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LAG-3 IMMUNOTHERAPY

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

Update on new **TACTI-002 Phase II** and initial **INSIGHT-003** Phase 1 data presented at SITC 2022

Global Webcast Presentation

(ASX: IMM, NASDAQ: IMMP)

Date & Time Thursday, 10 November 2022, at 5 pm U.S. ET
Friday, November 11, at 9 am Australian Eastern Daylight Time (AEDT)

Registration Webcast Link

Forward-Looking Statements

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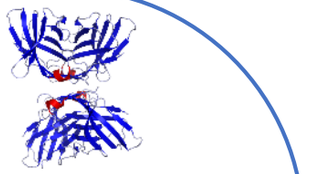
Eftilagimod Alpha (efti): A First-in-Class Soluble LAG-3 Protein

LAG-3: Approved Checkpoint with Unique Characteristics

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



Cytotoxic T lymphocyte Antigen-4 (CTLA-4)

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

YERVOY (ipilimumab)

Programmed Cell Death Protein-1 (PD-1)

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

KEYTRUDA (pembrolizumab) OPDIVO (nivolumab)

Lymphocyte Activating Gene-3 (LAG-3)*

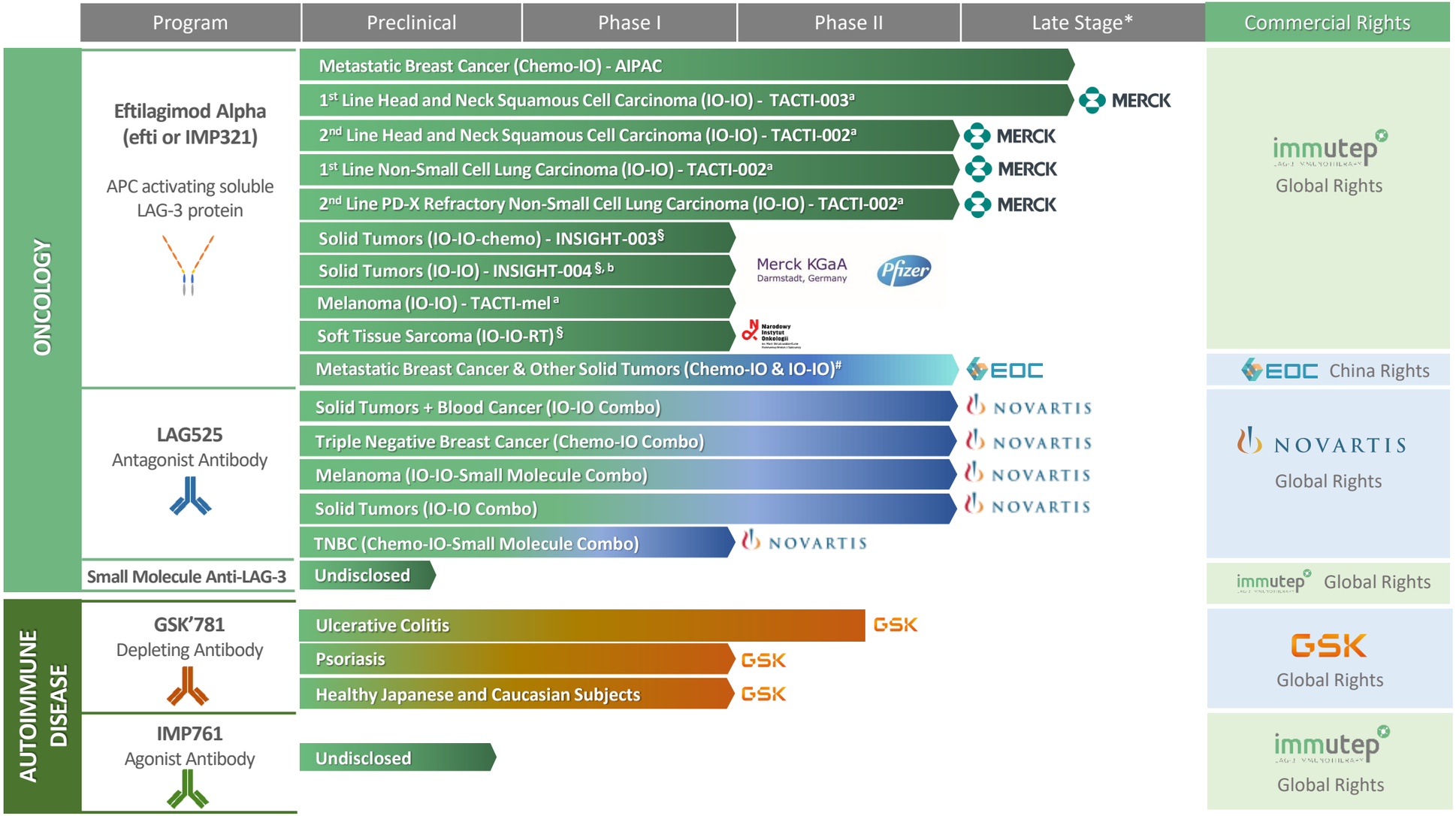
Relatlimab (anti-LAG-3) approved 2022 in combination with Opdivo; BMS est. ***>$4 billion*** *in NRA sales** in 2029*

Opdualag (nivolumab and relatlimab-rmbw)

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

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

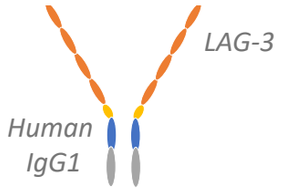
Immutep LAG-3 Pipeline



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

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

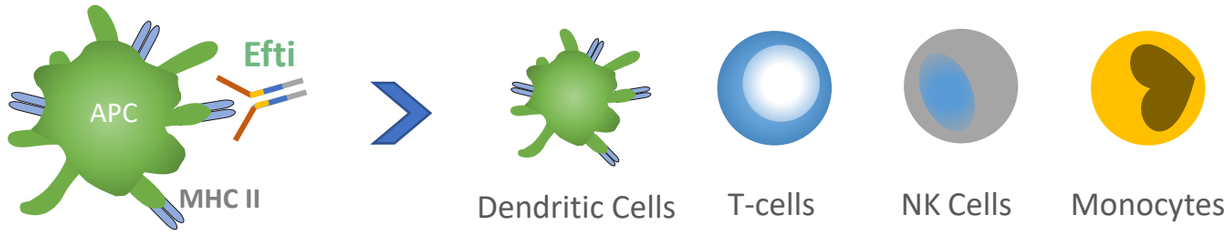
Eftilagimod alpha (Efti)



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

Pushing the Accelerator on the Immune System

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



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

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

Compelling pairing capabilities

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

TACTI-002 Phase II Trial – Part A:

