immutep
LAG-3 IMMUNOTHERAPY

Immutep TACTI-002 and INSIGHT Clinical Results & Update Global Webcast Slides

Immutep will present these slides as part of its global webcast, as follows:

Date & Time: Thursday, 10 June 2021, at 7:00 am Australian Eastern Standard Time (AEST) / Wednesday, 9 June, at 5:00 p.m. U.S. Eastern Daylight Time

Register: Interested parties join the webcast by registering via https://fnn.webex.com/fnn/onstage/g.php?MTID=ebcdb72840d84111e57730c2b6cccd2c1

A replay of the webcast will also be available at www.immutep.com

(ASX: IMM, NASDAQ: IMMP)

Notice: Forward Looking Statements

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Overview

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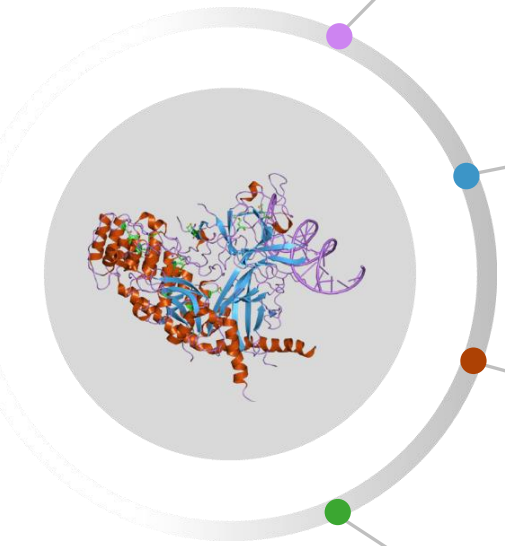

Immutep

is an innovative biotechnology company developing novel immunotherapies for cancer and autoimmune disease

Global leadership position

in LAG-3 with 4 product candidates in immuno-oncology and autoimmune disease

Clinical Potential

Immutep's product candidates have demonstrated clinical potential in a range of indications with high unmet need

Collaboration deals

executed with industry leaders

NOVARTIS
Pfizer
gsk GlaxoSmithKline
Merck KGaA, Darmstadt, Germany
MERCK INVENTING FOR LIFE
EOC
CYTLIMIC Cytotoxic T Lymphocyte Immunotherapy in Cancer
LabCorp

LAG-3 Overview & Product Candidates

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LAG-3 Pioneer: French immunologist

Frédéric Triebel, PhD, MD

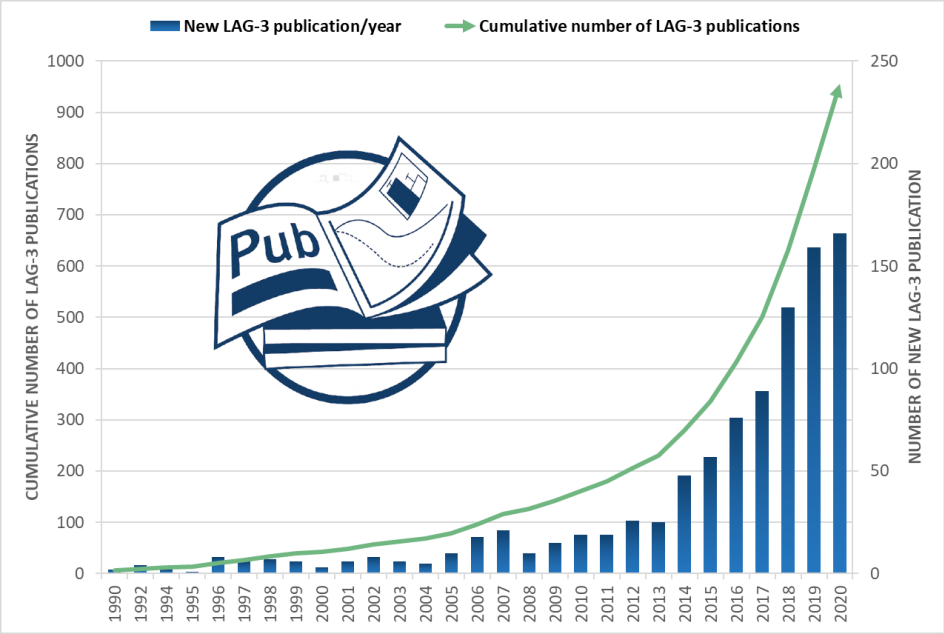
Immutep CMO & CSO

https://en.wikipedia.org/wiki/Fr%C3%A9d%C3%A9ric_Triebel

Acceleration in the LAG-3 Space

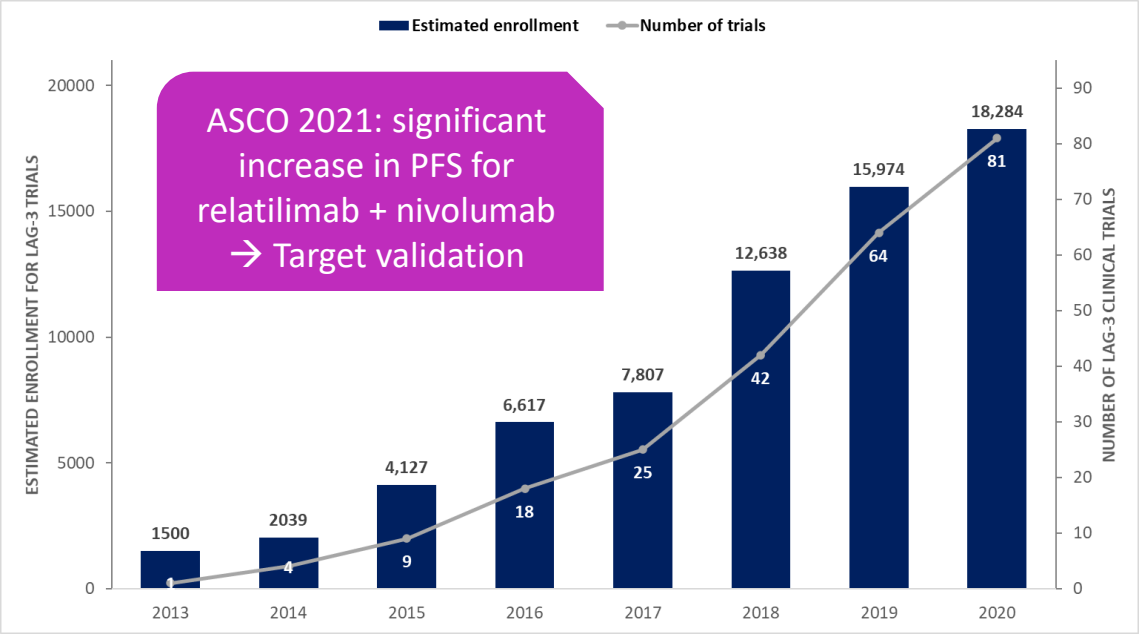
- Over 900 scientific publications dealing with LAG-3
- More than 80 clinical trials evaluating 19 LAG-3 product candidates
- Close to 20,000 patients estimated to be enrolled in clinical trials around the globe

LAG-3 Scientific Publications



Source: PubMed

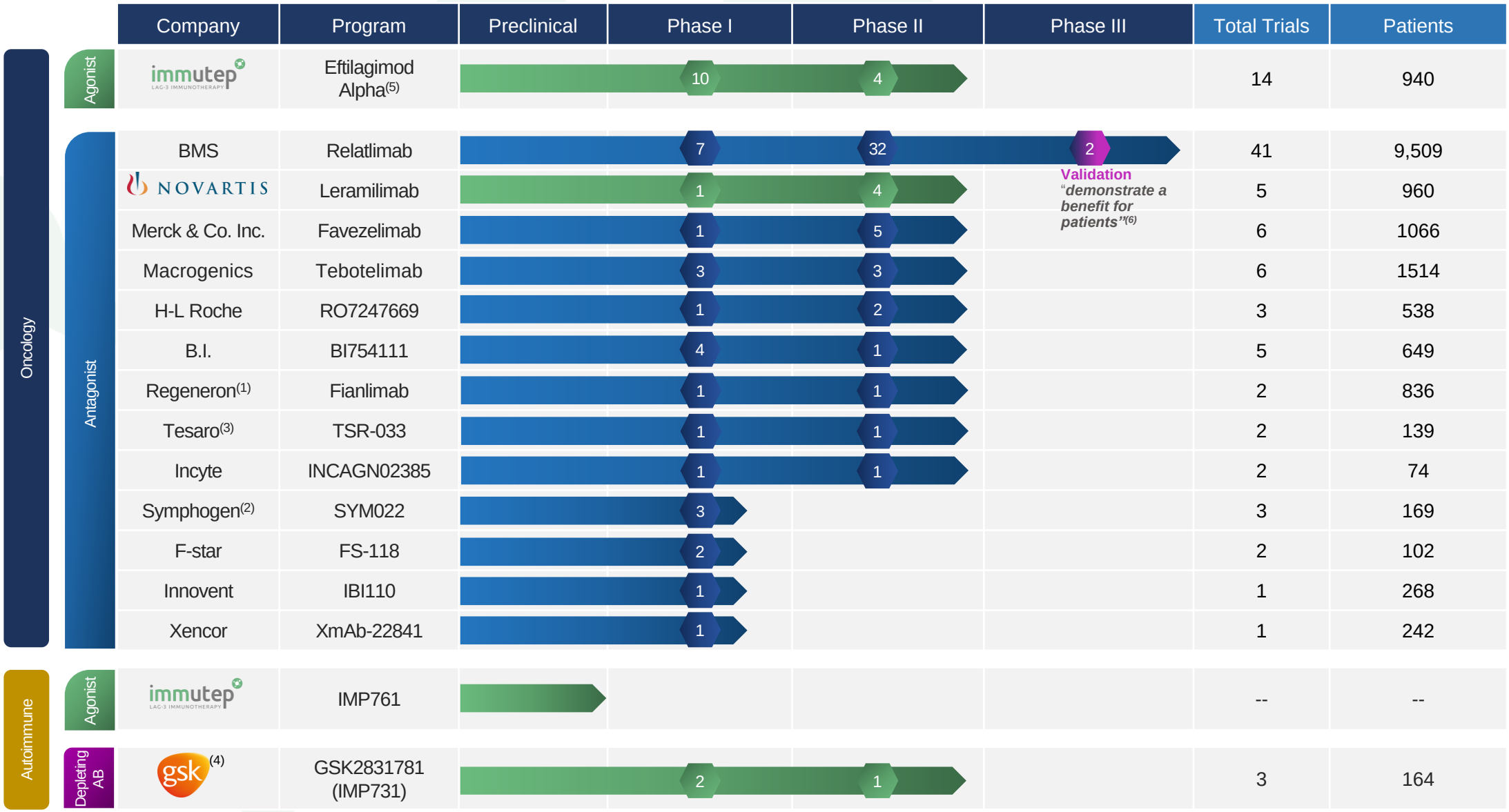
LAG-3 Clinical Trials



Source: GlobalData, May 2021

Immutep is the only company with four LAG-3 related compounds each with a different mechanism of action

