

TACTI-003 Topline Data Update for Patients with Any PD-L1 Expression (Cohort A) & Negative PD-L1 Expression (Cohort B) in 1L HNSCC and Overview of TACTI-004 Pivotal Phase III in 1L NSCLC

Global Webcast Presentation – Thursday, June 27th, at 9AM AEST (Wednesday, June 26th, at 7PM ET)



## Forward-Looking Statements



The purpose of the presentation is to provide an update of the business of Immutep Limited ACN 009 237 889 (ASX:IMM; NASDAQ:IMMP). These slides have been prepared as a presentation aid only and the information they contain may require further explanation and/or clarification. Accordingly, these slides and the information they contain should be read in conjunction with past and future announcements made by Immutep and should not be relied upon as an independent source of information. Please refer to the Company's website and/or the Company's filings to the ASX and SEC for further information.

The views expressed in this presentation contain information derived from publicly available sources that have not been independently verified. No representation or warranty is made as to the accuracy, completeness or reliability of the information.

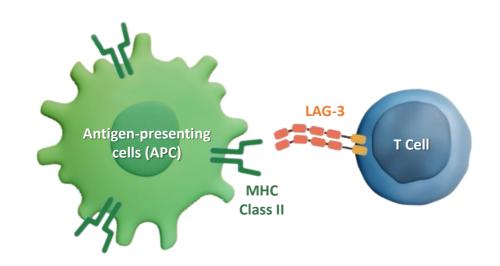
Any forward-looking statements in this presentation have been prepared on the basis of a number of assumptions which may prove incorrect and the current intentions, plans, expectations and beliefs about future events are subject to risks, uncertainties and other factors, many of which are outside Immutep's control. Important factors that could cause actual results to differ materially from assumptions or expectations expressed or implied in this presentation include known and unknown risks. Because actual results could differ materially to assumptions made and Immutep's current intentions, plans, expectations and beliefs about the future, you are urged to view all forward-looking statements contained in this presentation with caution.

This presentation should not be relied on as a recommendation or forecast by Immutep. Nothing in this presentation should be construed as either an offer to sell or a solicitation of an offer to buy or sell shares in any jurisdiction.

This presentation is authorised for release by the CEO of Immutep Limited.

## Pioneering LAG-3 Immunotherapy Portfolio





Immutep has designed multiple first-in-class therapeutics targeting either MHC Class II molecules on antigen-presenting cells (APC) or LAG-3 on T-cells to fight cancer & autoimmune disease

#### Targeting MHC Class II on APCs# Targeting LAG-3 on T cells **LAG525**\* Anti-LAG-3 **GSK'781**\* **IMP761** Depleting LAG-3 Soluble LAG-3 Blocking LAG-3 small molecule Agonist LAG-3 fusion protein antibody antibody antibody **Autoimmune Disease** Oncology Oncology Immune Stimulation Immune Stimulation Immune Suppression