Efti + Pembrolizumab Combination in 1st Line Non-Small Cell Lung Cancer (1L NSCLC)

Treatment Options in 1L NSCLC Limited by Durability & Tolerability

1L NSCLC Epidemiology[1,2]

– 1.87 million NSCLC diagnoses per annum –

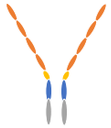
– Most frequent cause of cancer death (18%) –

– 1.3 million patients develop metastatic disease & are eligible to receive anti-PD-(L)1 –

Unmet need in 1L NSCLC as median Overall Survival still <24 months for most patients

Patients with **low PD-L1 status** have poorer responses to checkpoint therapy (TPS <50% = **~70% patient population**)

High discontinuation rates due to toxicity **limits Duration of Response** of checkpoint & chemo combinations



Well-tolerated treatment options that synergize with SOC and improve outcomes across PD-L1 status, including negative & low PD-L1 tumors, are necessary in frontline NSCLC. Efti in combination with anti-PD-1 immunotherapy has significant potential to fill this unmet need.

[1] Calculated from Global Cancer Observatory (WHO), 2020 data; [2] Informa Pharma Intelligence Report 2018 for US, Japan and EU5

Phase II Trial Evaluating Efti + Pembro in 1L NSCLC

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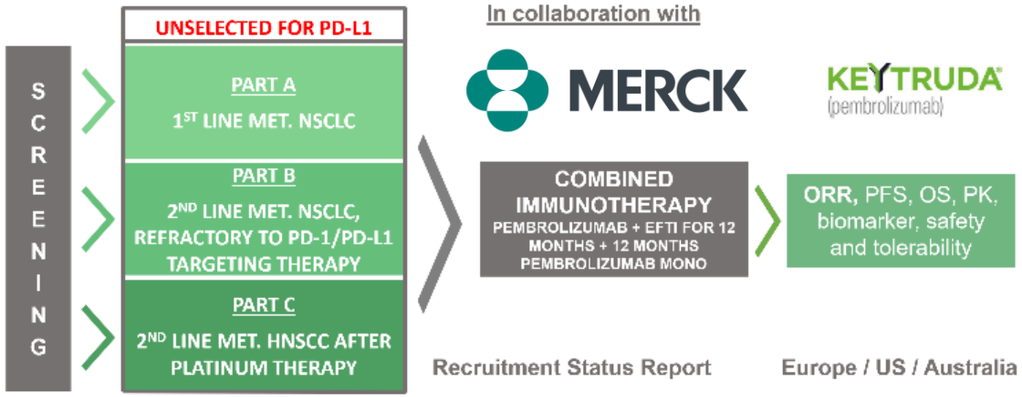
TACTI-002/KEYNOTE-798: 1st Line Non-Small Cell Lung Cancer (Part A)

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	113 (99.1) / 1 (0.9)
PD-L1 expression TPS[1], n (%)	< 1% 1-49% ≥ 50%	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)

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

- ~75% of patients have PD-L1 TPS of <50%
- 34.3% of patients have PD-L1 TPS of <1%
- 99.1% had metastatic disease at study entry

Data cut-off July 1, 2022

[1] Central assessment of PD-L1 TPS using Dako PD-L1 IHC 22C3 pharmDx for 90 pts. For 18 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)

ORR – PD-L1 all comer

Response	iRECIST[4] n (%)	RECIST 1.1[4] n (%)
Complete Response	**1 (0.9)**	**1 (0.9)**
Partial Response	45 (39.5)	43 (37.8)
Stable Disease	37 (32.5)	37 (32.5)
Progression	18 (15.8)	20 (17.5)
Not Evaluable[1]	13 (11.4)	13 (11.4)
ORR, (ITT=114); [95% CI][2]	**46 (40.4)**; [31.3-50.0]	**44 (38.6)**; [29.6-48.2]
ORR (EVAL[3] =101); [95% CI][2]	**46 (45.5)**; [35.6-55.8]	**44 (43.6)**; [33.7-53.8]

- **Primary Objective achieved (ORR > 35%)**
- Responses confirmed in 87% of cases[6]
- Responses comparable between iRECIST and RECIST 1.1.
- Comparable ORR for squamous and non-squamous histologies
- 45% ORR for TPS of 1-49% and >30% & for PD-L1 negative patients

Tumor Response by PD-L1 status[5]

ORR & DCR by iRECIST, n (%)	<1%, N=32	1-49%, N=38	≥50%, N=20	≥1% N=58
ORR [95% CI][2]	**10 (31.3)** [16.1-50.0]	**17 (44.7)** [28.6-61.7]	**11 (55.0)** [31.5-76.9]	**28 (48.3)** [35.0-61.8]
DCR [95% CI][2]	**21 (65.6)** [46.8-81.4]	**30 (78.9)** [62.7-90.5]	**16 (80.0)** [56.3-94.3]	**46 (79.3)** [66.7-88.8]

Note: ORR for combined central + local PD-L1 (N=108): ORR for PD-L1 TPS <1% of 27%; ORR for 1-49% of 42.9%; ORR for ≥50% of 51.7%; ORR for ≥1% of 46.5%.

Tumor Response by tumor type

Tumor Response, n (%)	Squamous, N=40	Non-squamous, N=72
ORR [95% CI][2]	**15 (37.5)** [22.7-54.2]	**29 (40.3)** [28.9-52.5]
DCR [95% CI][2]	**33 (82.5)** [67.2-92.7]	**48 (66.7)** [54.6-77.3]

Note: 2 pts with tumor type not otherwise specified had a PR as BOR.

Data cut-off July 1, 2022; ITT: Intention-to-treat (N=114). EVAL: Evaluable population (N=101). 1. Pts with no on-study post-baseline tumor staging for any reason. 2. 95% confidence intervals calculated using Clopper-Pearson method. 3. All pts with ≥1 on-study post-baseline tumor staging. 4. Unconfirmed. 5. Central assessment of PD-L1 TPS using Dako IHC 22C3 pharmDx for 90 pts. 6. Confirmed ORR by iRECIST: 35.1% (95% CI: 26.4-44.6)

