Immatics Corporate Presentation

September 11, 2023

Delivering the Power of T cells to Cancer Patients

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Building a Leading TCR Therapeutics Company

Two Clinical-Stage Modalities

Pipeline of TCR-T and TCR Bispecific product candidates in clinical & preclinical development

Clinical PoC for Cell Therapy

Anti-tumor activity and durability of response across multiple solid tumors in early TCR-T clinical development

Differentiated Platforms

Unique technologies to identify true cancer targets and right TCRs

Therapeutic Opportunity

Potential for addressing large patient populations with high prevalence targets in solid tumors

Our Near-Term Focus – Clinical Development of Our Lead Assets from Our Autologous TCR-T (ACTengine®) and TCR Bispecifics (TCER®) Pipeline

ACTengine® IMA203 (PRAME)

Three IMA203 Ph1b cohorts
- IMA203 monotherapy
- Checkpoint combo
- IMA203CD8 monotherapy

Next update on all three IMA203 cohorts and clinical development path for PRAME TCR-T monotherapy towards registration-directed trials is planned for 4Q 2023

TCER® IMA401 (MAGEA4/8)

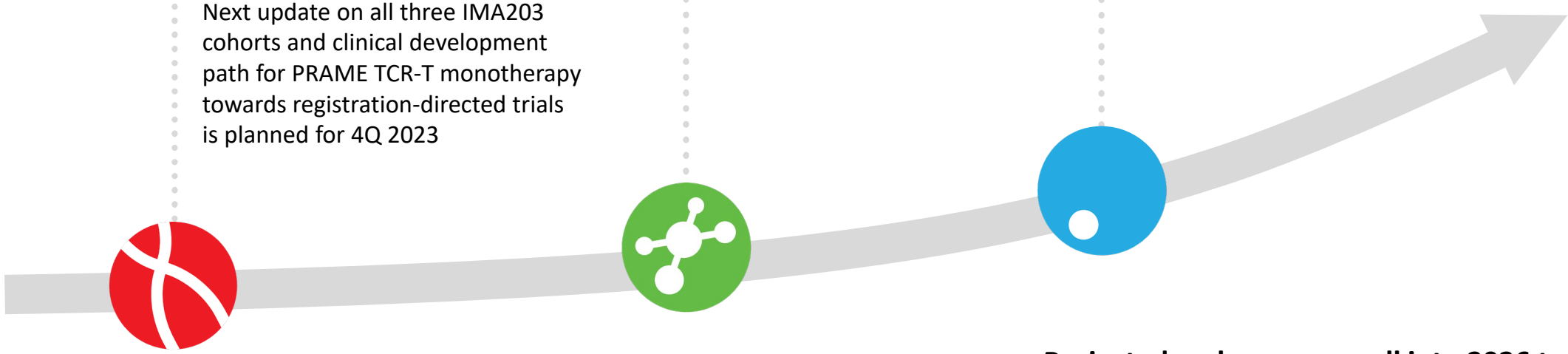
Advance ongoing Phase 1 clinical trial

Establish clinical PoC

TCER® IMA402 (PRAME)