## Deep LAG-3 Pipeline in Oncology & Autoimmune Diseases

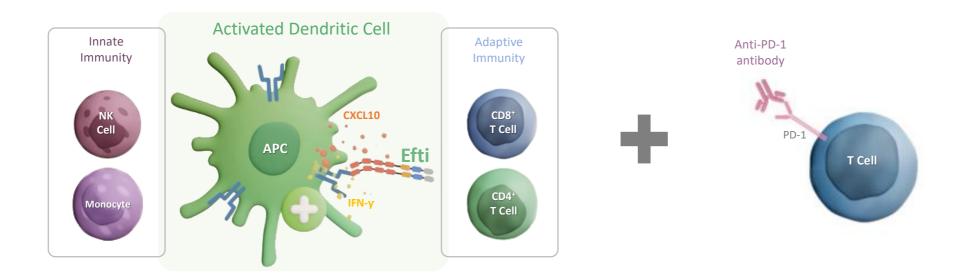


	Program		Indication	Preclinical	Phase I	Phase II	Late Stage#	Collaborations	Commercial Rights
SONCOLOGYOPHI		<b>a</b> ein	1L Non-Small Cell Lung Cancer (NSCLC)  1L Head & Neck Squamous Cell Carcinoma (HNSCC)	TACTI-004   Efti + Pemb				MERCK MERCK	
			1L NSCLC, 2L HNSCC, PD-X Refractory 2L NSCLC	TACTI-003   Efti + Pemb				MERCK  MERCK	immutep <sup>©</sup>
	<b>Eftilagimod Alpha</b> Soluble LAG-3 Protein		1L Non-Squamous NSCLC	INSIGHT-003   Efti + Per				Merck KGaA	Global Rights ex-China
	& MHC Class II agonisi		Urothelial Cancer Soft Tissue Sarcoma	INSIGHT-005   Efti + Ave				Merck KGaA Darmstadt, Germany  Narodowy Instrutut United States  Narodowy Instruction  Narodowy  N	ex-Cillia
			HR+/HER2- Metastatic Breast Cancer & TNBC  Metastatic Breast Cancer & Solid Tumors	AIPAC-003   Efti + Paclita  Efti + Paclitaxel and Efti +				Names transfer	<b>♦ E</b> □ <b>C</b> Efti China Rights
	Anti-LAG-3 Small Molecule	X.	Undisclosed	ETU + PAUILAXEI ATIU ETU +	Pembrolizumab ····			CARDIFF	immutep® Global Rights
	<b>LAG525</b> Anti-LAG-3 Antibody	从	Solid Tumors & Blood Cancer Triple Negative Breast Cancer Melanoma Solid Tumors Triple Negative Breast Cancer					U NOVARTIS	NOVARTIS Global Rights
AUTOIMMUNE DISEASE	IMP731* Depleting LAG-3 Antibody	人	Ulcerative Colitis Psoriasis Healthy Subjects						immutep <sup>©</sup>
	IMP761** Agonist LAG-3 Antibody	从	Undisclosed			-			Global Rights

## Differentiated Approach in Oncology



Efti has complementary action with immune checkpoint inhibitors (ICIs) like anti-PD-(L)1 therapy

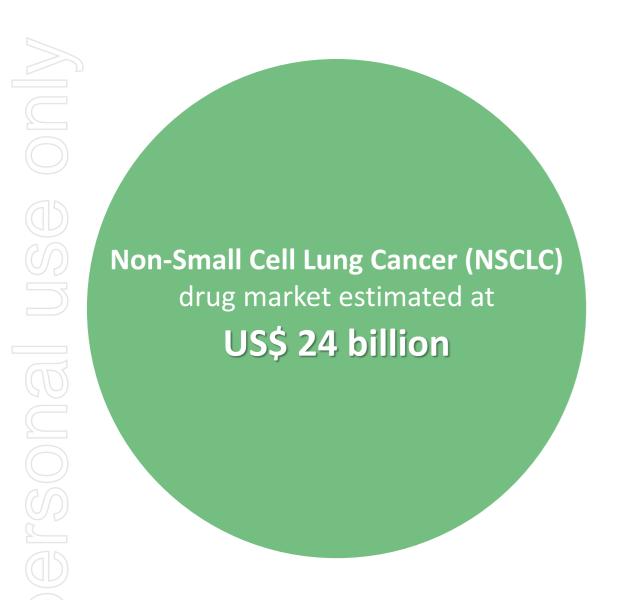


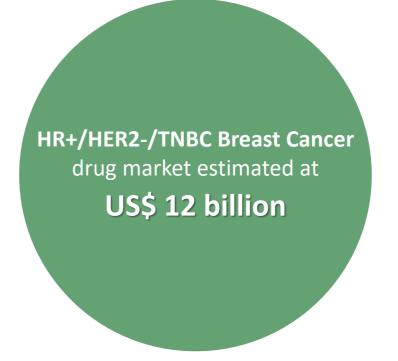
Efti's unique activation of antigen-presenting cells (e.g. dendritic cells, monocytes) engages the adaptive and innate immune system, which complements anti-PD-(L)1 therapy to fight cancer