Responses Across Entire PD-L1 Spectrum

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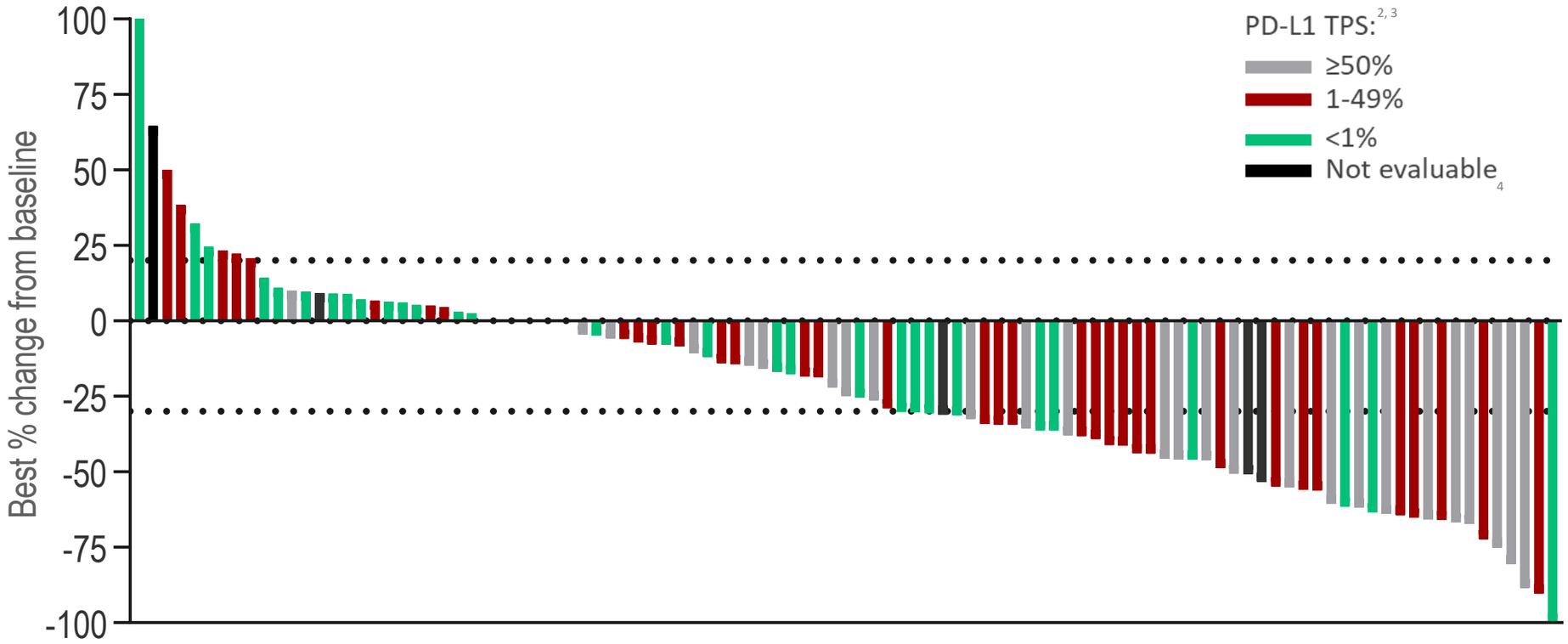
TACTI-002/KEYNOTE-798: 1L NSCLC (Part A)



- Responses are deep and across all PD-L1 subgroups
- ~70 % of patients have a decrease of target lesions

Data cut-off July 1, 2022; [1] all patients with ≥1 post-baseline CT scan; N=103; [2] PD-L1 assessed by central assessment (Dako kit), n=82; [3] local assessment included due to non evaluable central assessment results, n=16; [4] no results available for neither central nor local testing, n=5.

Deep & Durable Responses: Interim Median DoR 21.6 Months

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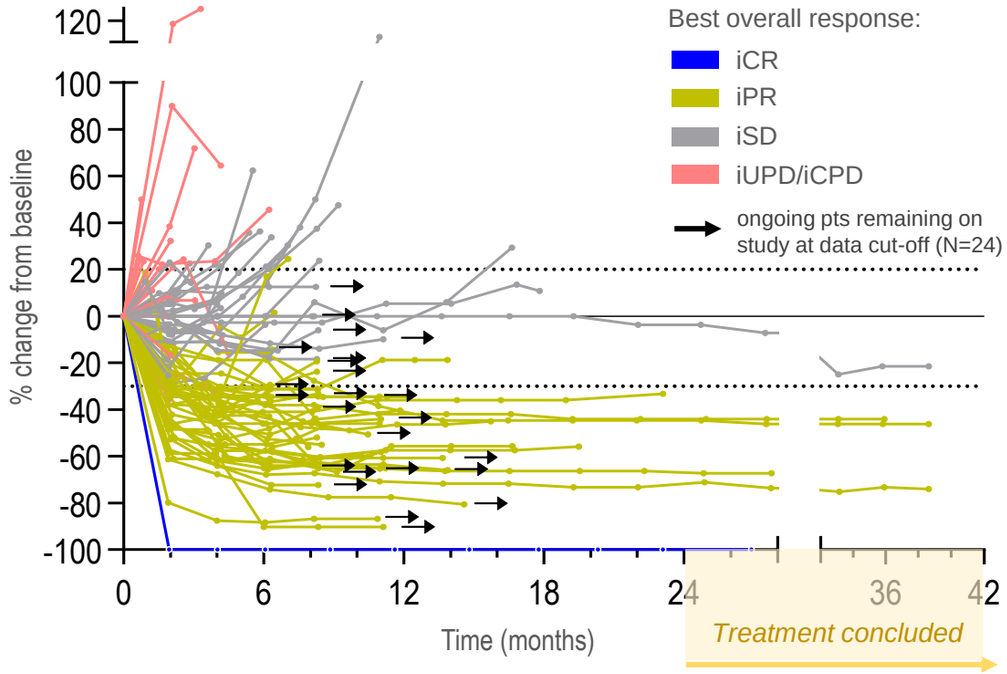
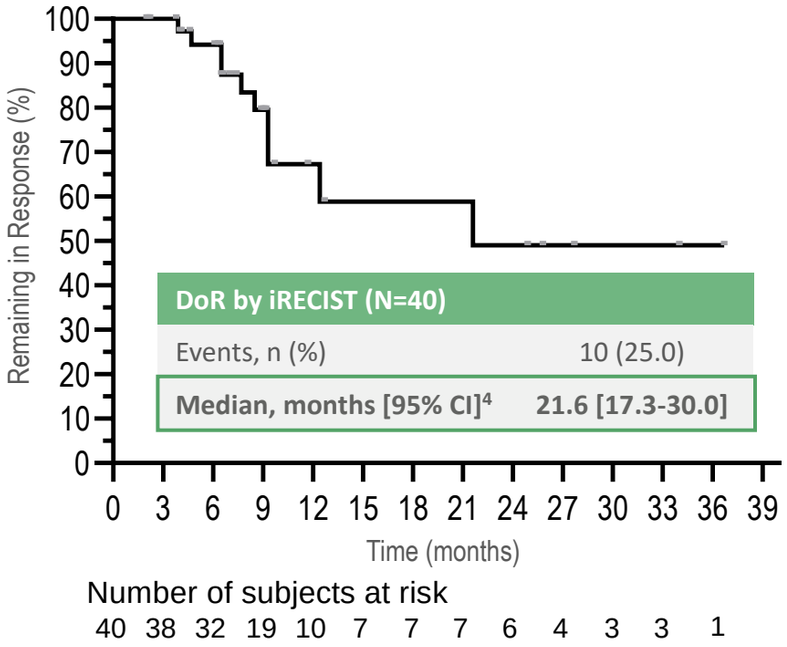
TACTI-002/KEYNOTE-798: 1L NSCLC (Part A)