LAG-3 Therapeutic Landscape Overview

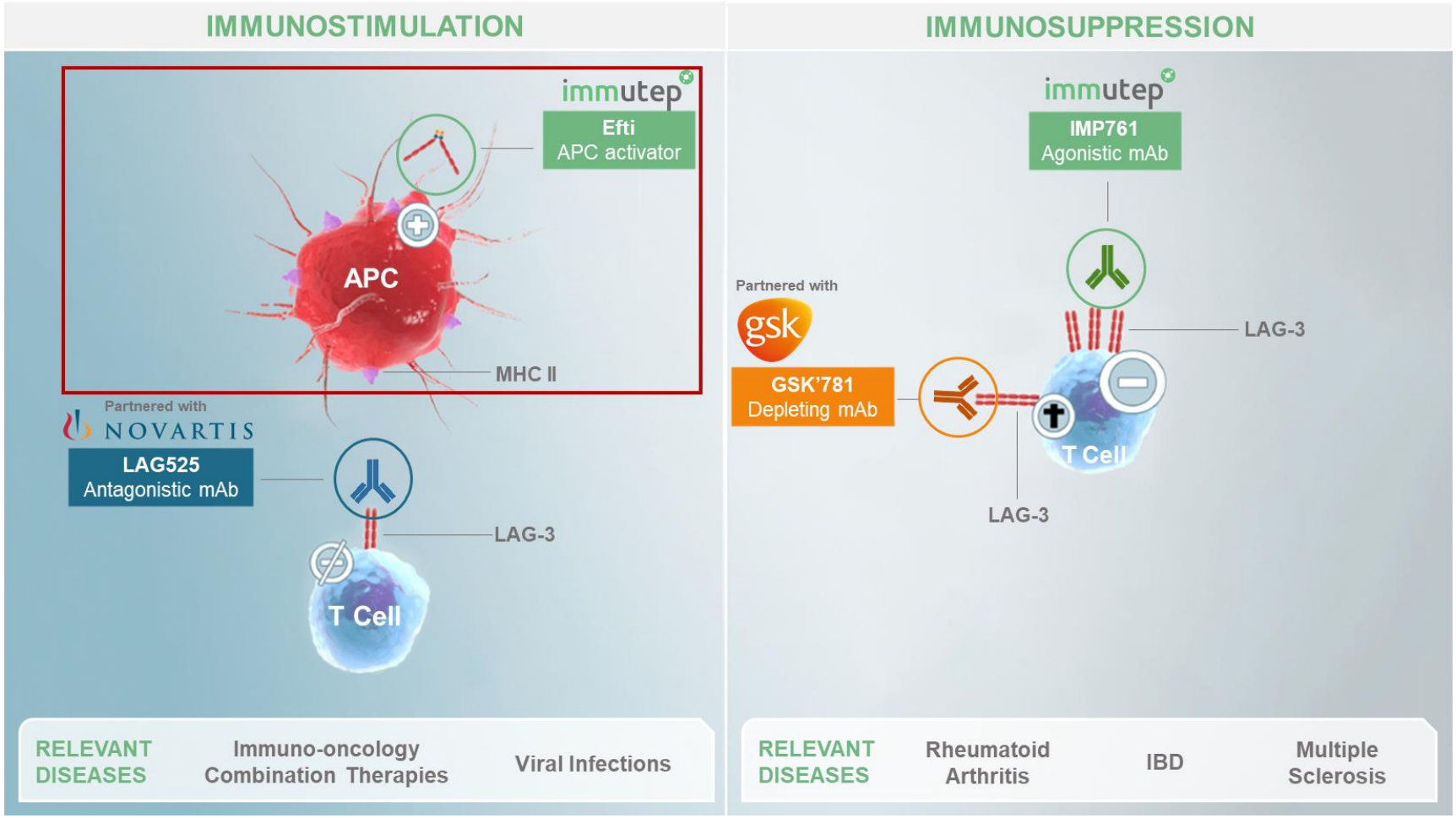


Sources: GlobalData, Company websites, clinicaltrials.gov, and sec.gov, as of **June 2021.** The green bars above represent programs conducted by Immutep &/or its partners. Total trials includes all active, completed &/or inactive trials. Patient totals are based on estimated total enrolled &/or to be enrolled. Not a complete list of currently existing LAG-3 products.

1) As of January 7, 2019 Regeneron is in full control of program and continuing development (https://www.sec.gov/Archives/edgar/data/872589/000110465919000977/a19-1325_18k.htm)
2) On 3 Apr. 2020 Les Laboratoires Servier Acquires Symphogen
3) Tesaro was acquired by and is now part of GSK (www.gsk.com/en-gb/media/press-releases/gsk-completes-acquisition-of-tesaro-an-oncology-focused-biopharmaceutical-company/)
4) Includes two completed Phase I studies and one discontinued Phase 2 study
5) Including IITs, two planned trials (MBC trial by EOC and HNSCC trial) and the EAT COVID trial
6) RELATIVITY-047 (https://investors.bms.com/iframes/press-releases/press-release-details/2021/Bristol-Myers-Squibb-Announces-RELATIVITY-047-a-Trial-Evaluating-Anti-LAG-3-Antibody-Relatlimab-and-Opdivo-nivolumab-in-Patients-with-Previously-Untreated-Metastatic-or-Unresectable-Melanoma-Meets-Primary-Endpoint-of-Progression-Free-Survival/default.aspx)

Immutep Mission: Targeting LAG-3 / MHC II

Multiple product candidates in numerous diseases



- ✓ **Immutep is the only company with four LAG-3 related compounds, each with a different mechanism of action for treatment of numerous diseases**
- ✓ **Two major partnerships with pharma and two products under own development**

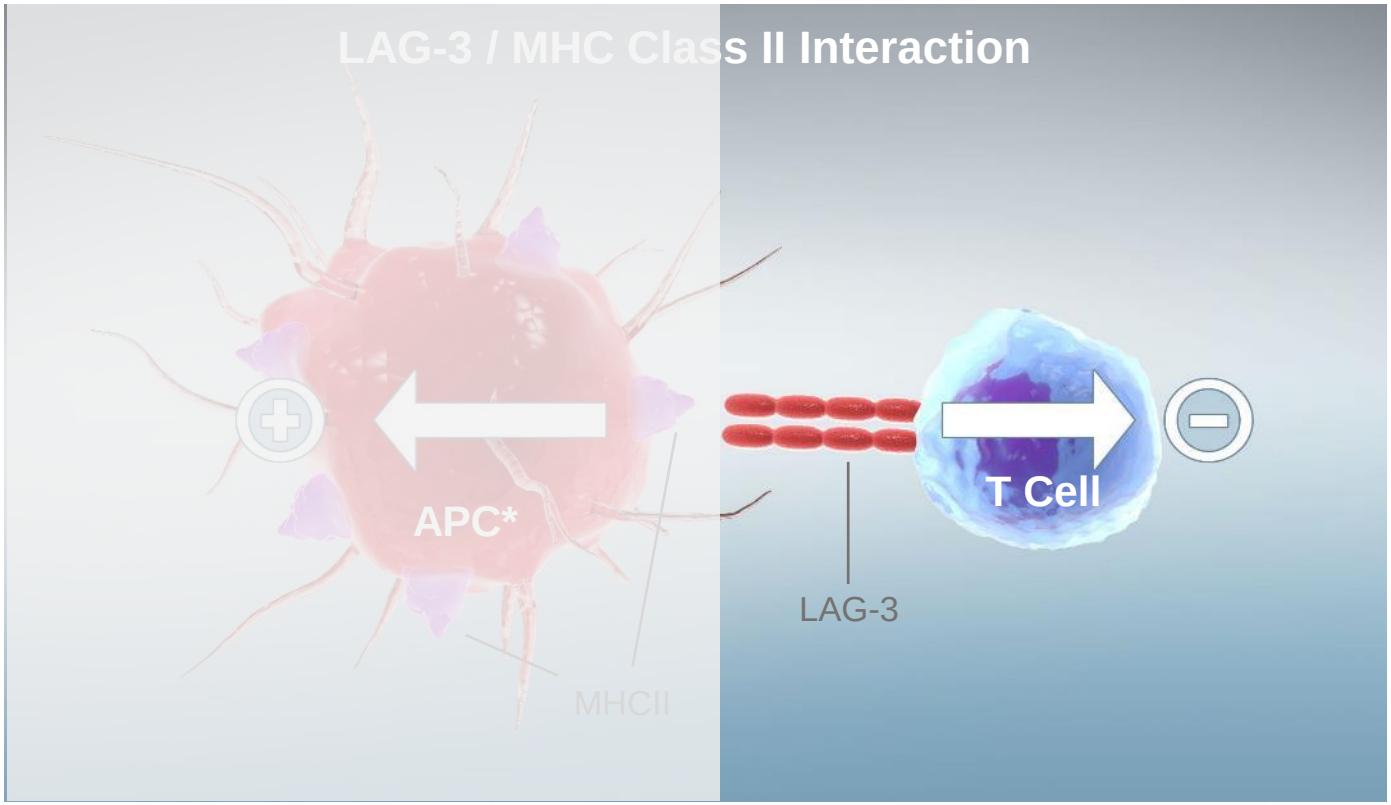
Notes:

* APC: antigen presenting cell

MHC II / LAG-3 Interaction as a Therapeutic Target

LAG-3, an immune checkpoint, is widely expressed on tumor infiltrating lymphocytes (TILs) and cytotoxic T cells, and interacts with MHC class II molecules on APCs

→ **Prime target for immune therapy**



Negative regulation of LAG-3+ T Cells

- Relatlimab + 15 more products in clinical development
- Clinical validation at ASCO 2021 (RELATIVITY-047 - relatlimab + nivolumab in melanoma)

Positive regulation of antigen presenting cells (**APCs**) via MHC II transferred activating signals → increase in antigen presentation to cytotoxic CD8+ T cells

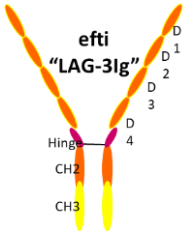
MHC II (APC) / LAG-3 (T cell) interaction is important for tumor immunology

This APC / T cell interaction is now a validated target since ASCO 2021 → 3rd validated checkpoint in immuno-oncology

Notes:
* APC: antigen presenting cell

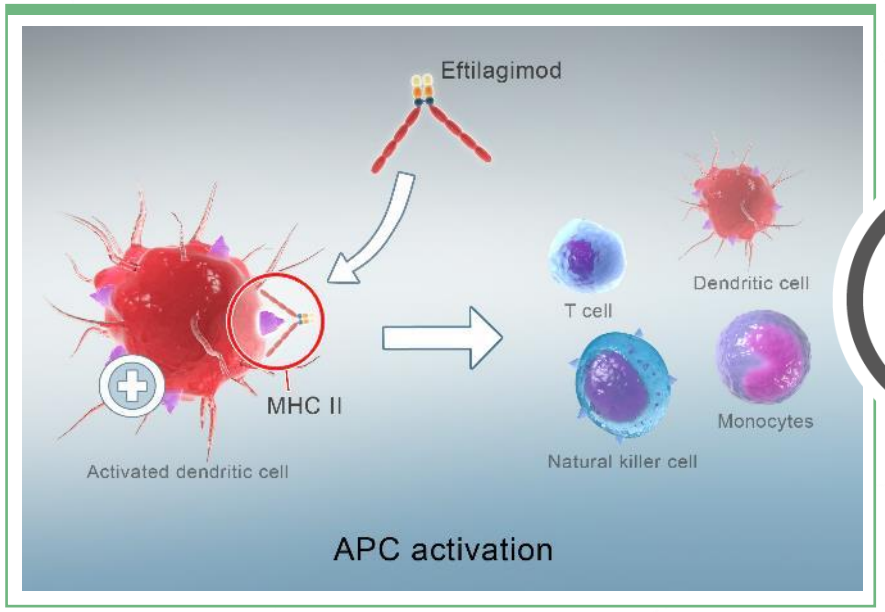
Eftilagimod Alpha (efti or IMP321)