- Efficacy across "hot", "tepid", "cold" tumours in patients with high, low, negative PD-L1 expression
- Additionally, efti in combination with anti-PD-(L)1 has a favourable safety profile

## Clinical Trials Target Large Addressable Markets









\*Efti has FDA Fast Track designation in 1L NSCLC and 1L HNSCC

## **TACTI-003**

First Line Head & Neck Squamous Cell Carcinoma (1L HNSCC)

## Head and Neck Squamous Cell Carcinoma



## **Head and Neck Cancer Regions** Paranasal sinuses Nasal cavity Nasopharynx-Oral cavity Oropharynx-Tongue Salivary glands Hypopharynx Larvnx

## TACTI-003 included cancers that originate from the areas delineated by red boxes

#### **Overview:**

- Head and neck squamous cell carcinoma (HNSCC) encompasses a spectrum of heterogeneous diseases originating in the oral cavity, pharynx, and larynx
- HNSCC is a complex disease involving distinct anatomical sites and with varying etiological factors including smoking, alcohol consumption and infection with Human Papilloma Virus (HPV)

#### **Epidemiology:**

- More than 890,000 HNSCC diagnoses and 450,000 deaths per annum worldwide<sup>1</sup>
- Up to ~100,000 estimated to develop metastatic disease in 8MM countries²
- 5-year survival for metastatic HNSCC is 39.3%<sup>3</sup> and varies depending on the anatomical site of cancer origin

## Treatment Landscape in 1L HNSCC



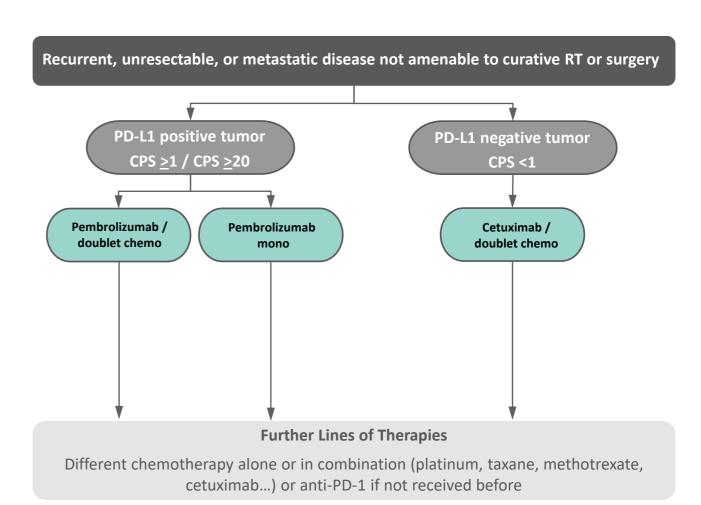
#### High unmet need:

Overall Survival in first line HNSCC is ~12 months.

#### PD-L1 expression:

- PD-L1 expression as measured by Combined Proportion Score (CPS) is an FDA approved predictive biomarker in 1L HNSCC for anti-PD-1 therapy
- Patients are grouped by high (CPS ≥20), low (CPS 1-19), and negative (CPS <1) PD-L1 expression<sup>1</sup>. Generally, high PD-L1 expressors respond best, low respond sub-optimally, and negative have negligible responses to anti-PD-1 therapies.
- Currently, there are no effective chemotherapy-free treatments for patients with negative PD-L1 expression