Efficacy: Change in Tumor Size Over Time[1]



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



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

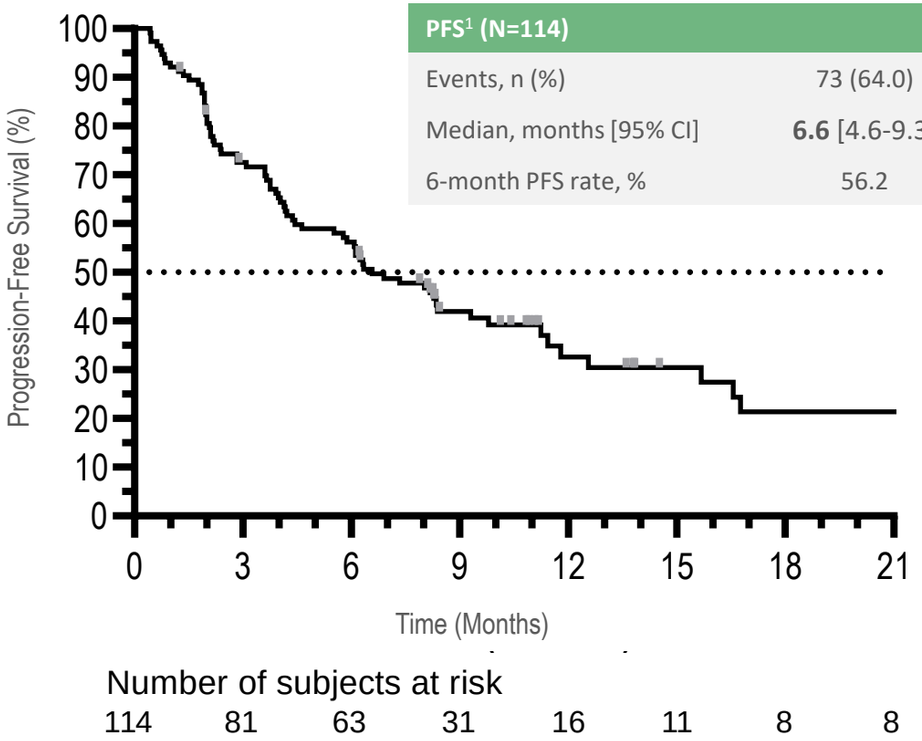
- Response onset is early & responses are long-lasting: interim mDoR 21.6 months
- Less than 10% of responding patients progress within 6 months

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

Promising Progression Free Survival (PFS)

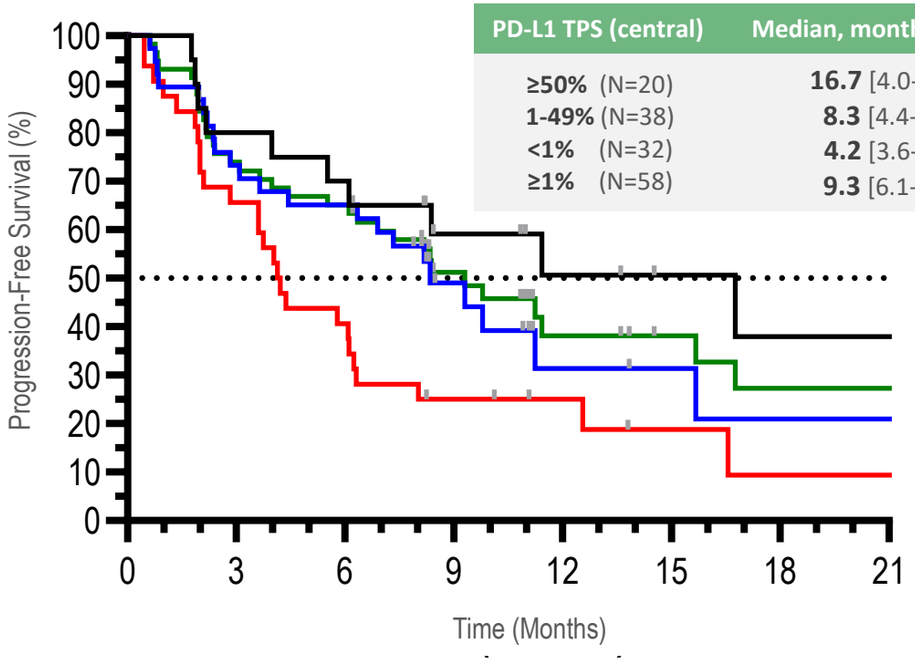
TACTI-002/KEYNOTE-798: 1L NSCLC (Part A)

PFS[1] – PD-L1 all comer (ITT)



PFS[1] (N=114)	
Events, n (%)	73 (64.0)
Median, months [95% CI]	**6.6** [4.6-9.3]
6-month PFS rate, %	56.2

PFS[1] by PD-L1 status



PD-L1 TPS (central)	Median, months [95% CI]	Events, n (%)
≥50% (N=20)	**16.7** [4.0-16.8]	10 (50.0)
1-49% (N=38)	**8.3** [4.4-15.7]	23 (60.5)
<1% (N=32)	**4.2** [3.6-6.1]	26 (81.3)
≥1% (N=58)	**9.3** [6.1-15.7]	34 (58.6)

Number of subjects at risk

≥50%	20	17	15	10	7	5	4	4
1-49%	38	28	25	11	5	4	3	3
<1%	32	22	14	8	5	3	2	2
≥1%	58	43	38	20	11	8	6	6

Data cut-off July 1, 2022 [1] by iRECIST. [2] 95% confidence intervals calculated using Clopper-Pearson method. *mPFS of central & local assessment was 9.8 months for PD-L1 TPS ≥1%, 8.3 months for PD-L1 TPS 1-49%, 11.8 months for PD-L1 ≥50%, and 4.2 months for PD-L1 <1%
Note: figures have been cropped for visualization purposes