Efti: an Innovative LAG-3 I-O Product Candidate

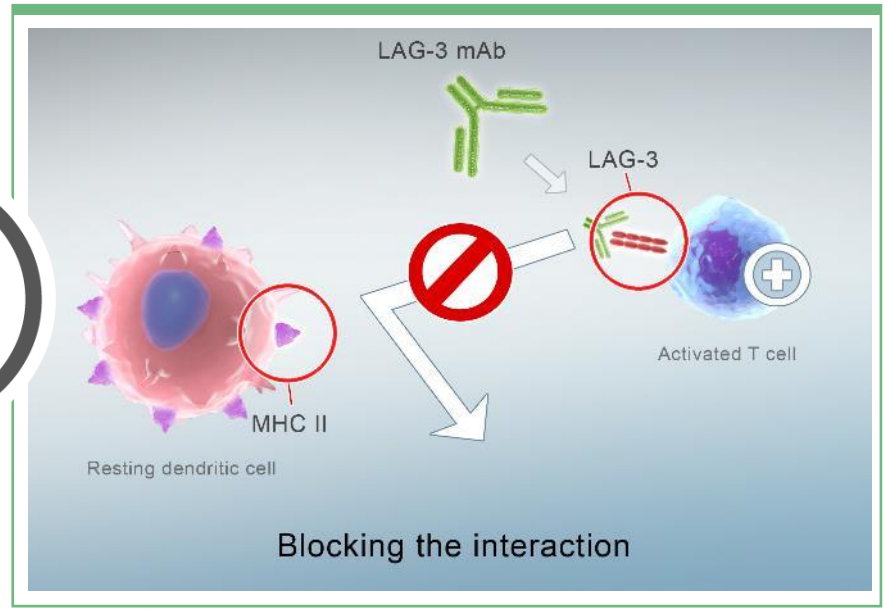


- Efti is a soluble LAG-3 protein targeting a subset of MHC class II on APC
- Potentially synergistic with other therapeutic agents, e.g. Immuno-Oncology (I-O) agents or chemotherapies

"PUSHING THE ACCELERATOR ON IMMUNE RESPONSES"



"RELEASING THE BRAKE ON THE T CELL"



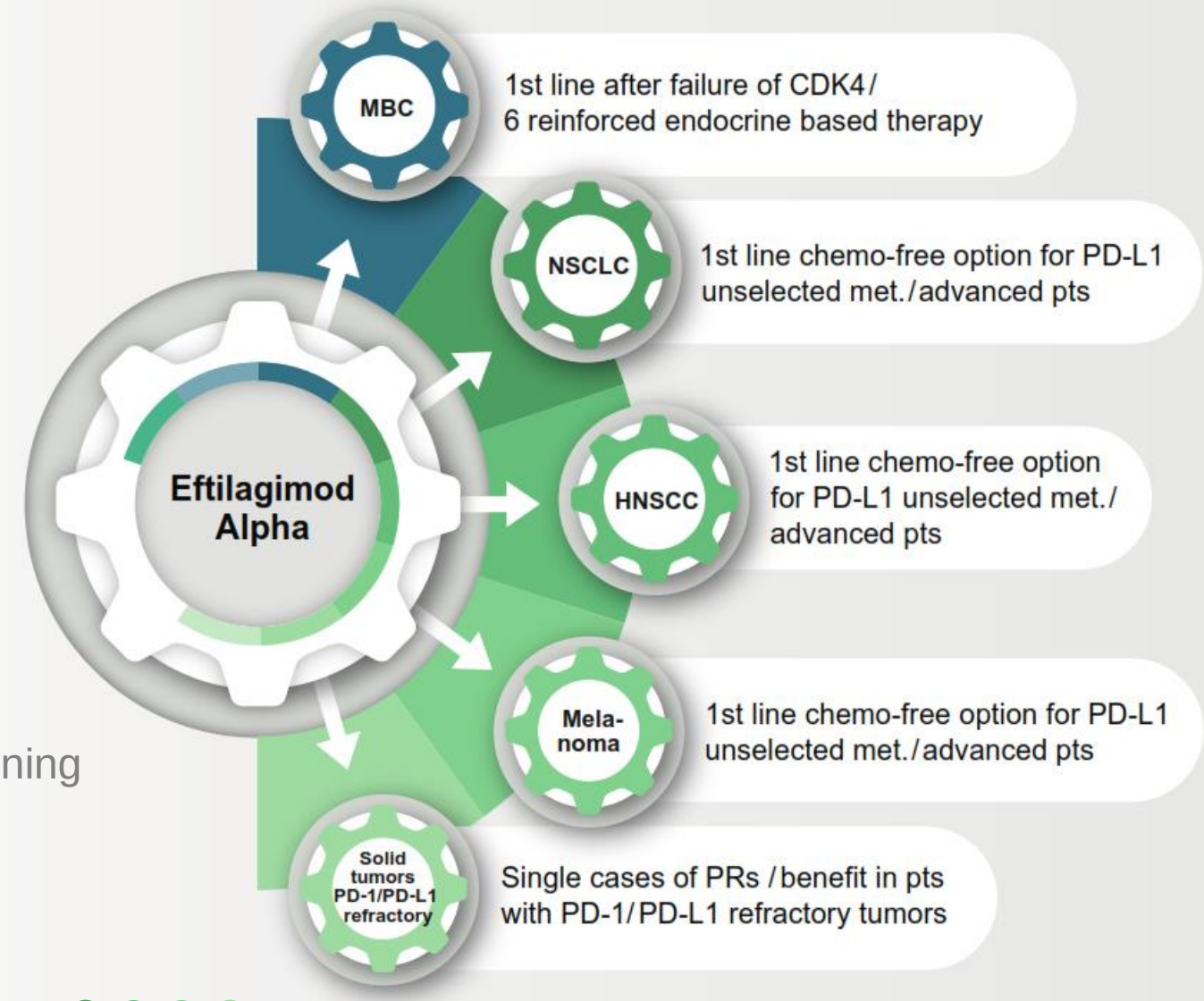
Efti is an **MHC II agonist:**
<u>APC activator</u>
- boost and sustain the $CD8^+$ T cell responses
- activate multiple immune cell subsets

LAG-3 antagonist, or blocking, antibodies:
<u>Immune checkpoint inhibitor</u>
- increase cytotoxicity of the pre-existing CD8 T cell response

Efti: Potential Pipeline in a Product

Potential for use in various combination settings

- Unique MHC II agonist
- Excellent safety profile
- Encouraging efficacy data
- Low cost of goods
- Unique protective IP positioning (unlike ICI mAbs)



Clinical Development

Efti: Main Trials*

Program	Preclinical	Phase I	Phase II	Late Stage[5]	Commercial Rights
Oncology	**Eftilagimod Alpha (Efti or IMP321)** APC activating soluble LAG-3 Protein	**Metastatic Breast Cancer (Chemo – IO)** AIPAC			
		Head and Neck Squamous Cell Carcinoma (IO – IO) [1] [6] TACTI-003		MERCK INVENTING FOR LIFE	
		Head and Neck Squamous Cell Carcinoma (IO – IO) [1] TACTI-002		MERCK INVENTING FOR LIFE	
		Non-Small-Cell Lung Carcinoma (IO – IO) [1] TACTI-002		MERCK INVENTING FOR LIFE	
		Solid Tumors (IO – IO) [2], [3a] INSIGHT-004	Pfizer Merck KGaA, Darmstadt, Germany		Global Rights immutep LAG-3 IMMUNOTHERAPY
		Solid Tumors (IO – IO) [2], [3b] INSIGHT-005	Merck KGaA, Darmstadt, Germany gsk		
		Melanoma (IO – IO) [1] TACTI-mel			
		Solid Tumors (In situ Immunization) [2] INSIGHT			
		Solid Tumors (Cancer Vaccine)[4a] YNP01 / YCP02 / CRESCENT 1	CYTLIMIC Cytotoxic T Lymphocyte Immunotherapy in Cancer		
		Metastatic Breast Cancer (Chemo – IO)[4b]		EOC	Chinese Rights EOC

Notes:

* Information in pipeline chart current as at June 2021

(1) In combination with KEYTRUDA® (pembrolizumab)

(2) INSIGHT Investigator Initiated Trial ("IIT") is controlled by lead investigator and therefore Immutep has no control over this clinical trial

(3) a) In combination with BAVENCIO® (avelumab); b) in combination with Bintrafusp alfa

(4) a) Conducted by CYTLIMIC in Japan; b) Conducted by EOC in China. Immutep has no control over either of these trials.

(5) Late stage refers to Phase IIb clinical trials or more clinically advanced clinical trials

(6) Not yet recruiting

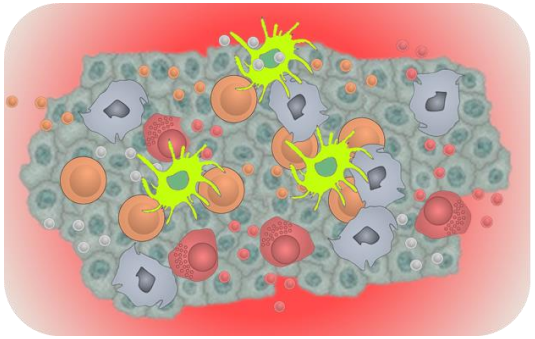
Combining efti and anti-PD-1 pembrolizumab

TACTI-002

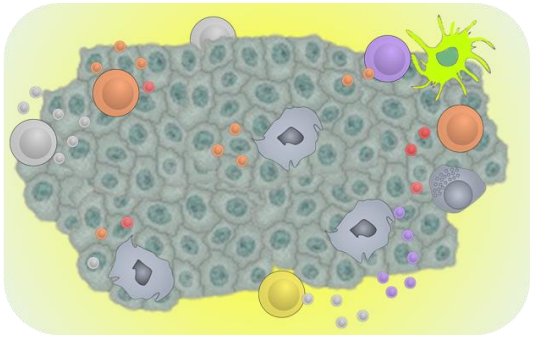
APC activator – ICI combinations

Three types of patient tumors

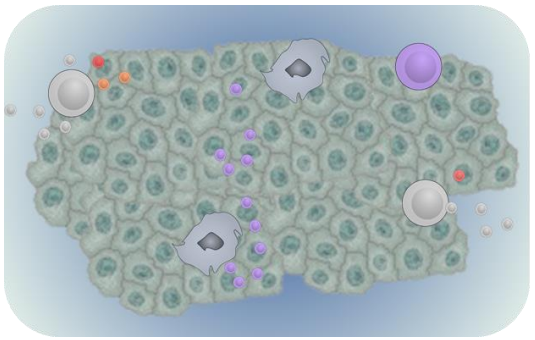
HOT



TEPID



COLD



IFNγ

Inflamed responder

- Considerable immune cell infiltration e.g.: CD8+ Tc; Macrophages
- **High** levels of IFN-γ produced → inducing high PD-L1 expression on tumor cells

Likely responds to Immune Checkpoint Inhibition e.g.: anti-PD-1

Inflamed non-responder

- Some infiltrates in the tumor margins but no response.
- **Medium** levels of IFN-γ produced → inducing low PD-L1 expression on tumor cells

Due to low level of TH1 (IFN-γ) driven T-cell activation → **unlikely to respond to ICI treatment**

Non-inflamed non-responder

- Minimal to no immune cell infiltration on the tumor margins.
- **Low** levels of IFN-γ produced → no induction of PD-L1 expression on tumor cells

Due to low numbers of infiltrating T-cells → **unlikely to respond to ICI treatment**

TACTI-002 (Phase II)
Design & Status

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TACTI-002: Two ACTive Immunotherapeutics in NSCLC and HNSCC

SCREENING

UNSELECTED FOR PD-L1

PART A:
1ST LINE MET. NSCLC

PART B:
2ND LINE MET. NSCLC, REFRACTORY TO PD-1/PD-L1 TARGETING THERAPY

PART C:
2ND LINE MET. HNSCC AFTER PLATINUM THERAPY

COMBINED IMMUNOTHERAPY
PEMBROLIZUMAB+EFTI FOR 12 MONTHS + 12 MONTHS PEMBROLIZUMAB MONO

ORR, PFS, OS, PK, biomarker, safety and tolerability

In collaboration with

MERCK
INVENTING FOR LIFE

Treatment	30 mg efti (IMP321) s.c. 200 mg pembrolizumab (Keytruda®) i.v.