High unmet medical need for well tolerated and efficacious treatment options

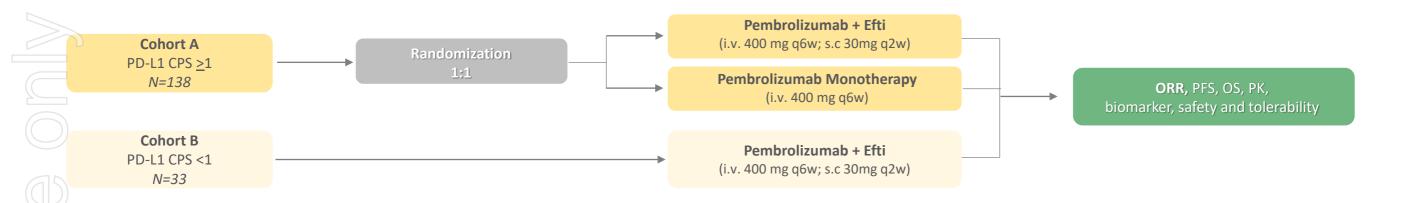


Simplified based on NCCN Guidelines Head and Neck Cancers and EHNS-ESMO-ESTRO Clinical Practice Guidelines

## TACTI-003 / KEYNOTE-PNC-34 Trial Overview



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



- Randomized, multicenter Phase IIb trial evaluating efti in combination with pembrolizumab (KEYTRUDA®) in first line recurrent or metastatic head and neck squamous cell carcinoma (1L HNSCC). A total of 171 patients enrolled in 29 clinical sites across nine countries (US, UK, ES, UA, AU, RO, UA, DK, DE):
  - Cohort A (N=138) Patients with any PD-L1 expression (CPS ≥1) randomized 1:1 evaluating efti + KEYTRUDA® versus KEYTRUDA monotherapy
  - Cohort B (N=33) Patients with negative PD-L1 expression (CPS <1), which could not be randomized as KEYTRUDA monotherapy is not approved in CPS <1</li>
- Primary endpoint is Overall Response Rate (ORR) among evaluable patients (>= 1 post baseline CT), according to RECIST1.1
- Secondary endpoints include Overall Survival and Progression-Free Survival, ORR (iRECIST), and Disease Control Rate

### TACTI-003 Baseline Characteristics in Evaluable Patients



- 149 evaluable patients out of 171 patients enrolled\*:
  - ✓ Efti + KEYTRUDA with CPS  $\geq$ 1: 58 of 69 (84%)
  - ✓ KEYTRUDA alone with CPS  $\geq$ 1: 60 of 68 (88%)
  - ✓ Efti + KEYTRUDA with CPS < 1: 31 of 33 (94%)
- Patients recruited irrespective of HPV status & PD-L1 expression
- CPS used for randomization/enrollment was assessed locally (65.8%) / centrally (34.2%)\*\*
- Data read-out according to protocol with minimum follow-up of 18 weeks
- Data collection for follow up and additional analyses is ongoing, as well as for secondary endpoints

Detailed presentation of TACTI-003 data (Cohorts A & B) planned for medical conferences in H2 of 2024

## Prognostic Factors in HNSCC



Imbalances in treatment arms (e.g. smoking status, location of primary tumour) favour KEYTRUDA monotherapy arm

	Good	Prognosis	Poor	Imbalances in TACTI-003 (Cohort A)
	Younger age	Age at onset	Older age	- None -
	Female	Gender	Male	Favours KEYTRUDA arm (30.0% female vs 20.7% in combination arm)
15	0	Performance Status (ECOG)	1	- None -
	Never, quitters	Smoking status	Current	Favours KEYTRUDA arm (16.7% current vs 22.4% in combination arm)
	Other sites	Site of primary tumour	Hypopharynx	Favours KEYTRUDA arm (13.3% hypopharynx vs 19.0% in combination arm)
J.	HPV+	HPV status*	HPV-	Favours KEYTRUDA arm (65.0% HPV+ vs 29.2% in combination arm)
	Stage I/II	Stage of cancer	Stage III/IV	- None -
	Local in H&N area	Site of recurrence	Distant metastasis	- None -
	Absent	Liver metastasis	Present	- None -

- Multiple prognostic markers

  favor the KEYTRUDA mono arm

  (e.g., gender, smoking, HPV+/-,
  site of primary tumour)
- None of the prognostic markers favor the Efti + KEYTRUDA combination arm