Initial Efti + Pembrolizumab Pharmacodynamic Data

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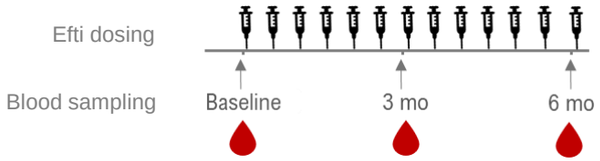
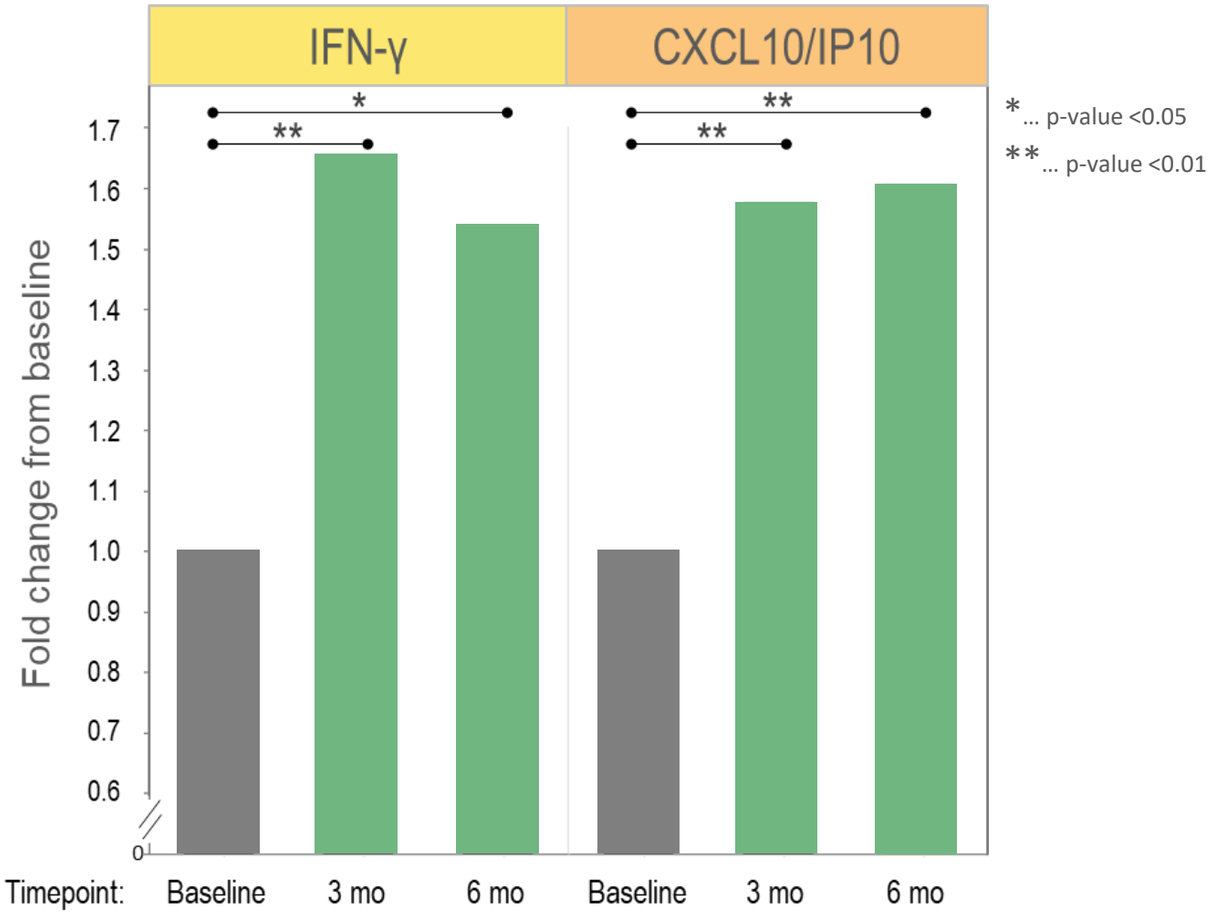
TACTI-002/KEYNOTE-798: 1L NSCLC (Part A)

Key takeaways:

- Significant increase in IFN-γ and CXCL10 serum biomarkers for systemic TH1 response at 3 and 6 months compared to baseline. Substantiates efti's unique stimulation of the immune system, also seen in randomized AIPAC Phase IIb trial in Breast Cancer.
- Increased IFN-γ levels have been associated with objective tumor responses with anti-PD-1 therapy[1] & CXCL10 has been shown to contribute to "hot" tumor microenvironment[2]
- Increase is seen early (<24 hours) after first efti administration[3]
- Blood samples collected pre-efti dosing at baseline, after 3 months (n=68) and 6 months (n=36), 2 weeks after the previous efti dosing -> *minimal residual effect*





Data cut-off: July 1, 2022; Note: Plasma levels of IFN-g and CXCL10/IP10 are shown as mean of % change to baseline. Two-sided Wilcoxon matched-pair signed rank test on timepoint versus baseline are shown

[1] Cancer Sci. 2017 May; 108(5): 1022–1031. [2] SCIENCE IMMUNOLOGY 22 Jul 2022, Vol 7, Issue 73 DOI: 10.1126/sciimmunol.abq6509. [3] Data not shown.

Exposure & Safety

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

Overview of adverse reactions

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)*

- Median efti exposure was 24.7 weeks (range 1- 58.0) and 24.2 weeks for pembro (range 0.1-103.3).
- 6 pts completed 2 years of treatment and 24 pts still on therapy at data cut-off.
- 26.3% of pts had any type of local injection site reactions[3] G1+2. No reactions ≥ G3 were reported.
- irAEs2 >2% were: hypothyroidism (6.1%), pneumonitis (4.4%), hyperthyroidism (3.5 %), and myositis (2.6%).

Frequent TEARs (incidence ≥10%) by PT related to treatment[2]

Adverse event by PT, n (%)	Any grade	G3	G4	G5
Pruritus	23 (20.2)	*N/A*	*N/A*	*N/A*
Asthenia	22 (19.3)	*N/A*	*N/A*	*N/A*
Rash	15 (13.2)	*N/A*	*N/A*	*N/A*
Diarrhoea	12 (10.5)	*1 (0.9)*	*N/A*	*N/A*
Fatigue	12 (10.5)	*1 (0.9)*	*N/A*	*N/A*

- Rate of discontinuation due to drug related adverse events comparable to pembrolizumab monotherapy**
- **Safety profile**, including immune mediated adverse events, **comparable to pembrolizumab monotherapy** except for the addition of any type of local injection site reactions**

Preliminary data, cut-off July 1, 2022; (**) - Source: KN042; KN001; KN024, TACTI-002); [1] rated according to the current NCI CTCAE (v5.0); [2] relationship to efti and/or pembrolizumab could not be ruled out; [3] any PT containing injection site
PT ~ Preferred Term; TEAE – treatment emergent adverse event