Status Report

- ✓ Fully approved in all countries
- ✓ Up to 183 patients in three indications
  - Part A (N=36) completed; extension (N=74 recruiting)
  - ✓ Part C (N=39) completed
  - Part B (N=36); stage 2 recruitment ongoing

Sites in Europe / US / Australia

Notes:
ORR – overall response rate, DCR – disease control rate, PFS – progression free survival, OS – overall survival, QoL – Quality of life

TACTI-002 (Phase II)
Safety

Efti + Pembro combination has a favourable safety profile

Summary TACTI-002
(N=115 in total)

- No (0%) treatment-related death
- 4 (3.5%) subjects with treatment (efti and/or pembro) related adverse events leading to discontinuation
- 57 pts (49.6%) had ≥ 1 adverse events ≥ grade 3
- No new safety signals of this combination identified until cut-off

Selected safety aspects of other treatment regimens

Regimen[2]	Treatment related adverse events leading to discontinuation	Treatment related adverse events leading to death
Double Chemo	8-22%	1-6%
Ipi + Nivo	20%	< 2%
Chemo + Pembro	23-33%	3-8%
Pembro alone	10-15%	< 2%

✓ **Efti + pembrolizumab combination has a very good safety profile**

✓ **Favorable compared to any combination which included chemotherapy**

Notes:

(1) Preliminary data, cut-off 16-Apr 2021

(2) Source: Calculated from corresponding publications e.g.: Checkmate-227; Keynote-40/189/407/48;

Non-Small Cell Lung Cancer (NSCLC)
Introduction

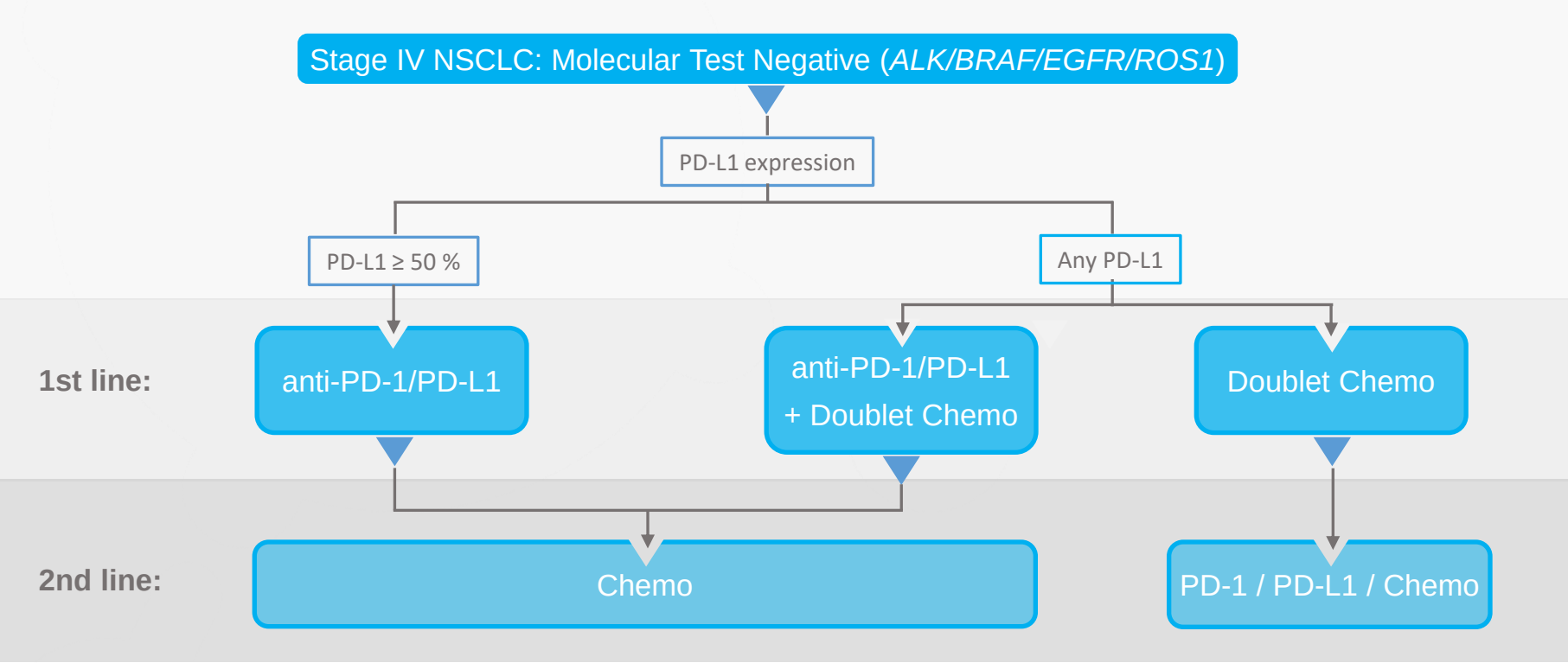
High unmet medical need for well tolerated and efficacious treatment options

Epidemiology[1]:

- 1,850,000 NSCLC diagnoses per annum worldwide growing by 1.5% p.a.
- Approximately 1,300,000 develop metastatic disease and are eligible to receive anti-PD-1/PD-L1

Unmet need:

- Modest efficacy of anti-PD-1/PD-L1 for pts with < 50% PD-L1 **(~70% of total population)**
- Toxicity for patients / costs for health care systems of doublet chemo + PD-1/PD-L1 is relatively high



Notes:
(1) Calculated from Global Cancer Observatory (WHO), 2018 data
(2) Informa Pharma Intelligence Report 2018 for US, Japan and EU5
(3) Based on ESMO Guidelines

TACTI-002 Results(1)

1st line NSCLC (Part A)

- ***PD-L1 distribution as expected (~70% with < 50% PD-L1 expression) → PD-L1 all comer trial***
- ***Patients are typical NSCLC 1st line pts***

Baseline parameters	N (%)
Age (years), median (range)	68.5 (53-84)
Female Male	11 (30.6) 25 (69.4)
ECOG 0 ECOG 1	15 (41.7) 21 (58.3)
Current / Ex-smokers Non-smokers	34 (94.4) 2 (5.6)
Squamous pathology Non-squamous pathology	15 (41.7) 21 (58.3)
Patients with liver metastasis	14 (38.9)

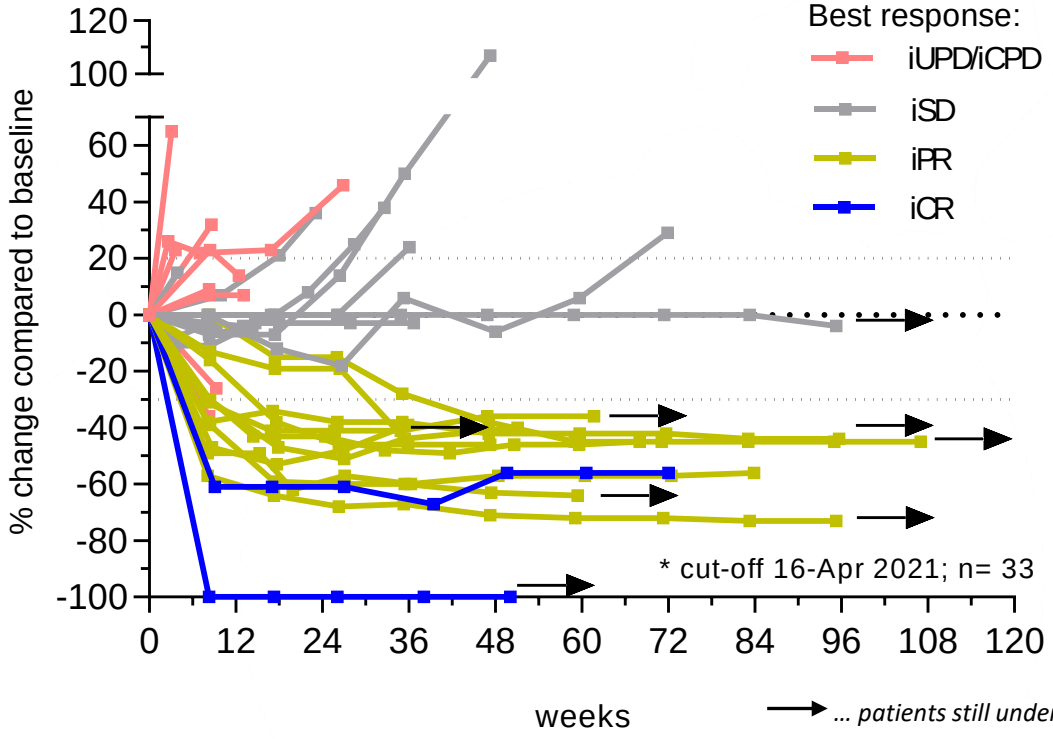
Best overall response, iRECIST, N = 36	Local Read (investigator) N (%)	Blinded Read (BICR) N (%)
Complete Response	**2 (5.6)**	**2 (5.6)**
Partial Response	11 (30.6)	13 (36.1)
Stable Disease	11 (30.6)	10 (27.8)
Progression	8 (22.2)	6 (16.7)
Not Evaluable**	4 (11.1)	5 (13.9)
Disease Control Rate	24 (66.7)	25 (69.4)
Overall Response Rate* [95% CI interval]	**13 (36.1) [20.8-53.8]**	**15 (41.7) [25.5-59.2]**
Overall Response Rate – Evaluable pts* [95% CI interval]**	**13 (40.6) [23.7-59.4]**	**15 (48.4) [30.1-60.9]**