<sup>\*</sup> In patients with primary oropharyngeal tumors

## Safety



	3

Safety Parameter	Efti + KEYTRUDA (Cohorts A+B) n (%)	KEYTRUDA alone (Cohort A) n (%)
Any TEAE Leading to Discontinuation of Study Treatment	8 (7.8%)	4 (5.9%)
Related to Efti and/or Pembrolizumab	6 (5.9%)	3 (4.4%)

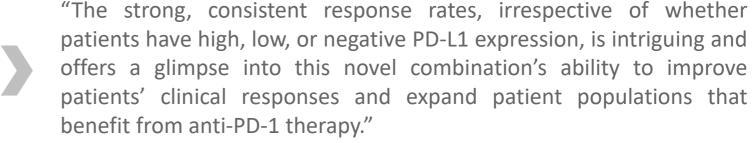
- No new safety signals
- Rate of treatment related discontinuation was low and comparable between treatment regimens
- Safety profile comparable to KEYTRUDA monotherapy
- More details will be shown at conference in H2 2024

## Overall Response Rate in Evaluable Patients



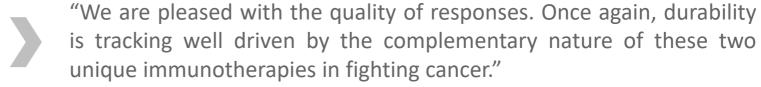
TACTI-003 primary endpoint is overall response rate (ORR) in evaluable patients, according to RECIST1.1

Efti plus KEYTRUDA achieved a ~34% ORR regardless of PD-L1 levels and HPV status, including patients with negative PD-L1 expression



- Dr. Martin Forster, UCL Cancer Institute, London, UK

Efti plus KEYTRUDA led to higher ORR across all levels of PD-L1 expression versus KEYTRUDA monotherapy and durability is tracking well



- Dr. Frédéric Triebel, CSO of Immutep

## Randomised Cohort A in Patients with Any PD-L1 Expression



		TA.	le II
TA	_		
		Λч,	~ .

Efti + KEYTRUDA

**KEYTRUDA** alone

#### High PD-L1 Expression (CPS ≥20)

31.0% ORR (N=29)

18.5% ORR (N=27)

In CPS >20, efti + KEYTRUDA shows strongest outperformance with 68% relative increase and 12.5% absolute increase. Patients with CPS >20 represent ~50% of the 1L HNSCC patient population.\*

#### Low PD-L1 Expression (CPS 1-19)

34.5% ORR (N=29)

33.3% ORR (N=33)

In CPS 1-19, efti + KEYTRUDA has relatively high 34.5% ORR in CPS 1-19. KEYTRUDA monotherapy's 33.3% ORR is higher than historical published data, including a 14.5% ORR in KN-048\*, that may be explained by imbalances including gender, smoking status, HPV+/- status, and location of primary tumour.

#### Any PD-L1 Expression (CPS ≥1)

32.8% ORR (N=58)

26.7% ORR (N=60)

In CPS ≥1, efti + KEYTRUDA has 23% relative Increase and 6.1% absolute increase against KEYTRUDA monotherapy results that were driven higher by results in CPS 1-19 group. efti + KEYTRUDA 90% CI: 22.6%-44.3%; KEYTRUDA 90% CI: 17.5%-37.6%

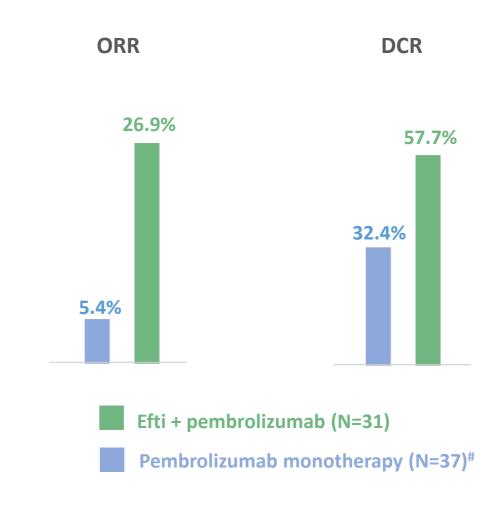
## Results for Patients with Negative PD-L1 (Cohort B)



#### TACTI-003, Cohort B (CPS <1)

- ✓ Positive preliminary 26.9% ORR and 57.7% disease control rate from 26 evaluable patients with CPS <1 reported in April 2024
- Compares favorably to historical results from KEYTRUDA monotherapy (see figures on the right)

ORR in CPS <1 has substantially improved and will be presented at an ESMO Virtual Plenary session on 11 July 2024.



