	

*2-sided rank-sum Wilcoxon test; 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

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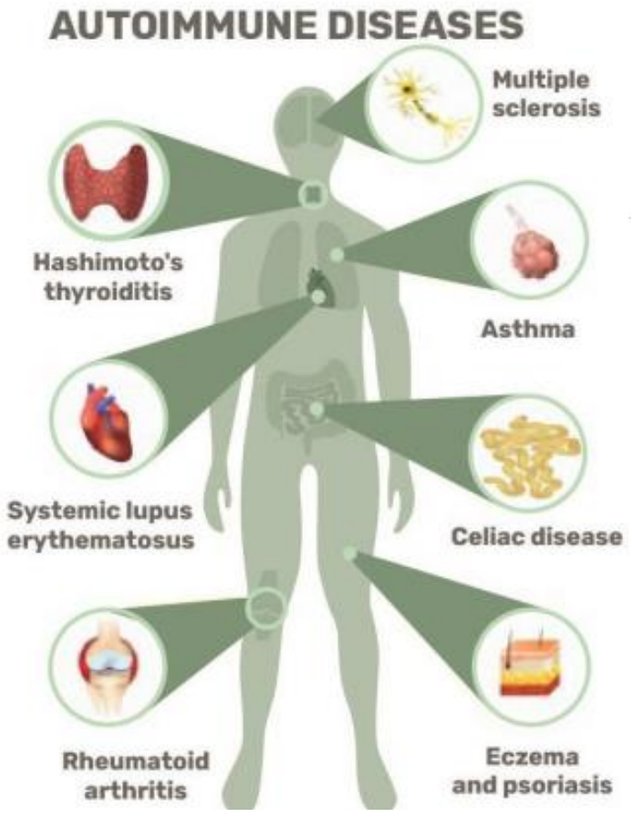
LAG-3 IMMUNOTHERAPY

LAG-3 Therapeutics for Autoimmune Disease

LAG-3: A Key Target in Autoimmune Diseases



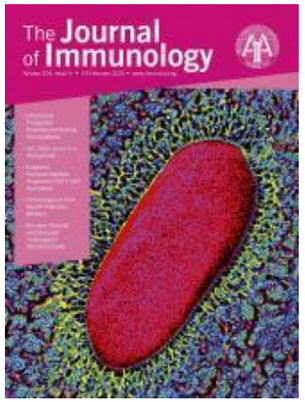
Present Approaches Fight the Symptoms of Autoimmune Diseases

Treating general inflammation:
Corticoids, methotrexate, anti-TNF-α,
-IL-6, -IL-17, -IL-23 mAbs

Future Approaches Target the Causes of Autoimmune Disease

Treating the disease process:
Targeting autoimmune memory T cells
with depleting or agonist LAG-3 antibodies

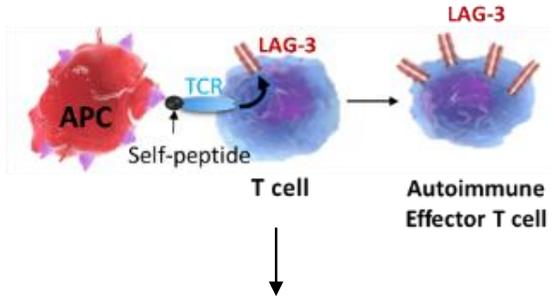
IMP761: Broad Potential Targeting Auto-Reactive Memory T Cells



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



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 autoimmune diseases, IMP761 is a **potential game-changer in autoimmune diseases**.

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

Summary

2022 Milestones

- Clinical data from TACTI-002
  - ✓ 1L NSCLC Oral Presentation at ASCO
  - ✓ 2L NSCLC PD-X refractory data presented at European Lung Cancer Congress 2022
- Additional clinical data updates through year end
  - New data from Phase II TACTI-002 in 1L NSCLC
  - Initial results from INSIGHT-003 (first triple-combo data)
  - Update from Phase IIb TACTI-003 in 1L HNSCC
- Ongoing recruitment & updates from randomized trial in 1L HNSCC (TACTI-003)
- Regulatory updates
- Manufacturing scale up to 2,000L
- Expansion of existing programs
- Updates from IMP761 and partnered programs (e.g. Novartis, GSK, EOC Pharma)

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$80 million* in cash
- Cash runway to early CY2024*
- Ticker symbols:
  - ✓ IMM (ASX)
  - ✓ IMMP (NASDAQ)
- Market cap ~A$217M / $147M US**

*As reported in Quarterly Activities Report for quarter ended 30 June 2022 (Q4 FY22); ** As of Sept 28, 2022

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LAG-3 IMMUNOTHERAPY

Thank You