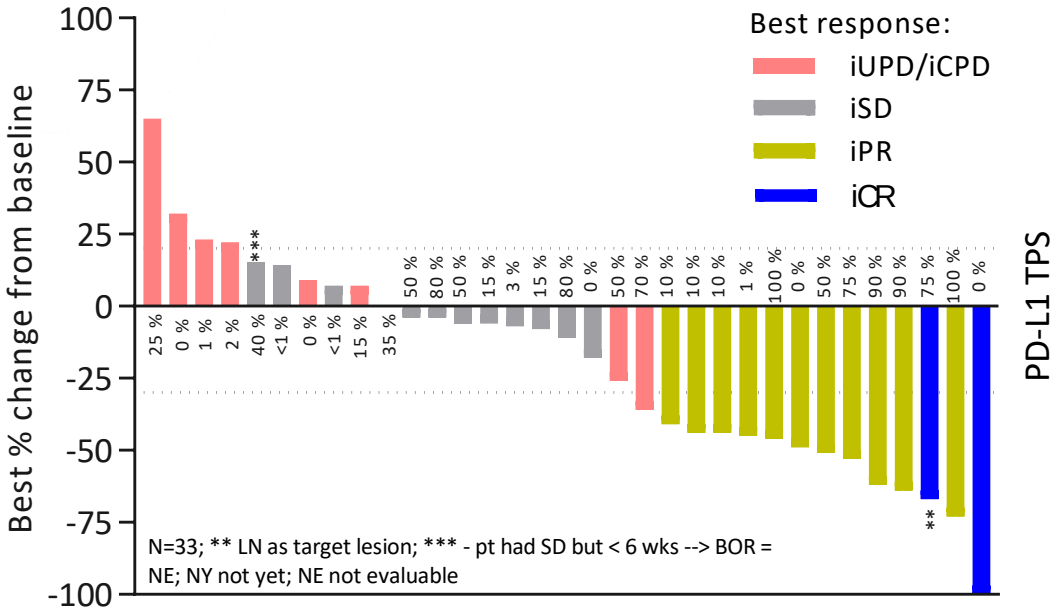
** - All patients stage 1 and 2 (N=36) with* ≥ 1 treatment
*** - dropped off prior to first staging or were not evaluable post-baseline for any reason*
**** - Evaluable for efficacy meaning* ≥ 1 treatment and ≥ 1 post baseline tumor staging

Notes:
(1) Preliminary data, cut-off Apr 16, 2021
ECOG… Eastern Cooperative Oncology Group
iRECIST… Immune Response Evaluation Criteria In Solid Tumors
BICR… Blinded Independent Central Review

TACTI-002 Results(1)

1st line NSCLC (Part A)





Duration of response (DoR)

- 92% responses confirmed
- 58% confirmed responses ongoing with 6+ months
- 42% of confirmed responses progressed after 6.5-13.8 months
- Median DoR estimated 13+ months

- Responses at all PD-L1 levels including 1 Complete Response with TPS of 0%
- At data cut-off, 7 pts still under therapy and 1 patient completed the 2 years of therapy

(1) Preliminary data, cut-off Apr 16, 2021

Graphs represent all patients with at least one post baseline assessment. One patient has no official RECIST assessment as this was done < 6 weeks and this does not qualify according to RECIST. Per local investigator assessment.

iRECIST… Immune Response Evaluation Criteria In Solid Tumors

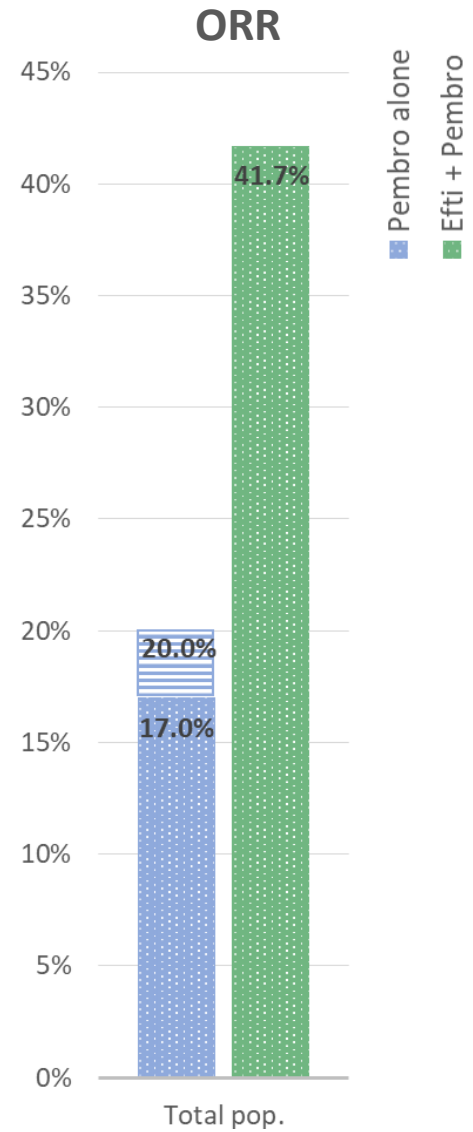
TACTI-002 Results(1)

1st line NSCLC (Part A) - Benchmarking

	PD-L1 (TPS)	Pembro alone** (NSQ+SQ)	Pembro + Efti*** (NSQ+SQ)	Pembro + Chemo	
				NSQ	SQ
ORR (%)	≥ 50	39.5	53.8*	62.1	60.3
	≥ 1	27.3	44.0*	~ 55.8	~ 55.1
	< 50	--	31.6*	~ 40.7	~ 57.1
PFS (mths)	**Overall pop.**	--	**8.2**	**9.0**	**6.4**
	≥ 50	7.1	11.8	11.1	8.0
DoR (mths)	**Overall pop.**	**20.2**	**NR (currently 13+)**	**12.4**	**7.7**
Toxicity		Well tolerated	**No significant add. toxicity**	+ toxicity	
Co-med			**No add. co-med required**	+ cost of chemo co-med	

- **Increased ORR & median PFS**
- **Responses in PD-L1 low expressors**
- **Comparable safety profile**

- **ORR & PFS comparable**
- **Improved DoR**
- **Less toxicity**



Data for pembro derived from KN042 and KN001(2)(5)

* Pts with PD-L1 results available and ≥ 1 post baseline RECIST assessments (32/36); ** Data for pembro derived from KN042, KN189, KN-407(2)(3)(4); *** According to investigator read

(1) Preliminary data, cut-off 16 Apr 2021 for TACTI-002
(2) KEYNOTE-042: TSK Mok et al, The Lancet 2019, http://dx.doi.org/10.1016/S0140-6736(18)32409-7
(3) KEYNOTE-189: S Gadgeel et al, J Clin Oncol 2020, https://doi.org/10.1200/JCO.19.03136
(4) KEYNOTE-407: L Paz-Ares et al, N Engl J Med 2018;379:2040-51. DOI: 10.1056/NEJMoa1810865
(5) KEYNOTE-001: NB Leighl et al, The Lancet 2019, http://dx.doi.org/10.1016/S2213-2600(18)30500-9

Head & Neck Squamous Cell Carcinoma (HNSCC)
Introduction

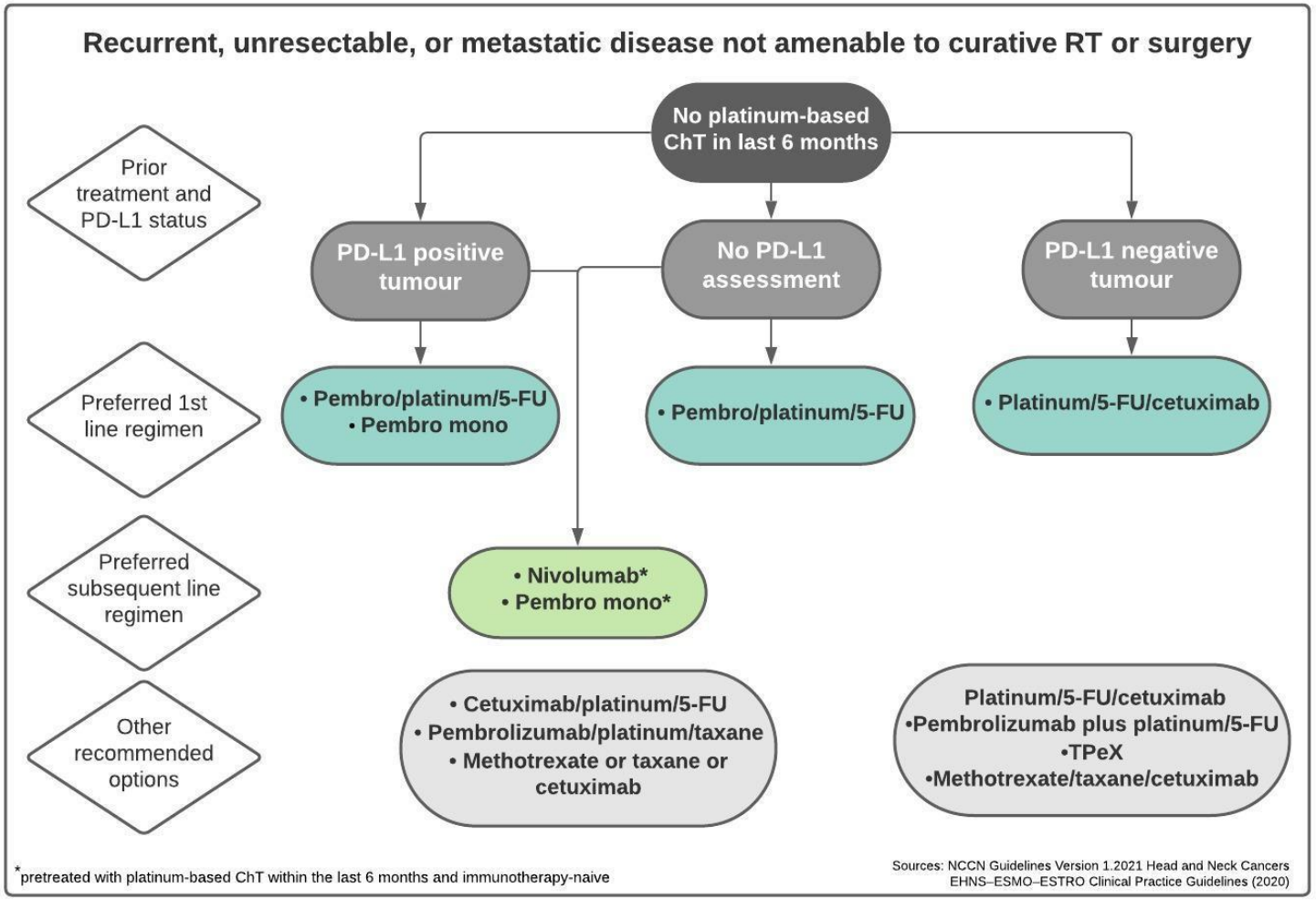
High unmet medical need for well tolerated and efficacious treatment options

Epidemiology:

- More than 585,000 HNSCC diagnoses per annum worldwide(1)
- Approximately 350,000 develop metastatic disease & are eligible to receive anti-PD-1 monotherapy or in combination with chemotherapy

High unmet need:

- OS in 1st line barely exceeds 12 months
- ORR of 10-18% in 2nd line regardless of therapy



Notes:

(1) F Bray et al.: Global cancer statistics 2018: GLOBOCAN estimates of incidence and mortality worldwide for 36 cancers in 185 countries. CA CANCER J CLIN 2018;68:394–424

(2) Athanassios Argiris et al.: Evidence-Based Treatment Options in Recurrent and/or Metastatic Squamous Cell Carcinoma of the Head and Neck. Front. Oncol., 09 May 2017 | https://doi.org/10.3389/fonc.2017.00072

(3) FDA and EMA approval differences. Pembrolizumab approval by the European Medicines Agency is for patients whose tumours express PD-L1 with a ≥ 50% TPS, which differs from FDA approval.