## **ESMO VIRTUAL PLENARY**





# Cohort B – ESMO Plenary Session in July 2024

- ESMO Virtual Plenaries are monthly presentations of the latest, original scientific data, including "Phase II trials which demonstrate remarkable therapeutic benefit, scientific insight or progress in an area of unmet need"
- Updated clinical data from Cohort B in patients with negative PD-L1 expression has been accepted for an ESMO Virtual Plenary session and will be delivered via an oral presentation on 11 July 2024

## Summary & Next Steps



#### Summary

Efti + KEYTRUDA leads to an ORR consistently above 30% across all CPS expression levels (high, low, negative)

In the randomised Cohort A, efti in combination with KEYTRUDA shows the strongest performance in patients with high PD-L1 expression (CPS  $\geq$ 20) with a 31.0% ORR as compared to 18.5% for KEYTRUDA monotherapy

In patients with negative PD-L1 expression (CPS <1, Cohort B), a patient population with no effective chemotherapy-free options and for who KEYTRUDA alone does not work, the IO combination's high response rate is exceptional for a chemo-free regimen

This effect of efti on anti-PD-1 — meaning inducing responses in PD-L1 negative tumors where anti-PD-1 are typically primary resistant — has been observed across multiple diseases (e.g. non-small cell lung cancer, head and neck cancer, melanoma)

#### **Next Steps**

In addition to the ESMO Virtual Plenary session on 11th July for Cohort B, more clinical data from Cohort A & B in TACTI-003 will be presented next at a medical conference in H2 CY2024

Based on the positive topline results, the Company will discuss the path forward in 1L HNSCC with regulatory agencies

# only

## **Lead Indication**

# First Line Non-Small Cell Lung Cancer (NSCLC)



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



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



**ESMO 2023 - Dr. Enric Carcereny** presenting Overall Survival data in 1L NSCLC from TACTI-002/KN-798

## Immutep & Merck (MSD) to Undertake Phase III Trial in NSCLC



Opportunity to set a new standard of care across entire NSCLC population regardless of PD-L1 expression

#### **MSD / Immutep Collaboration**

- Immutep will conduct the registrational TACTI-004 Phase III trial and MSD will supply KEYTRUDA
- Agreement enables Immutep and MSD to seek marketing authorisation of the combination and to market their respective compounds with a relevant label indication
- Both parties retain the commercial rights to their respective compounds and are free to conduct other clinical studies, either individually or in combination, in any therapeutic area