Benchmarking against Pembrolizumab Monotherapy: Strong ORR & PFS Across PD-L1 Spectrum

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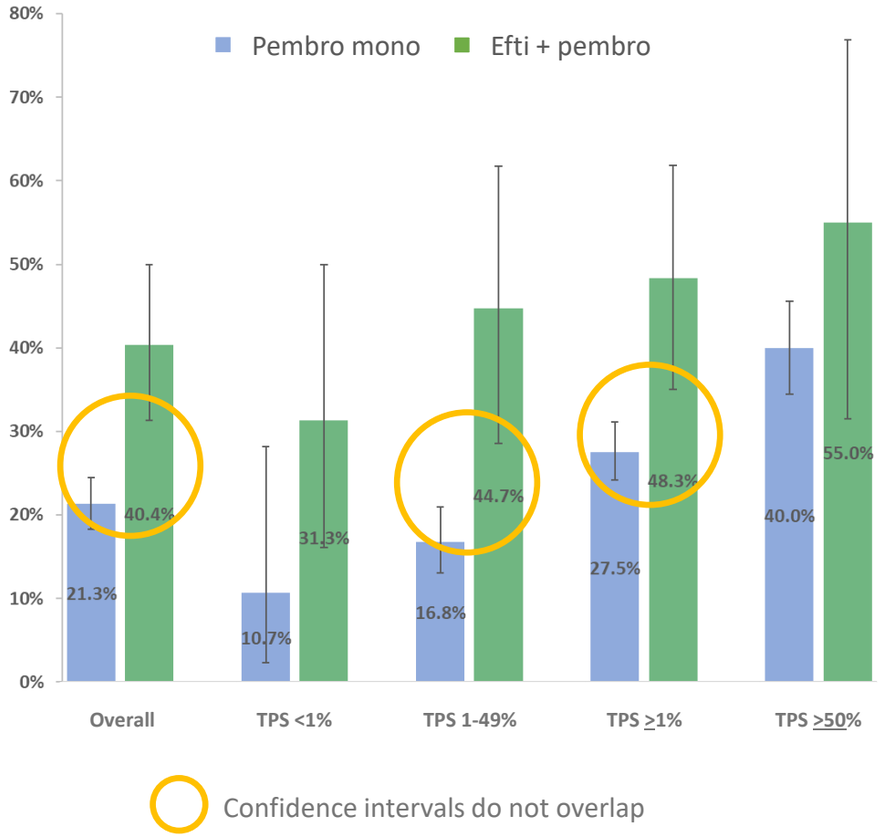
TACTI-002/KEYNOTE-798: 1L NSCLC (Part A)

Key Takeaways

- Superior ORR/PFS across all PD-L1 levels
- ORR at ≥1% and 1-49% confidence intervals do not overlap with ORR reported for pembro monotherapy
- Sustained, durable responses similar to pembro monotherapy
- Well tolerated & safety profile remains similar to pembro alone
- Efti has potential to substantially increase # of patients that respond to anti-PD-1 therapy, due to its orthogonal mechanism of action
- Of note, efti + pembrolizumab has **Fast Track Designation in ≥1% TPS** in 1st Line NSCLC

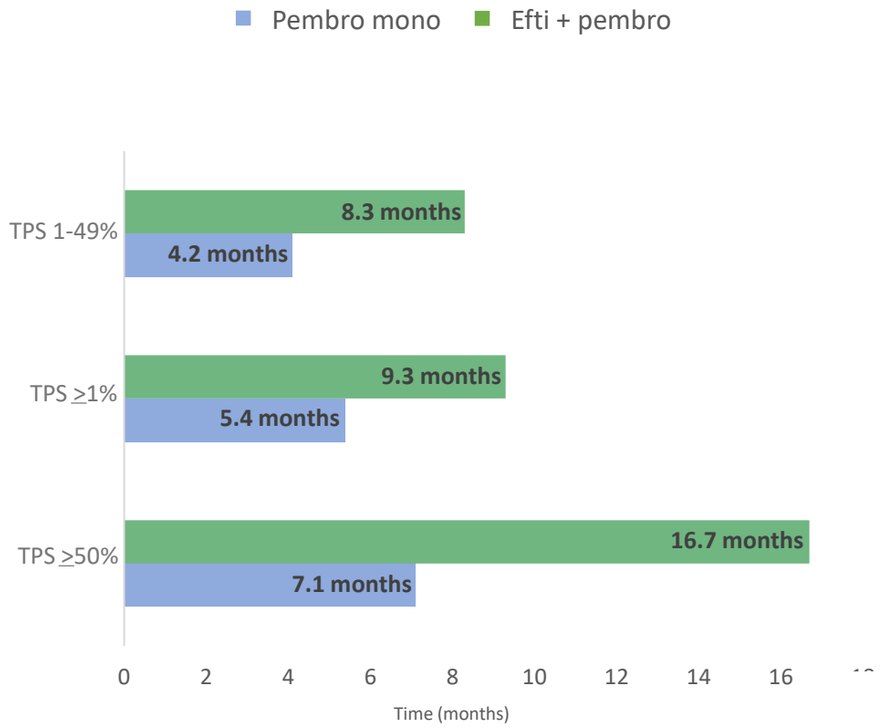
Overall Response Rate (ORR)

(with 95% confidence interval)



Median Progression Free Survival# (PFS)

(by PD-L1 TPS Score)



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

Benchmarking against Pembrolizumab Monotherapy and Pembrolizumab-Chemotherapy Combination