Phase 1/2 clinical trial started in Aug 2023

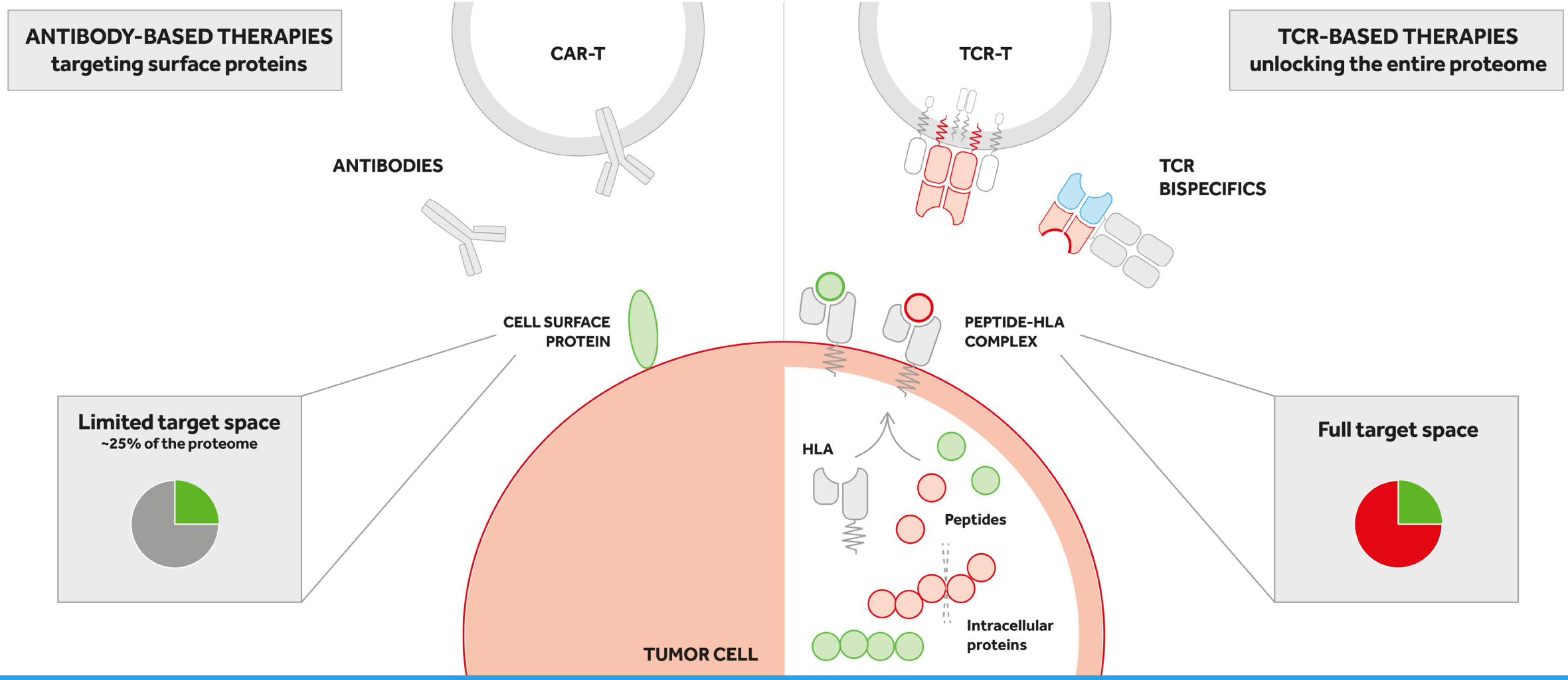
First clinical data planned in 2024



Projected cash runway well into 2026 to reach multiple value inflections points across our portfolio

[1] Clinical Trial Application (CTA) is the European equivalent of an Investigational New Drug (IND) application

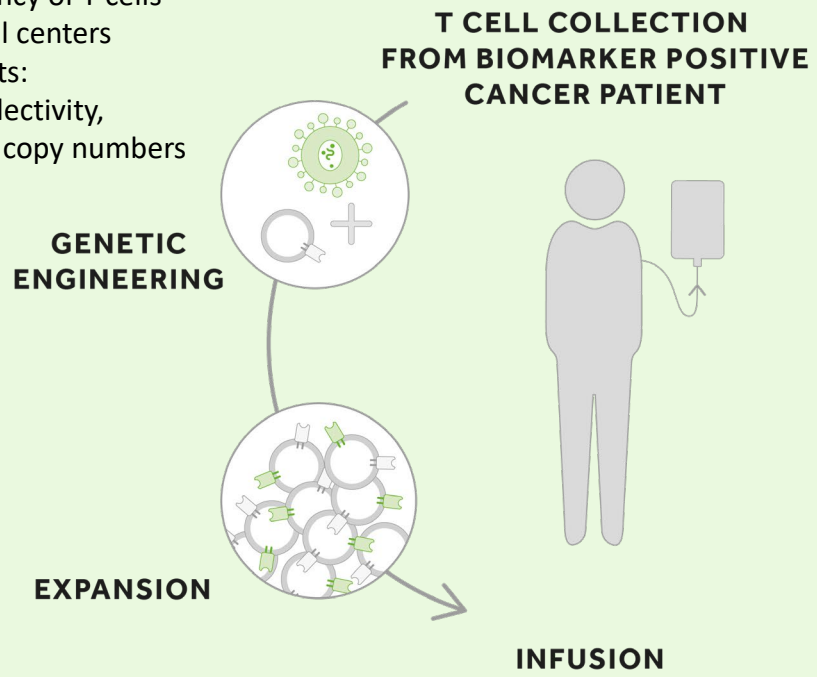
Our TCR-based Approaches Leverage the Full Target Space beyond the Cancer Cell Surface



Two Distinct TCR-based Therapeutic Modalities in Clinical Development

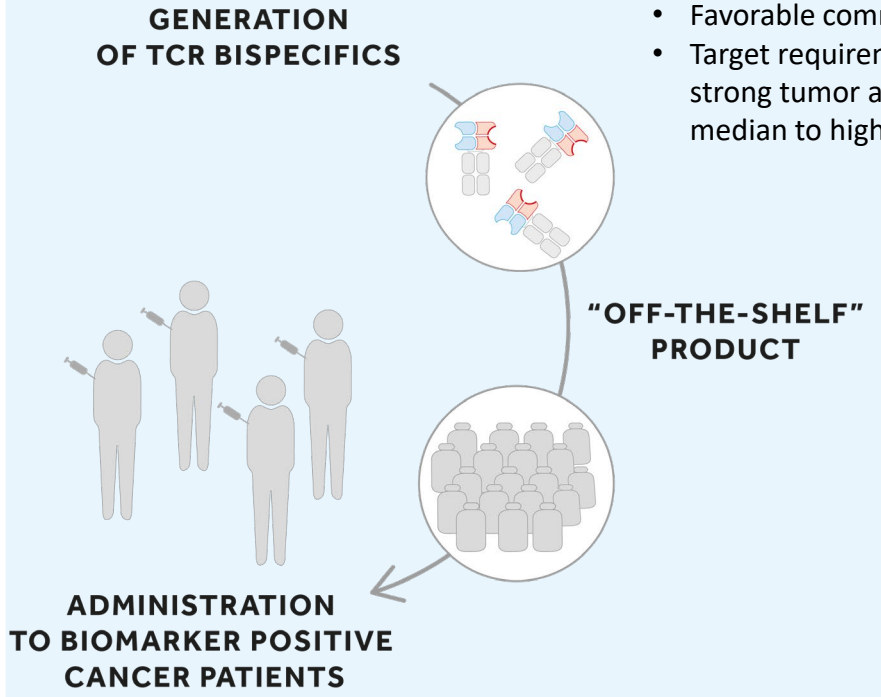
Autologous TCR-T (ACTengine®)

- Strong clinical activity in patients with high tumor burden[1]
- Single dose[2]
- Proprietary manufacturing process for enhanced potency of T cells
- Specialized medical centers
- Target requirements: stringent tumor selectivity, low, medium, high copy numbers



TCR Bispecifics (TCER®)

- Off-the-shelf biologic for immediate treatment
- Repeat dosing
- All hospitals and out-patient, opportunity for larger patient reach
- Favorable commercial characteristics
- Target requirements: strong tumor association, median to high copy numbers



Differentiated positioning of ACTengine® vs. TCER® based on patient population and medical need

[1] Interim data update from the ACTengine® IMA203 TCR-T monotherapy Phase 1b Cohort A (published May 02, 2023) with a 64% (7/11) ORR and 67% (6/9) confirmed ORR;
[2] Initial manufacturing may provide sufficient quantity for potential repeat dosing.