TACTI-002 Results(1)

2nd line HNSCC (Part C)

- 2nd line treatment for patients after platinum therapy. PD-L1 all comer population
- Doubling the ORR compared to historical pembro mono results with **13.5% Complete Responses**

Baseline parameters (N=39)	N (%)
Age, median (years)	62 (37-84)
Female Male	4 (10.3) 35 (89.7)
ECOG 0 ECOG 1	13 (33.3) 26 (66.7)
Current / Ex-smokers Non-smokers	33 (84.6) 6 (15.4)
Previous chemotherapy	39 (100)
Previous cetuximab	16 (41.0)
Lung lesions Liver lesions	19 (48.7) 6 (17.6)

Primary tumor location (N=39)	N (%)
Oral cavity	12 (30.8)
Oropharynx	14 (35.9)
Hypopharynx	7 (17.9)
Larynx	6 (15.4)

Best overall response*, iRECIST	Investigator assessment N (%)
Complete Response	**5 (13.5)**
Partial Response	**6 (16.2)**
Stable Disease	3 (8.1)
Progression	17 (45.9)
Not Evaluable**	6 (16.2)
Disease Control Rate	14 (37.8)
Overall Response Rate **[95% CI interval]**	**11 (29.7)** **[15.9 – 47.0]**
Overall Response Rate – Evaluable pts*** **[95% CI interval]**	**11 (35.5)** **[19.2 – 54.6]**

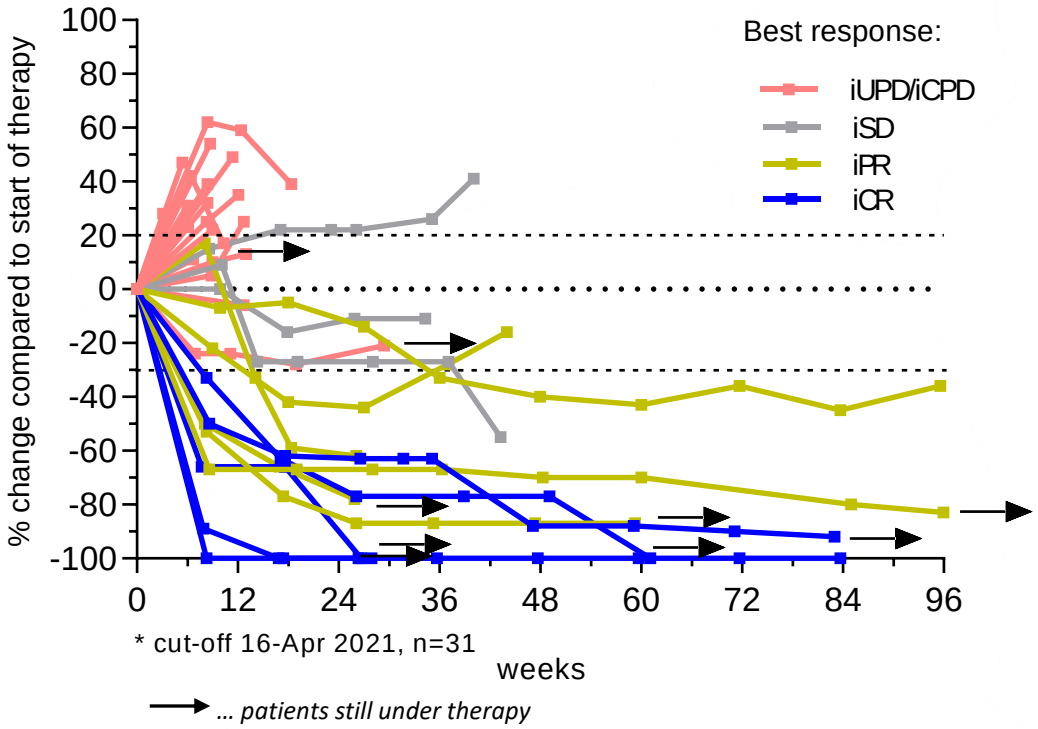
* - *All patients (N=37) with* ≥ 1 treatment and no death due to COVID-19 prior to first post-baseline staging
** - *dropped off prior to first staging or were not evaluable post-baseline for any reason*
*** - *evaluable patients (N=31):* ≥ 1 treatment and ≥ 1 post baseline tumor staging

All four pathologies enrolled

Note:
(1) Preliminary data, cut-off 16 Apr 2021

TACTI-002 Results(1)

2nd line HNSCC (Part C)



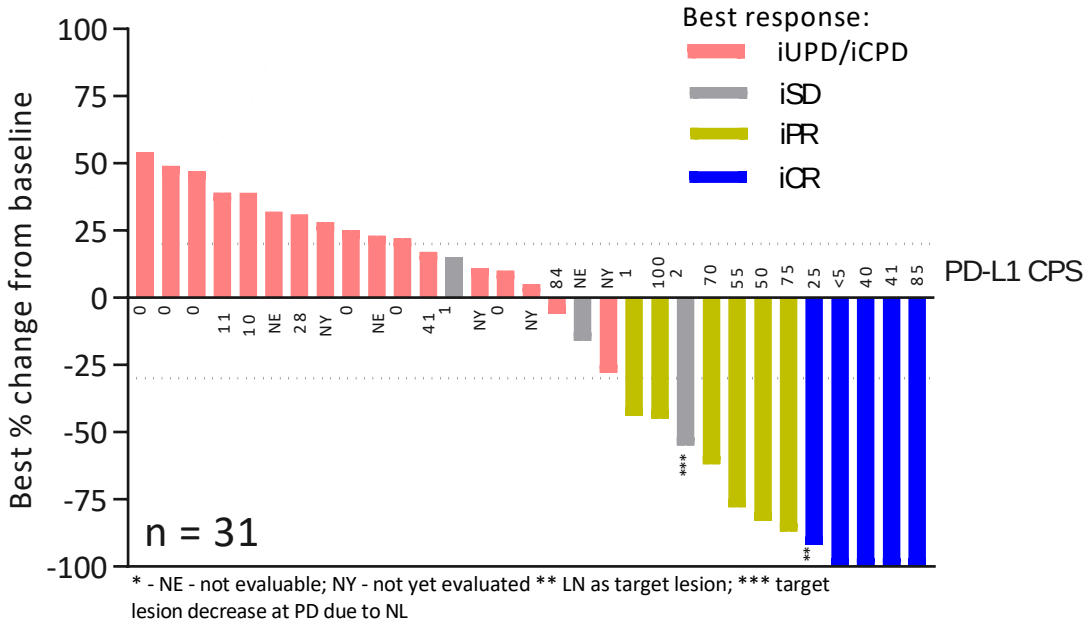
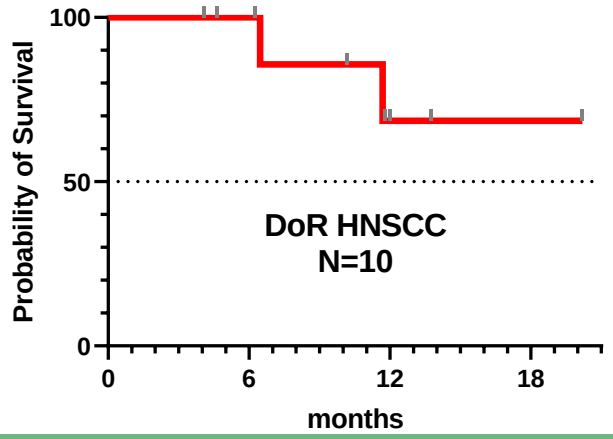


Figure 3: Duration of response (DOR) for confirmed responders



Deep responses with 5 Complete Responses

Duration of response (DoR)

- 91% confirmed responses
  - *80% confirmed responses ongoing (censoring at 4-20 months)*
  - *No progression prior to 6 months DOR*
- Median duration of response cannot be estimated yet

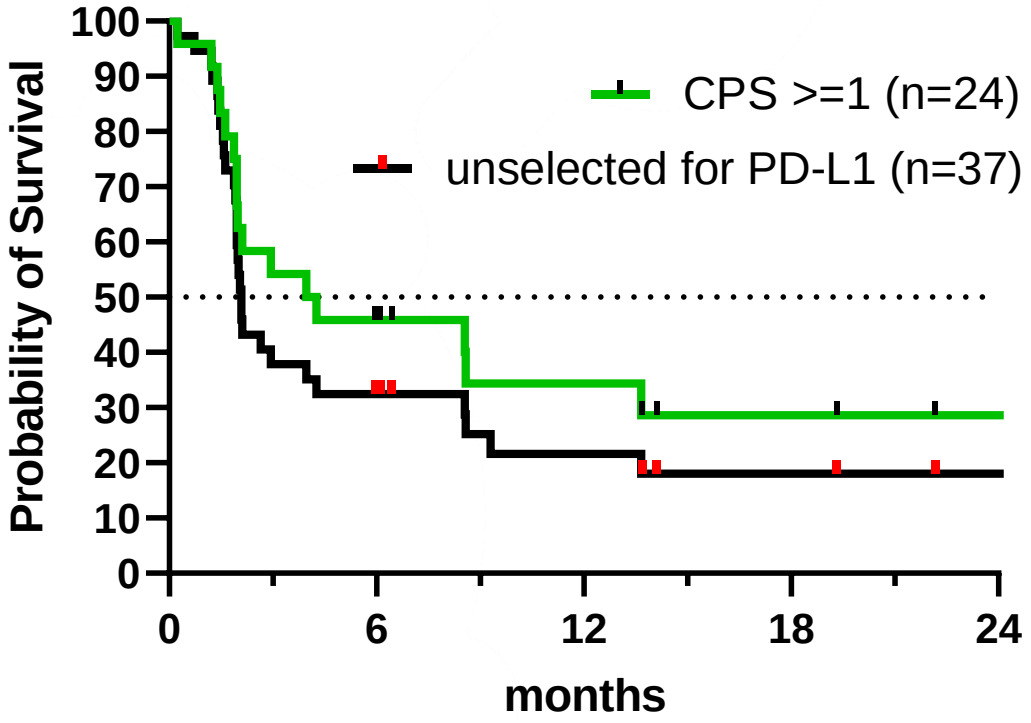
Note:

(1) Preliminary data, cut-off 16 Apr 2021
** >= 1 post baseline tumor staging (N=31)

TACTI-002 Results(1)

2nd line HNSCC (Part C)

*Kaplan-Meier Plot PFS**



Overall population (unselected for PD-L1)

- Median PFS 2.1 mths
- 30+% progression free at 6 mths

Selected for PD-L1 expression, CPS ≥ 1*

Median OS (58% events)	**12.6 mths**
Median PFS (71% events)	**4.1 mths** (45% prog. free at 6 mths)
ORR iRECIST (95% CI)	**45.8%** (25.6-67.2)

Note:

(1) Preliminary data, cut-off 16 Apr 2021
(2) * ≥ 1 treatment and no death due to COVID-19 prior to first post-baseline staging (N=37)
(3) ** >= 1 post baseline tumor staging (N=31)