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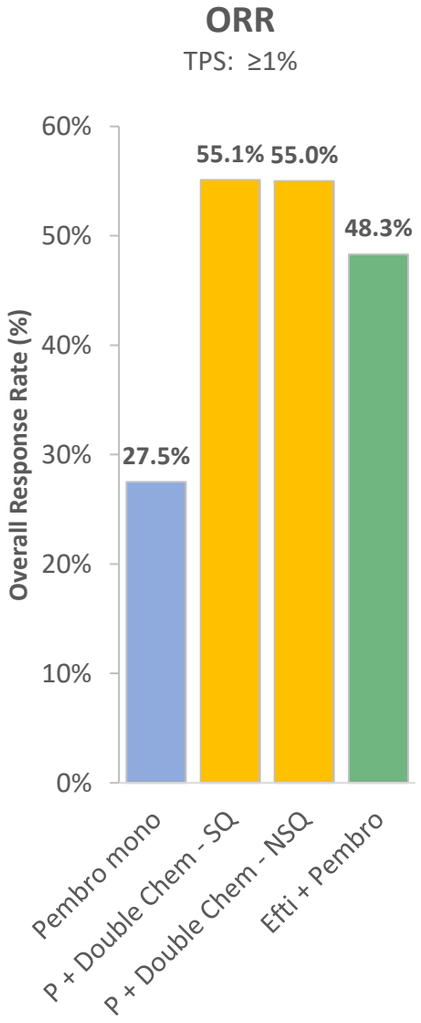
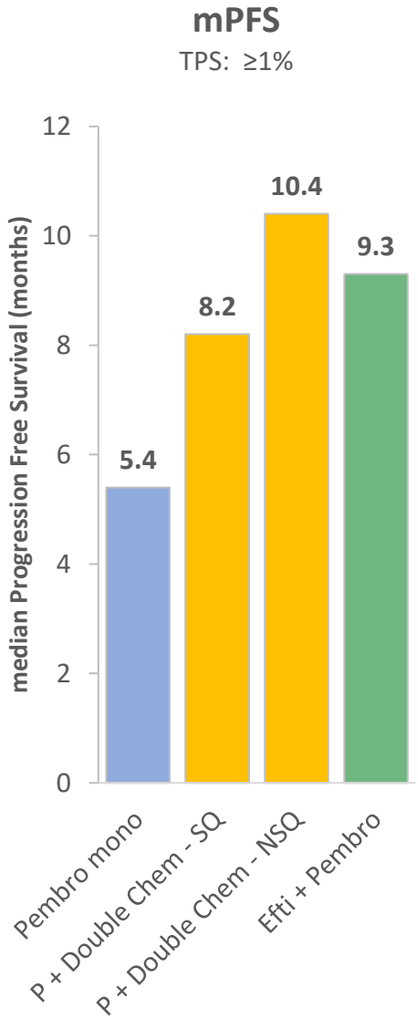
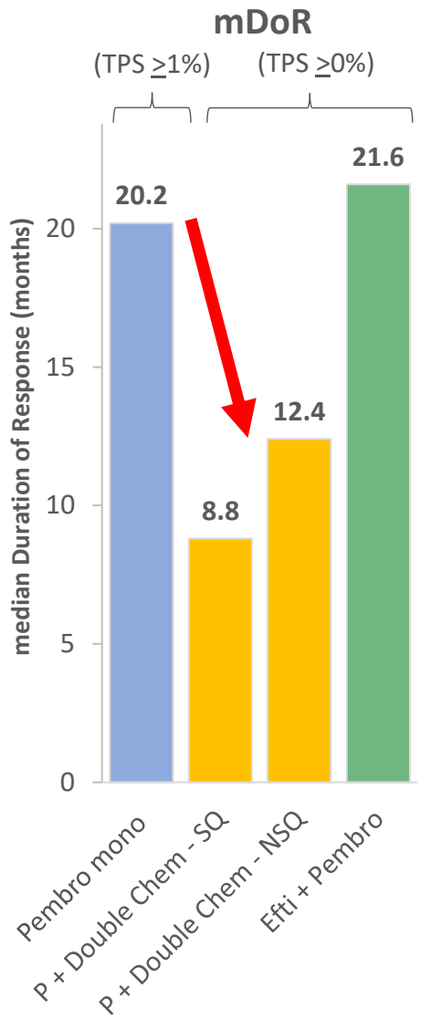
TACTI-002/KEYNOTE-798: 1L NSCLC (Part A)

Key Takeaways

- ORR & mPFS well ahead of pembro mono and similar range to chemo-IO
- DoR well ahead chemo-IO and ahead of pembro mono, despite TACTI-002 having 34.3% patients with TPS <1% vs pembro mono results from TPS ≥1% group
- On an individual basis, these key parameters for efti+pembro combination are impressive. Taken together, efti+pembro holds significant promise to positively impact patient outcomes.







ORR, mPFS and DoR data for pembrolizumab was derived from respective publications of KN-001; KN-042; KN-407; KN-189

INSIGHT-003 Phase 1 Trial:

Efti + Pembrolizumab + Chemotherapy Combination in 1L NSCLC

INSIGHT-003: 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

- Evaluating triple combination therapy consisting of efti in conjunction with carboplatin/pemetrexed & anti-PD-1 therapy
- Trial assessing safety, tolerability and initial efficacy
- 14 of 20 metastatic NSCLC patients have been enrolled between 2nd Aug 2021 until 14th Oct 2022 data cut off
- Median age 66 years; 71.4% male
- Majority of patients have PD-L1 TPS <50%
- Triple combination has been well tolerated & appears to be safe
- Promising early results with 72.7% response rate and 90.9% disease control rate in evaluable (N=11) 1st line NSCLC patients

Study Design

Inclusion	Histologically confirmed locally or advanced metastatic solid tumors; Stratum C focuses on NSCLC adenocarcinomas
	↓
	Patient receives standard-of-care (SOC)/immune therapy (with focus on carboplatin AUC5/pemetrexed/pembrolizumab in NSCLC adenocarcinomas
	↓
Stratum C	Concurrent SOC/immune therapy
	↓
Therapy	Based on most recent trial data on eftilagimod alpha (TACTI-002 trial), this cohort focuses on patients with NSCLC adenocarcinomas who are scheduled to receive carboplatin AUC5 + pembrolizumab + pemetrexed standard treatment. Induction: Efti 30mg s.c. injection qw 2 (for up to 24 weeks) Maintenance: Efti 30mg s.c. injection qw 2 or qw 3* *If the induction phase is less than 24 weeks, efti (30mg) is continued to be injected s.c. in a biweekly schedule until the end of the 24th treatment week (including induction phase), also if a maintenance SoC therapy is administered in a different schedule. After 24 weeks, efti (30mg) is injected s.c. in parallel with the SoC therapy, i.e., every 2 or 3 weeks dependent on the maintenance schedule of the SoC.