Our Pipeline of TCR-based Adoptive Cell Therapies and Bispecifics

Modality	Product Candidate	Target	Preclinical	Phase 1a[1]	Phase 1b[1]	Phase 2	Phase 3
Autologous ACT	ACTengine ® IMA203	PRAME			+ Checkpoint Inhibitor[2]		
	ACTengine® IMA203CD8	PRAME					
	ACTengine® IMA204	COL6A3					
	Multiple programs	Undisclosed					
Allogeneic ACT γδ T cells	ACTallo® IMA30x	Undisclosed					
	Multiple programs	Undisclosed					
Bispecifics	TCER® IMA401	MAGEA4/8					
	TCER® IMA402	PRAME					
	TCER® IMA40x	Undisclosed					
	Multiple programs	Undisclosed					
	Multiple programs[4]	Undisclosed					

[1] Phase 1a: Dose escalation, Phase 1b: Dose expansion; [2] Opdivo® (nivolumab): programmed death-1 (PD-1) immune checkpoint inhibitor;
[3] Immatics' proprietary ACTallo® platform utilizing Editas' CRISPR gene editing technology; [4] mRNA-enabled *in vivo* expressed TCER® molecules

Immatics & Moderna – A Strategic Cross-platform R&D Collaboration

Combining Immatics' Target and TCR Platforms with Moderna's mRNA Technology

TCER® mRNA Approach

Development of mRNA-enabled *in vivo* expressed half-life extended TCER® molecules targeting cancer-specific HLA-presented peptides

Option for global P&L sharing for most advanced TCER® program

mRNA Cancer Vaccines

Development of mRNA cancer vaccines by leveraging Moderna's mRNA technology and Immatics' target discovery platform XPRESIDENT® and bioinformatics and AI platform XCUBE™

TCR-T + mRNA Vaccine Combo

Evaluation of Immatics' IMA203 TCR-T therapy targeting PRAME in combination with Moderna's PRAME mRNA-based cancer vaccine[1]

Economics

- $120 million upfront cash payment plus research funding
- >$1.7 billion potential development, regulatory & commercial milestones
- Potential for tiered royalties on global net sales of TCER® products and certain cancer vaccine products commercialized under the agreement

Within the collaboration, preclinical activities conducted by Immatics will be managed by the Immatics Discovery Unit, a recently created internal division at Immatics integrating its technology platforms into one interdisciplinary team focused on all early-stage preclinical pipeline and collaboration programs.; [1] Each Party will retain full ownership of its investigational compound

Strategic Collaborations

Synergistic Expertise that Can Foster Transformative Innovations across Various Modalities

2018 — Genmab

Research collaboration
to develop bispecific immunotherapies
$54 M upfront,
up to $550 M aggregated milestone payments per program,
up to double-digit tiered royalties;
Co-promotion option

2019 — Bristol Myers Squibb™

Research collaboration
to develop autologous TCR-T therapies
$75 M (2019) + $20 M (2022) upfront,
up to $505 M aggregated milestone payments per program, tiered royalties;
Co-development/Co-fund option;
Opt-in right for 1st program exercised by BMS in 2Q 2023 for $15 M option exercise fee

2021 — Bristol Myers Squibb™

Clinical co-development collaboration
to develop Immatics' TCR Bispecific program TCER® IMA401
$150 M upfront,
up to $770 M aggregated milestone payments, double-digit tiered royalties;
Co-promotion option in the US

2022 — Bristol Myers Squibb™

Research collaboration
to develop off-the-shelf allogeneic γδ-based TCR-T/ CAR-T programs
$60 M upfront
up to $700 M milestone payments per program, low double-digit tiered royalties

2023 — moderna

Multi-platform R&D collaboration
to develop *in vivo* expressed TCER® molecules, mRNA cancer vaccines and combo of TCR-T + mRNA vaccine
$120 M upfront, >$1.7 B potential aggregated milestone payments, tiered royalties; Option for global P&L sharing for most advanced TCER®

Potential for Large Patient Populations across Multiple Solid Cancers

IMA203 / IMA402 PRAME

Uterine Carcinoma – 100%
Uterine Carcinosarcoma – 100%
Sarcoma Subtypes – up to 100%
Cut. Melanoma – 95%
Uveal Melanoma[1] – 90%
Ovarian Carcinoma – 80%
Squamous NSCLC – 65%
TNBC – 60%
Small Cell Lung Cancer – 55%
Kidney Carcinoma – up to 45%
Cholangiocarcinoma – 35%
Adeno NSCLC – 25%
Breast Carcinoma– 25%
HNSCC – 25%
Esophageal Carcinoma – 20%
HCC – 20%
Bladder Carcinoma – 20%

IMA401 MAGEA4/8

Sarcoma Subtypes – up to 80%
Squamous NSCLC – 50%
HNSCC – 35%
Bladder Carcinoma – 30%
Esophageal Carcinoma – 25%
Uterine Carcinosarcoma – 25%
Ovarian Carcinoma – 20%
Melanoma – 20%

IMA204 COL6A3 Exon 6

Pancreatic Carcinoma – 80%
Breast Carcinoma – 75%
Stomach Carcinoma – 65%
Sarcoma – 65%
Esophageal Carcinoma – 60%
Squamous NSCLC– 55%
Adeno NSCLC– 55%
HNSCC – 55%
Uterine Carcinosarcoma – 55%
Colorectal Carcinoma – 45%
Mesothelioma – 45%
Cholangiocarcinoma – 40%
Ovarian Carcinoma – 40%
Melanoma – 35%
Bladder Carcinoma – 35%