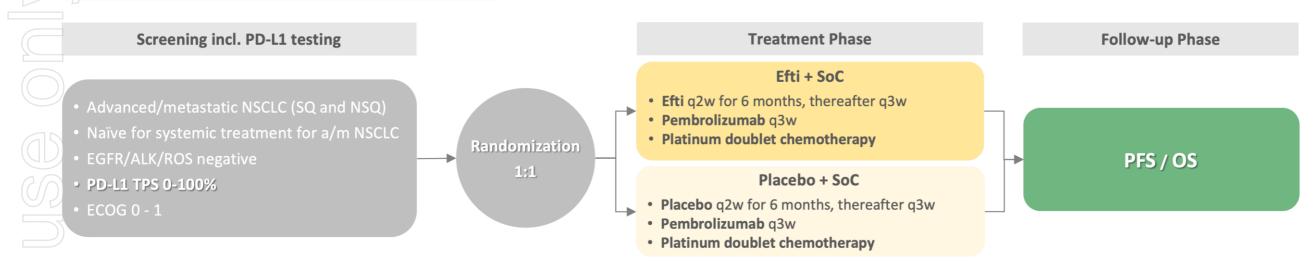
#### **Key Highlights**

- All comer trial: will not select for PD-L1 and include both squamous / non-squamous tumors → anticipate fast enrollment
- Trial design has been agreed with all important stakeholders: regulatory agencies across the globe (e.g. FDA, EU based authorities), investigators, MSD and others → strong support across the board
- Clear unique selling point: novel agonist with strong efficacy & favorable safety in 1L NSCLC and best available SOC control arm → quick to enroll
- Success will lead efti directly into a multi-billion market opportunity that exists today for KEYTRUDA in metastatic nonsmall cell lung cancer

## TACTI-004 Trial Design



#### TACTI-004 / KEYNOTE-PNC-91 Trial Design



#### **Trial Overview:**

- TACTI-004 will be a 1:1 randomized, double-blind, multinational, controlled clinical study with ~750 patients
- Trial will enroll first line squamous and non-squamous NSCLC patients who are unselected for PD-L1 expression
- Dual primary endpoints will be Progression-Free and Overall Survival with both being adequately powered
- First patient expected to be enrolled in Q4 2024 / Q1 2025
- Futility analysis expected in late 2025 / early 2026 and interim analysis in late 2026 till mid-2027 (event driven)

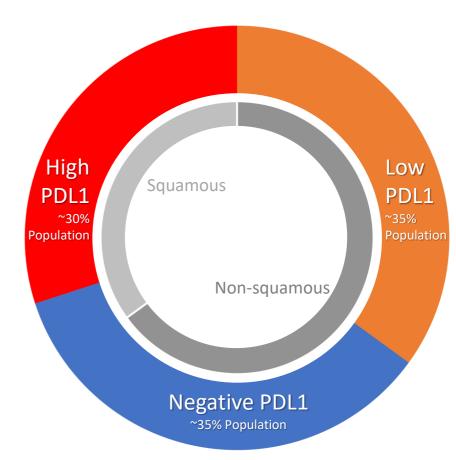
## Uniquely Positioned Phase III in 1L NSCLC Landscape



KEYTRUDA has revolutionized the treatment landscape in lung cancer, and as a result MSD (Merck) captures between 7 to 8 of every 10 metastatic lung cancer patients today\*

Of KEYTRUDA's ~US\$ 25 billion in sales in 2023, it is estimated that ~US\$ 9 billion or +35% are from lung cancer\*\*

Efti in combination with KEYTRUDA and chemotherapy is uniquely positioned to potential drive a new standard of care for the vast majority of the 1L NSCLC population



TACTI-004 among the few global Phase III trials evaluating combination therapies with KEYTRUDA that addresses almost the entire 1L NSCLC patient population eligible for anti-PD-(L)1 therapy

### Outlook



#### Milestones & Catalysts Ahead

- Non-Small Cell Lung Cancer TACTI-004 preparations for study start with FPI in late 2024 / early 2025
- Head & Neck Squamous Cell Carcinoma Updated Cohort B data 11th July at ESMO Plenary Session; additional data at medical conference H2 2024
- Non-Small Cell Lung Cancer Update from triple combo INSIGHT-003 trial
- **Soft Tissue Sarcoma** Update from investigator-initiated EFTISARC-NEO study
- Metastatic Breast Cancer Update from AIPAC-003 study evaluating 90mg vs 30mg efti dosing
- Metastatic Urothelial Carcinoma Update from investigator-initiated INSIGHT-005 study
- Autoimmune Diseases Continue IND-enabling studies of IMP761 and move toward to clinic in mid-2024
- Other indications Updates from partnered programs and potential expansion of clinical trial pipeline
- Cash Balance Pro forma cash balance of ~\$195 million (US\$ ~130 million)<sup>1</sup> providing cash runway to late CY2026

Thank you