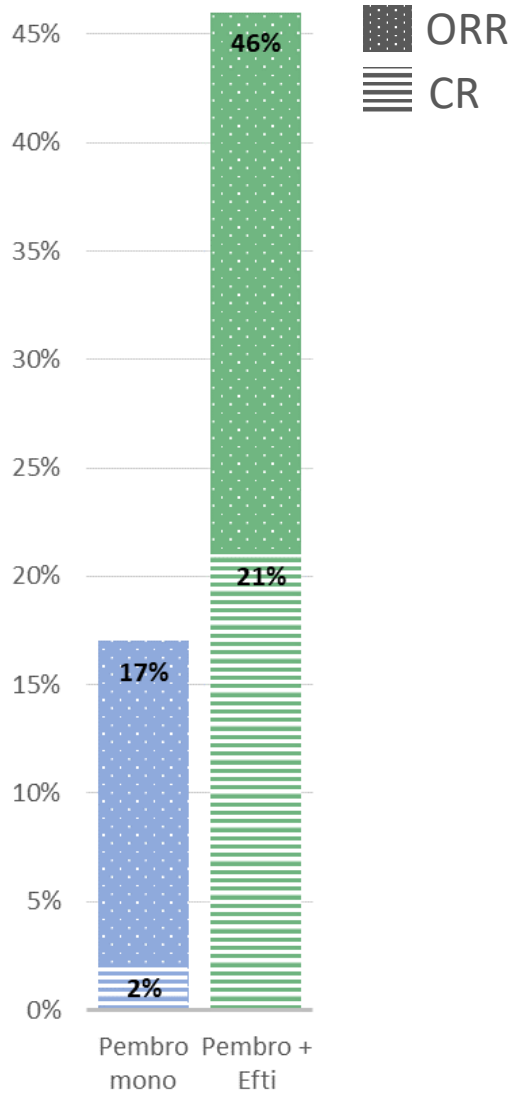
TACTI-002 Results[1]

2nd line HNSCC (Part C) – Benchmarking

	PD-L1 (CPS)	Pembro alone**	TACTI-002
ORR (%)	≥ 1	**17.3** (2% CR)	**45.8*** (20.8% CR*)
	Overall pop.	**14.6**	**35.5#**
mPFS (mths)	≥ 1	**2.2** 28.7% PFS rate at 6 mths	**4.1*** 45% PFS rate at 6 mths
	Overall pop.	**2.1** 25.6% PFS rate at 6 mths	**2.1§** 30+% PFS rate at 6 mths
mOS (mths)	≥ 1	**8.7** 40% alive at 12 mths	**12.6*** 54% alive at 12 mths
	Overall pop.	**8.4** 37% alive at 12 mths	**12.6§** 50+% alive at 12 mths

* - only patients evaluated where PD-L1 results available (N=24); # - only evaluable patients (N=31);
§ - total pop. (N=37) ; ** Data for pembro derived from KN040[2]

- ORR of pembro mono generally low → increase to 22% (≥ 20 CPS) and 28% (≥ 50 CPS)[4]
- Duration of response drops dramatically if you add chemo[5] – not the case with efti
- ORR is clearly higher with high rates of CRs; duration of response very promising (only 1 pt. with PR discontinued in TACTI-002 so far)



TACTI-002 Part C - Historical comparison of ORRs and CRs in metastatic HNSCC for patients who has a PD-L1 CPS of ≥1. ORR for Pembrolizumab monotherapy was taken from KEYNOTE-040.

Notes:

(1) Preliminary data, cut-off 16 April 2021
(2) Keynote-040 results: EEW Cohen et al., *The Lancet* 2018; http://dx.doi.org/10.1016/S0140-6736(18)31999-8
(3) RL Ferris et al.: Nivolumab for Recurrent Squamous-Cell Carcinoma of the Head and Neck. N Engl J Med 2016;375:1856-67.
(4) E Cohen et al; *Annals of Oncology* 2019; doi:10.1093/annonc/mdz252
(5) KN-048: The Lancet, 2019; https://doi.org/10.1016/S0140-6736(19)32591-7

Combining efti and anti-PD-L1 avelumab

INSIGHT-004

INSIGHT Platform Trial in Solid Tumours

INSIGHT-004: Efti + Avelumab Combination

INSIGHT-004 is a dose escalation study evaluating efti in combination with Bavencio ® (avelumab). Conducted as the 4th arm i.e. **Stratum D** of the INSIGHT trial.

In collaboration with Pfizer, Merck KGaA, Darmstadt, Germany, Institut für Klinisch-Onkologische Forschung, KRANKENHAUS NORDWEST

Phase I
Open label trial

12
Patients: 2 cohorts of 6 patients each

6 months
Combination treatment, then 6 months avelumab monotherapy

One site
Germany

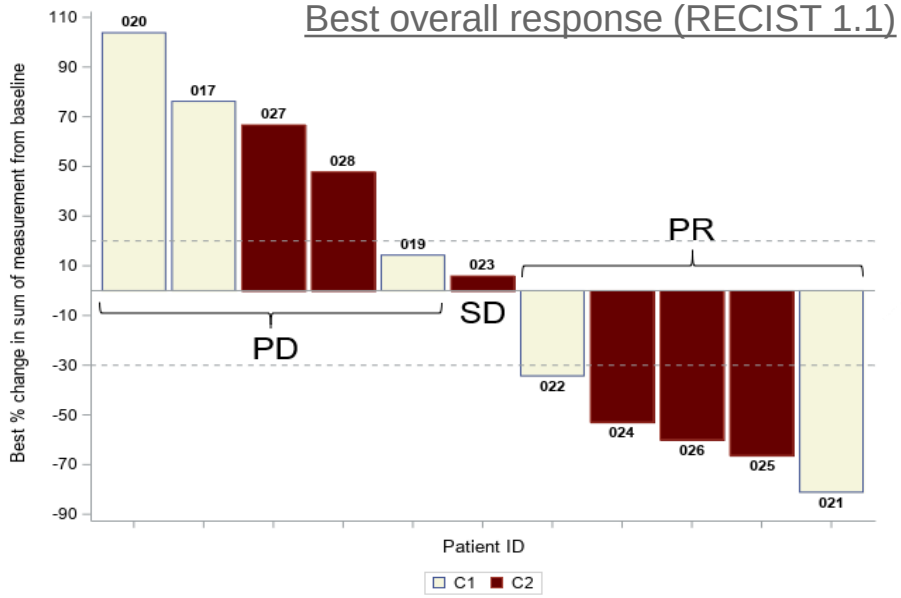
Inclusion	Treatment	Results
Solid tumors • histologically confirmed locally advanced or metastatic • received ≤3 prior lines of therapy • no selection for immunogenic markers (e.g. PD-L1 expression levels, msi high or tmb)	**1) Avelumab + Efti (6 mg - 30 mg) s.c.** qw 2 for a maximum of 6 months **2) Avelumab monotherapy (maintenance)** qw 2 for a maximum of further 6 months	**RP2D, Safety,** ORR, PFS, PK, PD

INSIGHT-004 (Stratum-D) Results(1)

Efficacy

- 5/12 (42%) with partial responses in different indications:
  - 1st line MSI high colorectal cancer; 1st line pleural mesothelioma; after radiochemo in squamous anal cell; pre-treated squamous cervical cancer (PD-L1 TPS < 1%) carcinoma; 3rd line gastroesophageal junction
- 75% (n=9) are still alive → 66.7% (n=4) of cohort 1 and 83.3% (n=5) of cohort 2

Best overall response (RECIST 1.1)

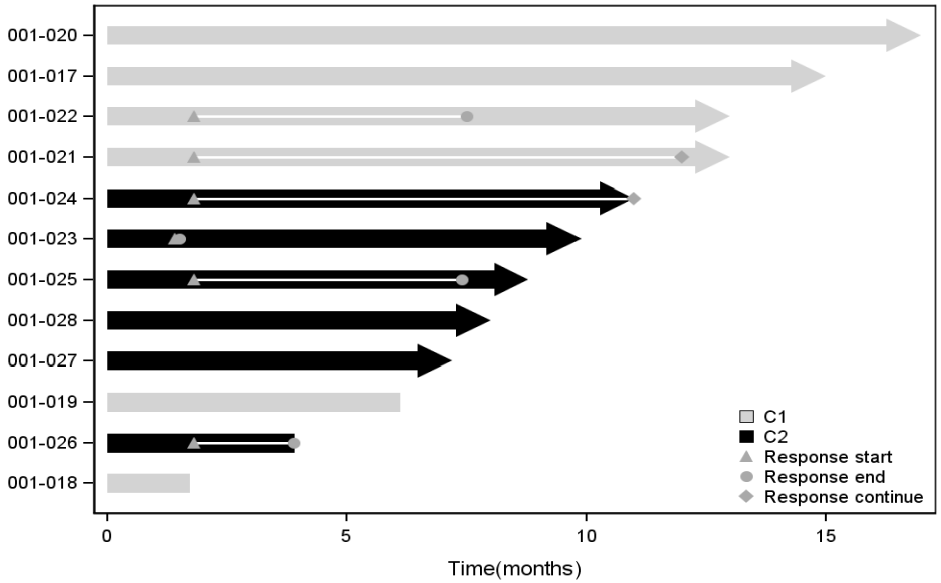


Safety

- Combo of avelumab 800 mg + efti 6 mg or 30 mg efti s.c. is feasible and safe
- No unexpected AEs

Conclusion

- Treatment with efti + avelumab safe, with promising signals of efficacy
- Efti + avelumab seems to be a potent combination for enhancing PD-L1 directed therapy and needs further evaluation in new trials



Triangles at the end of the chart represents the survival status

Note:

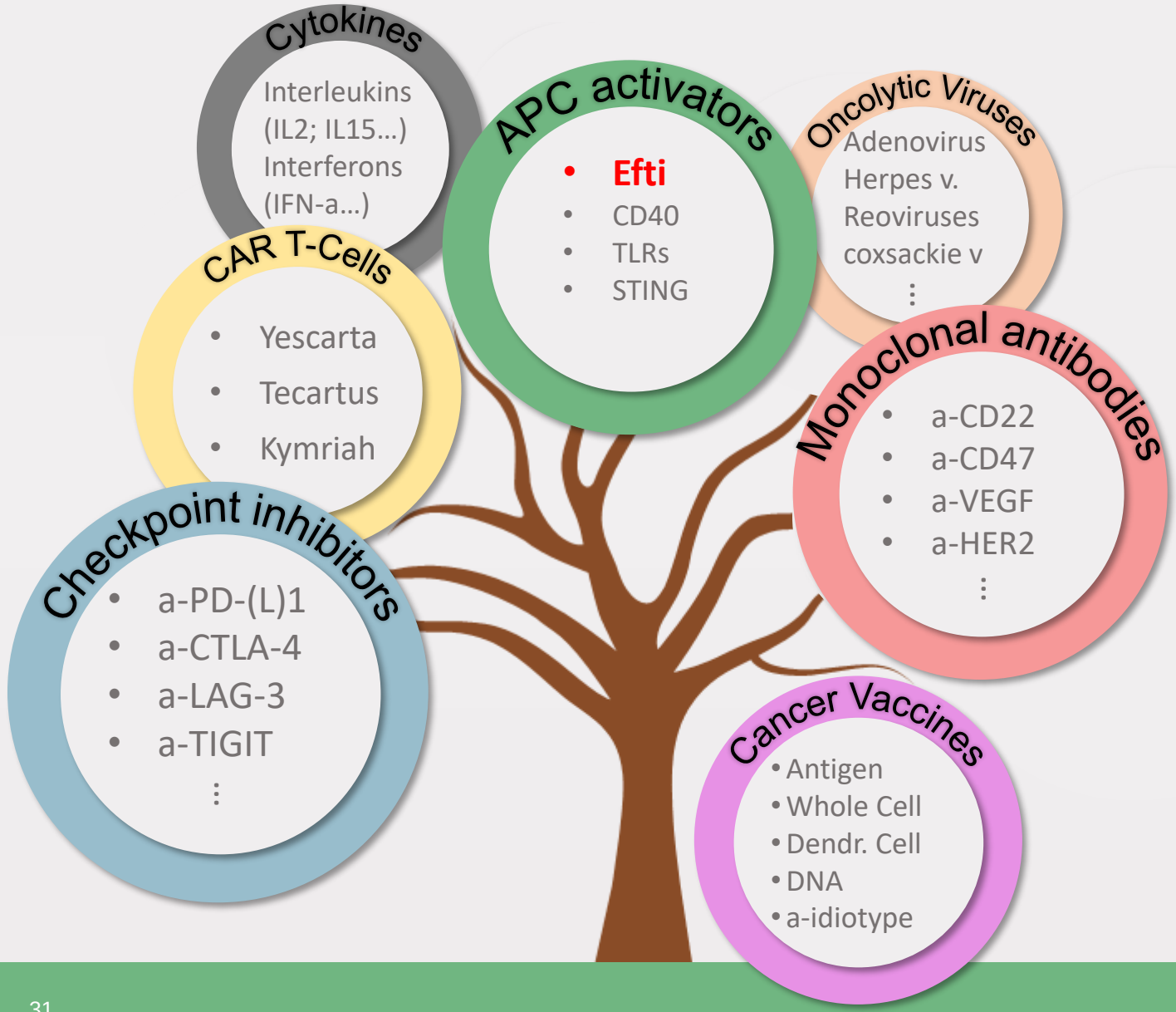
(1) ASCO 2021: J Clin Oncol 39, 2021 (suppl 15; abstr 2518); DOI 10.1200/JCO.2021.39.15_suppl.2518