ACTengine® and TCER® targets demonstrate high prevalence in multiple solid cancers

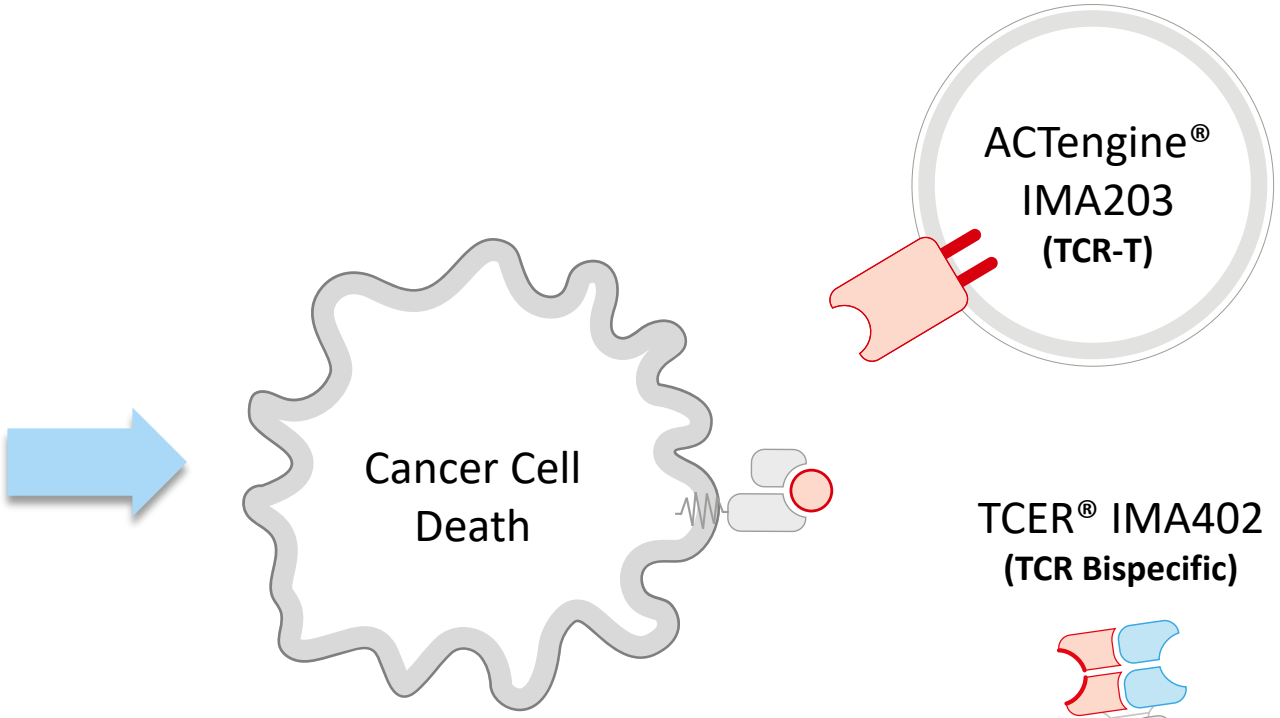
Target prevalence for selected solid cancer indications are based on TCGA (for SCLC: in-house) RNAseq data combined with a proprietary mass spec-guided RNA expression threshold;
[1] Uveal melanoma target prevalence is based on IMADetect® qPCR testing of screening biopsies from clinical trial patients (n=21)

Realizing the Full Multi-Cancer Opportunity of PRAME

ACTengine® IMA203 (TCR-T) and TCER® IMA402 (TCR Bispecific)

Indication	% PRAME positive patients[1]
Uterine Carcinoma	100%
Uterine Carcinosarcoma	100%
Sarcoma Subtypes	up to 100%
Cut. Melanoma	95%
Uveal Melanoma[2]	90%
Ovarian Carcinoma	80%
Squamous NSCLC	65%
TNBC	60%
Small Cell Lung Cancer	55%
Kidney Carcinoma	up to 45%
Cholangiocarcinoma	35%
Adeno NSCLC	25%
Breast Carcinoma	25%
HNSCC	25%
Esophageal Carcinoma	20%
HCC	20%
Bladder Carcinoma	20%

PRAME is one of the most promising and most prevalent, clinically validated solid tumor targets known to date