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

Interim Safety and Initial Efficacy

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

Initial Efficacy

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

Nine (81.8 %) patients had PD-L1 TPS <50%
with an ORR of 66.7 % in this subset

Interim Safety

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

No new safety signals detected thus far

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

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

1L NSCLC: Conclusion & Outlook

Conclusion:

- Large data set for efti+pembro (+chemo) combination with 120+ pts in 1st line NSCLC provides robust basis for phase III
  - ✓ Efti+pembro nearly doubles ORR of pembro mono (40.4% vs 21.3%), extends PFS, & maintains long DoR/safety profile of pembro mono
  - ✓ Due to orthogonal MoA, efti has potential to greatly increase # of patients who respond to anti-PD-1, including low/negative TPS
- Initial pharmacodynamic data of efti+pembro reveals significant increase in IFN-γ & CXCL10 (Th1 biomarker) → proof of principle
- Initial data shows efti + SoC doublet chemo + anti-PD-1 is feasible & safe with promising efficacy → increases flexibility for Phase 3 planning
- Strength of efti+pembro clinical data has led to Fast Track Designation in ≥1% TPS in 1st Line NSCLC

Outlook:

- Planning around intelligent registrational relevant trials (e.g. adaptive Phase 2/3) is in progress and under discussion with regulators. Potential design options are proceeding and include:
  - ✓ Superiority in terms of OS against pembro monotherapy restricted to patients where this combination could potentially demonstrate superiority
  - ✓ Superiority in terms of OS vs. doublet chemo + anti-PD-1/PD-L1 in appropriate 1st line NSCLC patients
- Trials are being planned in most cost-effective and time-efficient manner
- Final trial design and patient population will depend on feedback from agencies
- Expected timelines are design feedback in H1 2023 concluded and trial start in H2 2023

[1] Mok et al, The Lancet 2019, http://dx.doi.org/10.1016/S0140-6736(18)32409-7

Progress in HNSCC & MBC

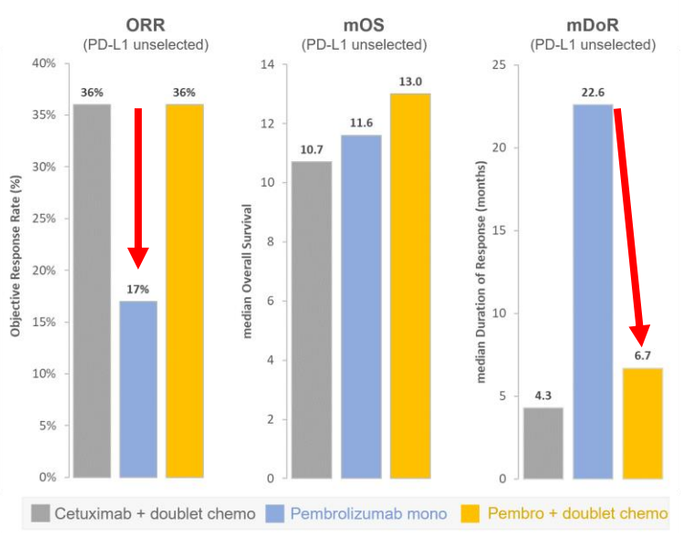
Targeting High Unmet Needs in 1st Line HNSCC & Metastatic Breast Cancer

HNSCC:

- Approx. 900,000 cases and over 400,000 deaths per annum worldwide[1].
- Pembrolizumab approved for 1st line HNSCC with chemo & also as monotherapy for patients whose tumors express PD-L1 (CPS ≥1)[1]

Unmet Need in 1st Line HNSCC:

- Attain comparable DoR plus higher ORR & improved OS with similar safety to pembro mono utilizing efti+pembro combination

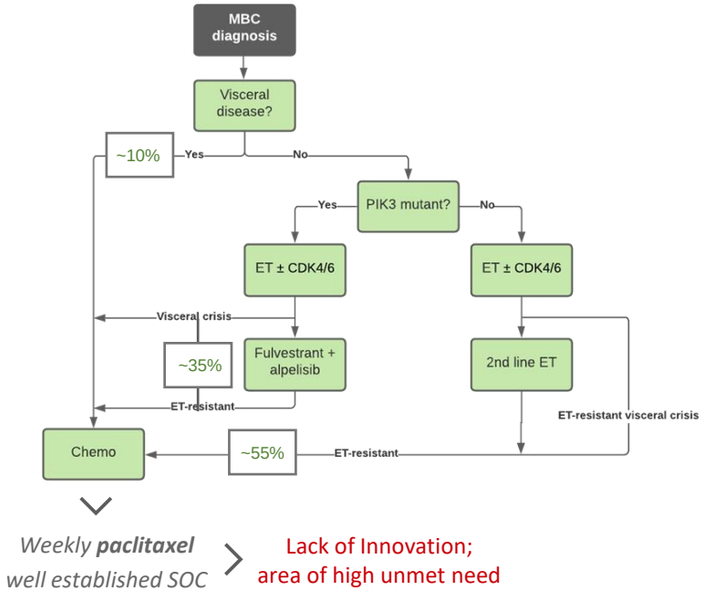


Breast Cancer:

- Over 2 million breast cancer diagnoses p.a. worldwide; ~70% are HR+/HER2neg/low
- Up to 550,000 patients in total develop metastatic disease and are eligible to receive chemotherapy[2,3]

Unmet Need in MBC:

- Improving OS while maintaining QoL in HER2– MBC patients utilizing efti in combination with standard of care chemotherapy



Update on randomized Phase IIb TACTI-003 trial

- ✓ Efti + pembro vs. pembro alone in CPS≥1; received FDA Fast Track designation on strength of TACTI-002 data in 2L HNSCC
- ✓ Recruiting (~38% enrolled; new sites activated & enrollment increasing*)
- ✓ Independent Data Monitoring Committee (IDMC) recommended continuing trial with no modifications after review of initial safety data; also reviewed initial efficacy data yet was not primary focus of the analysis
- ✓ *Trial in Progress* abstract presented at SITC 2022

Strategy in MBC

- ✓ Based on encouraging clinical data from the multicenter, placebo-controlled, double-blind, 1:1 randomized Phase IIb AIPAC trial and high unmet need, metastatic breast cancer (MBC) remains an attractive opportunity
- ✓ Immutep's preparations for future clinical development in MBC, including engagement with regulators, CROs & other stakeholders, are progressing

[1] FDA approval based on KN-048 (ORR, mOS, mDoR data from KN-048 trial). [2] WHO Global Cancer Observatory 2020 and Informa Intelligence October 2020. [3] Wang et al. BMC Cancer (2019) 19:1091.
*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

Summary

2022 Milestones

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

Corporate Snapshot

- Pioneering LAG-3 portfolio in oncology and autoimmune diseases with four product candidates in multiple clinical trials
- First-in-class positioning with eftilagimod alpha (efti)
- Multiple big pharma partnerships & collaborations, while retaining full control of efti (ex-China) & IMP761
- Well funded with ~A$73.9 million* in cash
- Cash runway to early CY2024*
- Market cap ~A$280M / $185M US**
- Ticker symbols:
  - ✓ IMM (ASX) & IMMP (NASDAQ)
- Total institutional ownership of ~57% includes Fidelity (FIL Ltd.) ~7.41% and Australian Ethical ~4.98%***

*As reported in Quarterly Activities Report for quarter ended 30 September, 2022 (Q1 FY23); ** As of 8 November, 2022. 26.76% of ordinary shares outstanding are represented by ADSs listed on NASDAQ.
***Based on latest substantial holder notices and Orient Capital Report reflecting the register as at 14 October 2022.

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Thank You