Competition

Eftilagimod Alpha

Leader in its Class of Oncology Products

immutep
LAG-3 IMMUNOTHERAPY



Efti:

- No direct competition in Mechanism of Action
- No other MHC-II agonist under development
- Protected by comprehensive patent estate
- Proven in randomized, placebo controlled setting
- Excellent safety profile
- Low cost of goods

Efti is well positioned to potentially become "the next big thing" in oncology

Summary and Outlook

TACTI-003 Trial in 1st line HNSCC

1st line HNSCC SoC

Median OS from KN-048 (1), unselected for PD-L1

Chemo + Cetuximab	10.7-11.0
Pembrolizumab	11.6 ↑ to 14.9 for CPS ≥ 20
Chemo + Pembrolizumab	13.0 ↑ to 14.7 for CPS ≥ 20

→ OS improved by ~2 months, but pembro non-inferior to chemo alone

→ CPS predictive for OS for pembro arms

Median DoR from KN-048 (1), unselected for PD-L1

Chemo + Cetuximab	4.3
Pembrolizumab	22.6
Chemo + Pembrolizumab	6.7

→ DoR dramatically decreased in the light of higher response rate (36 % vs. 17 %) for chemo containing arms

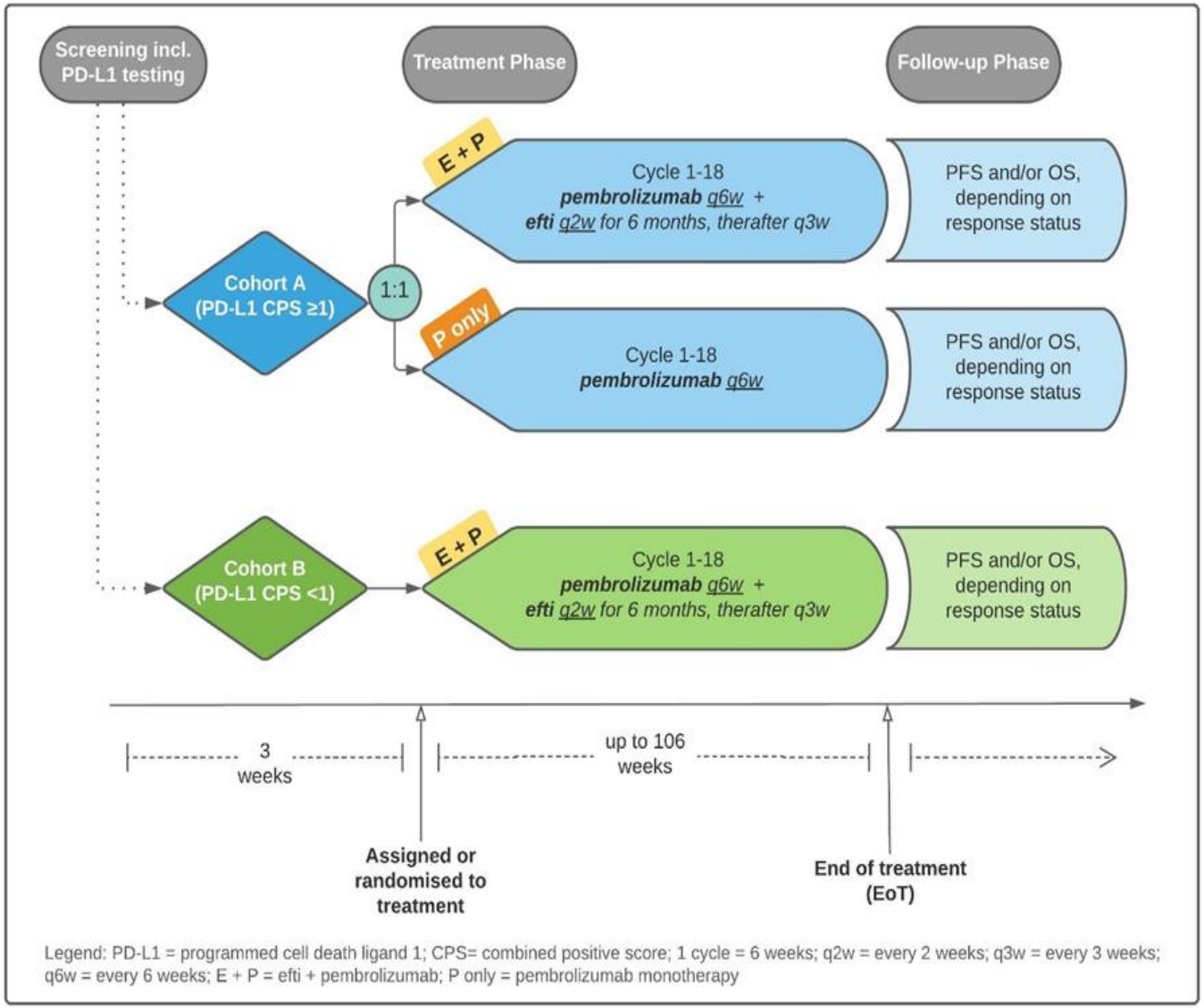
Despite progress high unmet medical need → therapy with comparable duration of response in combination with a higher ORR and improved OS with a comparable safety profile like pembro alone would be excellent

Notes:

(1) B Burtness et al.: Pembrolizumab alone or with chemotherapy versus cetuximab with chemotherapy for recurrent or metastatic squamous cell carcinoma of the head and neck (KEYNOTE-048): a randomised, open-label, phase 3 study. *The Lancet* 2019, https://doi.org/10.1016/S0140-6736(19)32591-7

TACTI-003 Trial in 1st line HNSCC

Current Design + Status



Legend: PD-L1 = programmed cell death ligand 1; CPS= combined positive score; 1 cycle = 6 weeks; q2w = every 2 weeks; q3w = every 3 weeks; q6w = every 6 weeks; E + P = efti + pembrolizumab; P only = pembrolizumab monotherapy

In collaboration with

MERCK
INVENTING FOR LIFE

Design:

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

Status:

- Advanced planning & study start up expected in mid 2021
- **Fast Track designation granted by FDA in April 2021**

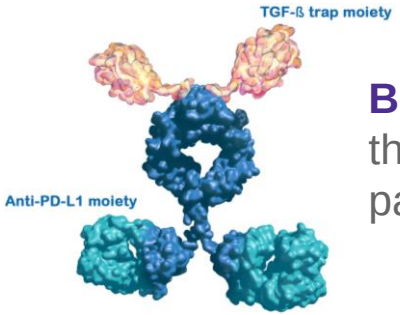
INSIGHT Platform Trial in Solid Tumours

Stratum-005: Efti + Bintrafusp Alfa Combination

immutep
LAG-3 IMMUNOTHERAPY

To evaluate the feasibility and safety of combined treatment with bintrafusp alfa (M7824) and eftilagimod alpha. Conducted as the 5th arm of the INSIGHT trial.

In collaboration with Merck KGaA, Darmstadt, Germany; gsk; Institut für Klinisch-Onkologische Forschung; KRANKENHAUS NORDWEST



Bintrafusp alfa: bifunctional fusion protein that aims to block two immunosuppressive pathways: TGF-β and PD-L1

Efti: LAG-3 fusion protein that activates antigen presenting cells (APCs) via the LAG-3 – MHC II pathway

Phase I
Open label trial

12
Patients in 3 cohorts

12 months
Combination treatment

Two sites
Germany

Solid tumors
- histologically confirmed locally advanced or metastatic
- received ≤4 prior lines of therapy

→

Q2W for maximum of 12 months
- **bintrafusp alfa** 1.200mg i.v.
- **eftilagimod alpha** 30mg s.c.

→

RP2D, Safety,
ORR, PFS, PK, PD

2020 & 2021 News Flow*

immutep
LAG-3 IMMUNOTHERAPY

2020

- ✓ **AIPAC** – PFS, ORR and OS delivered
- ✓ US **IND** for MBC
- ✓ **TACTI-002** – recruitment & data delivered e.g. at ASCO, EMSO & SITC for
  - ✓ 1st line NSCLC
  - ✓ 2nd line NSCLC
  - ✓ 2nd line HNSCC
- ✓ Support of global **COVID** efforts (Phase II)
- ✓ New **partnerships**: LabCorp
- ✓ Progress from **IMP761**
- ✓ Expansion of **IP portfolio**
- ✓ Strong **financial position**

2021

- ✓ Fast Track designation granted for efti in 1st line HNSCC from US FDA
- ❑ Final data from **AIPAC**: 2nd OS follow up
- ✓ Data from **TACTI-002** & final data from **INSIGHT-004** at ASCO
- ❑ Recruitment & data from **TACTI-002**
- ❑ Start & ongoing recruitment of **new randomized trial in 1st line HNSCC** (TACTI-003)
- ❑ Ongoing **regulatory** engagement
- ❑ Updates from **IMP761**
- ❑ Updates from partnered programs (e.g. GSK, Novartis, EAT COVID, CYTLIMIC and EOC Pharma)
- ❑ Potential further partnerships & expansion of existing programs

- ✓ Validation of LAG-3/MHC-II interaction through readout of BMS's Phase III data for relatlimab + nivo combination

Notes:
*The actual timing of future data readouts may differ from expected timing shown above. These dates are provided on a calendar year basis.

Summary

Global leadership position in LAG-3 with 4 LAG-3 related product candidates in immuno-oncology and autoimmune disease

Multiple active clinical trials (including partnered candidates), with further significant data read-outs in 2021

Compelling clinical data from efti & strong rationale to combine with multiple FDA approved treatments

Established collaborations with e.g. Merck (MSD), Pfizer, Merck KGaA, Novartis and GSK

Thank you!