Phase 1b dose expansion ongoing

Initiation of Phase 1/2 trial Aug 2023

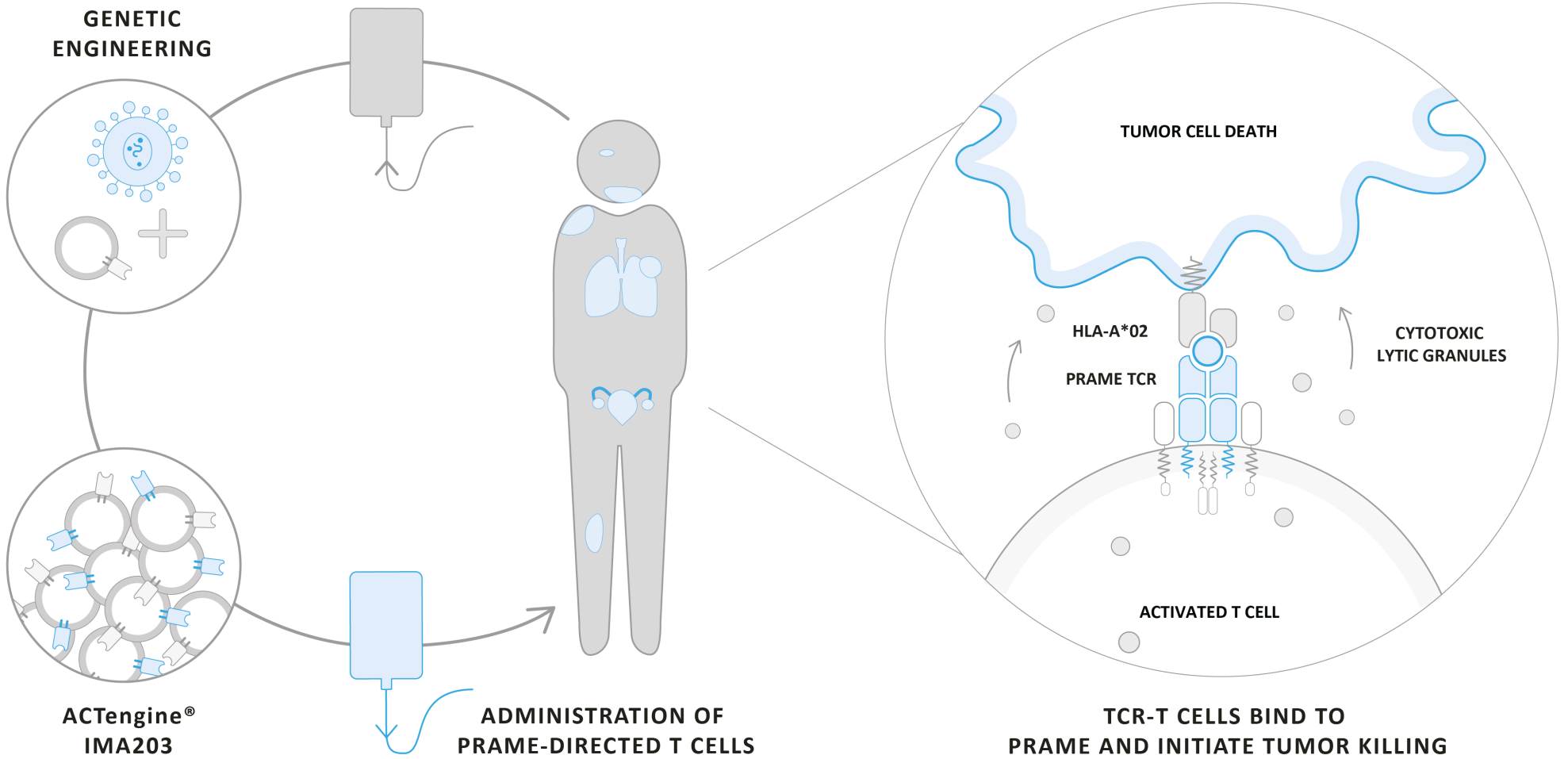
Leverage the full potential of targeting PRAME by continued evaluation of the best suited therapeutic modality (ACTengine® vs. TCER® or both) for each cancer type

[1] PRAME target prevalence is based on TCGA (for SCLC: in-house) RNAseq data combined with a proprietary mass spec-guided RNA expression threshold; [2] Uveal melanoma target prevalence is based on IMADetect® qPCR testing of screening biopsies from clinical trial patients (n=21); NSCLC: Non-small cell lung cancer, TNBC: Triple-negative breast cancer, HNSCC: Head and neck squamous cell carcinoma; HCC: Hepatocellular carcinoma

ACTengine® IMA203 – TCR-T Targeting PRAME

ACTengine® IMA203 Targeting PRAME – Mechanism of Action

Immatics' Leading TCR-T Approach



Key Pillars of Developing a Successful TCR-T Product Candidate

Summary of Interim Update on IMA203 TCR-T Phase 1b Cohort A as of April 2023

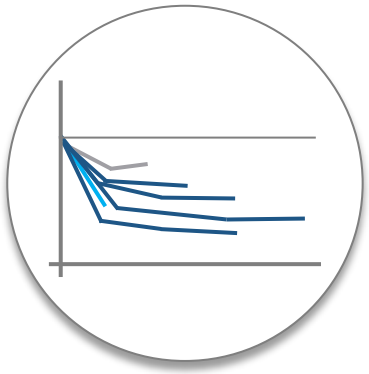
Safety

Manageable tolerability at doses as high as ~$9x10^9$ TCR-T cells

Anti-Tumor Activity

High rate of objective responses:

64% (7/11) ORR[1]
67% (6/9) cORR[2]

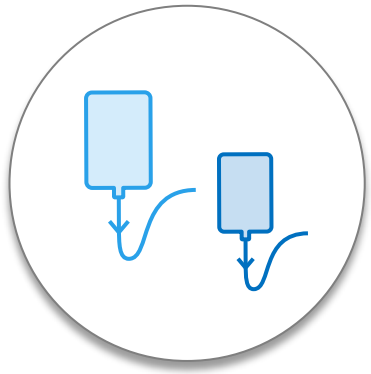


Durability

Ongoing durable responses at 9+ months

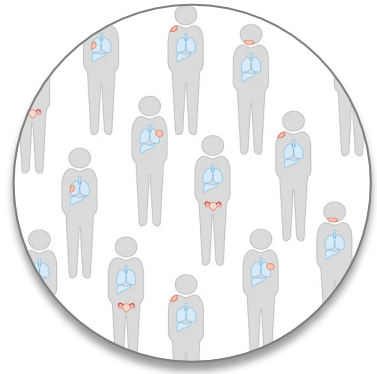
mDOR: Not reached
min 1.3+, max 8.8+

mFU: 8.5 months



Product Quality

Rapid manufacturing time of 7 days
(+ 7-day release testing), manufacturing success rate of 94%



Broad Reach

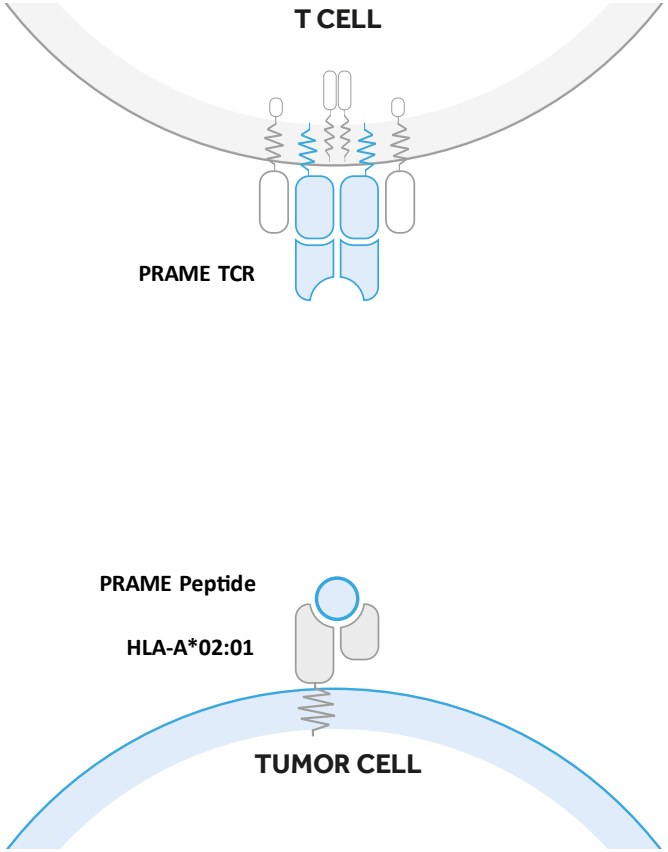
Confirmed objective responses in broad range of solid cancer types at low, medium and high PRAME levels above threshold

IMA203

[1] Initial ORR: Objective response rate according to RECIST 1.1 at first scan post infusion at ~week 6; [2] Confirmed ORR (cORR): Confirmed objective response rate according to RECIST 1.1 for patients with available second scan post infusion at ~month 3 or patients with progressive disease (PD) at any timepoint before this scan; mDOR: median duration of response; mFU: median follow-up

The Multi-Cancer Opportunity of PRAME

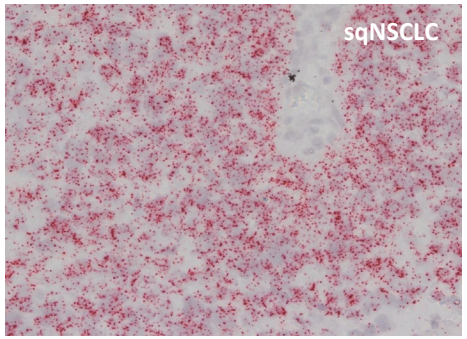
One of the Most Promising Solid Tumor Targets for TCR-based Therapies Known To Date

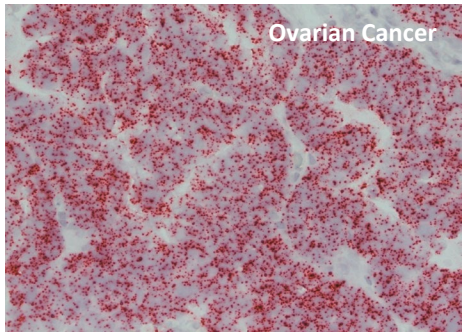


PRAME fulfills all properties of an ideal target for TCR-based therapies

- High prevalence
- High target density
- Homogeneous expression
- “Clean” expression profile
- Clinical proof-of-concept

PRAME RNA detection in tumor samples (ISH)





ISH: in situ hybridization, sqNSCLC: squamous non-small cell lung cancer

ACTengine® IMA203 TCR-T Monotherapy – Patient Flow

Screening & Manufacturing Phase

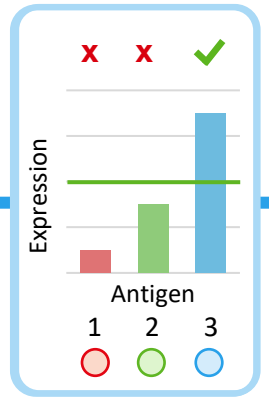
Treatment & Observation Phase

Long Term Follow-up

Safety and efficacy monitoring for 12 months

HLA-A*02 Testing
Blood sample;
Central lab

Leukapheresis



Target Profiling
Fresh Tumor Biopsy;
IMADetect®

Manufacturing
by Immatics

Short process time of 14 days
7-day rapid manufacturing process
7-day expedited QC release testing
Monocyte depletion process implemented in Phase 1b

Lymphodepletion*

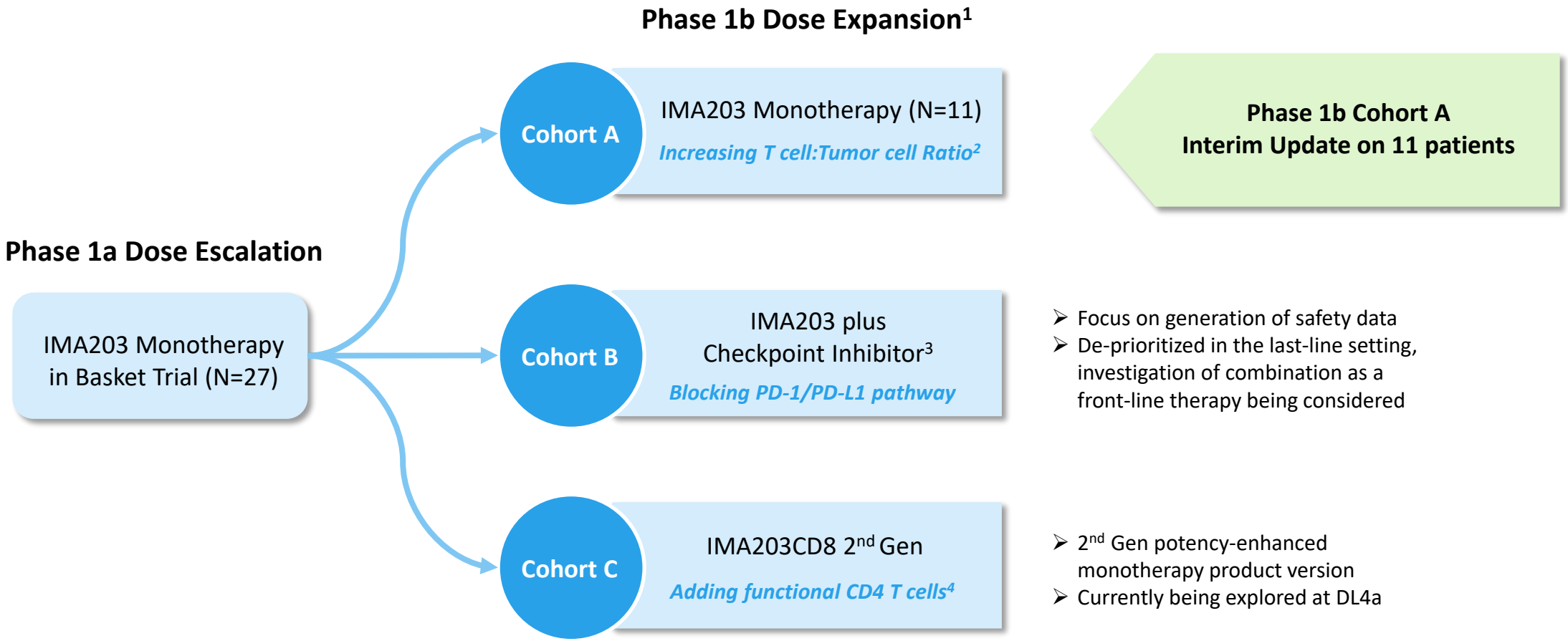
Low dose IL-2**

Infusion of ACTengine® IMA203 TCR-T Product

* 30 mg/m² Fludarabine and 500 mg/m² Cyclophosphamide for 4 days; ** 1m IU daily days 1-5 and twice daily days 6-10

ACTengine® IMA203 TCR-T Phase 1 Design

Focus on IMA203 TCR-T Monotherapy Investigated in Cohort A



Data cut-off Apr 04, 2023

IMA203

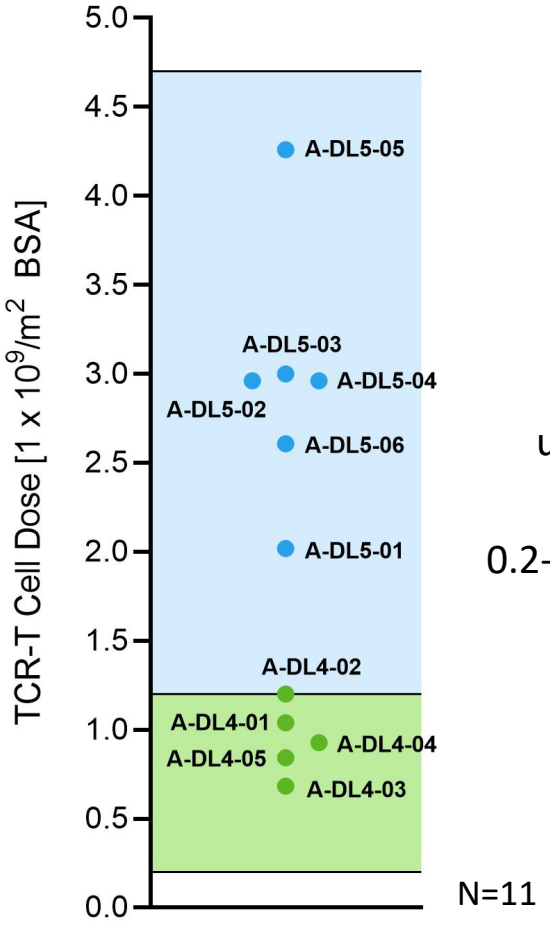
[1] Provisional recommended Phase 2 dose (RP2D) for Cohort A and B determined at DL4+DL5 (0.2-4.7 x 10^9 TCR-T cells/m^2 BSA); IMA203CD8 (Cohort C) is currently being explored at DL4a (0.481-0.8x10^9 TCR-T cells/m^2 BSA);
[2] Demonstrated to be associated with durable response: Locke *et al.* 2020 Blood Advances; [3] Opdivo® (nivolumab): programmed death-1 (PD-1) immune checkpoint inhibitor;
[4] Demonstrated to be important for long-term remission: Melenhorst *et al.* 2022 Nature, Bai *et al.* 2022 Science Advances;

ACTengine® IMA203 TCR-T Monotherapy – Phase 1b Cohort A

Patient and Product Characteristics

Patients in Phase 1b Cohort A (N=11)[1]	
Age Mean (min, max)	**55.4** **(31, 79)**
Gender Male / Female [% of patients]	**45.5 / 54.5**
Prior lines of treatment Mean (min, max)	**3.7** **(1, 10)**
LDH at baseline >1 x ULN [% of patients]	**54.5**
Baseline tumor burden Mean target lesion sum of diameter [mm] (min, max)	**73.8** **(21.0, 207.3)**
Total infused dose Mean TCR-T cells[2] infused [x10^9] (min, max)	**3.67** **(1.30, 8.84)**

Heavily pre-treated, metastatic last-line patients that have exhausted all available standard of care treatments



DL5 cleared for safety, updated provisional RP2D comprises DL4 + DL5: 0.2-4.7 x 10^9 TCR-T cells/m^2 BSA

[1] Including ovarian cancer patient A-DL5-04 who erroneously received one dose of nivolumab and is part of intent-to-treat (shown here) but not per-protocol population;
[2] Transduced viable CD8 T cells; ULN: Upper limit of normal; LDH: Lactate dehydrogenase; BSA: Body surface area; RP2D: Recommended Phase 2 Dose

Most Frequent Adverse Events – Phase 1b Cohort A (N=11)

Manageable Treatment-emergent Adverse Events (TEAEs)

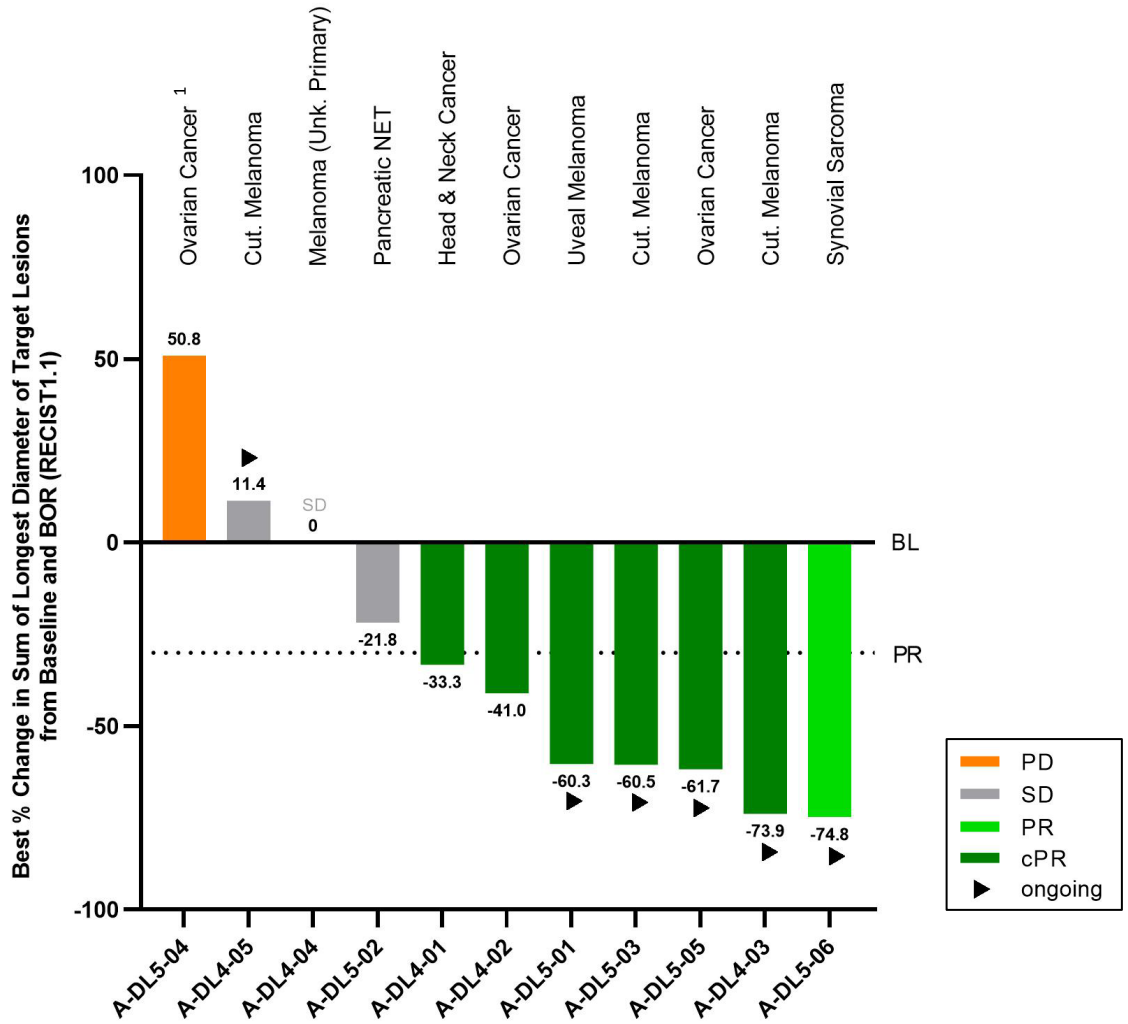
- **Expected cytopenia (Grade 1-4)** associated with lymphodepletion in all patients
- **Low-moderate cytokine release syndrome (CRS)** in 91% (10/11) of patients
  - 45% (5/11) of patients had Grade 1 CRS (3 in DL4, 2 in DL5)
  - 45% (5/11) of patients had Grade 2 CRS (2 in DL4, 3 in DL5)
  - No dose-dependent increase of CRS
- **No ICANS[1]**
- **No Dose-limiting toxicity**
- For IMA203 TCR-T monotherapy tolerability profile including Phase 1a dose escalation, see appendix

IMA203 TCR-T monotherapy shows manageable tolerability at total doses as high as ~$9x10^9$ TCR-T cells

CRS and ICANS graded by CARTOX criteria (Neelapu *et al.*, 2018); [1] ICANS: Immune Effector Cell-Associated Neurotoxicity Syndrome

Best Overall Response – Phase 1b Cohort A

Deep Objective Responses Independent of Tumor Type



ORR (at ~week 6)[2] **64% (7/11)**

cORR (at ~month 3)[3] **67% (6/9)**

Deep objective responses observed across multiple, heavily pre-treated tumor types

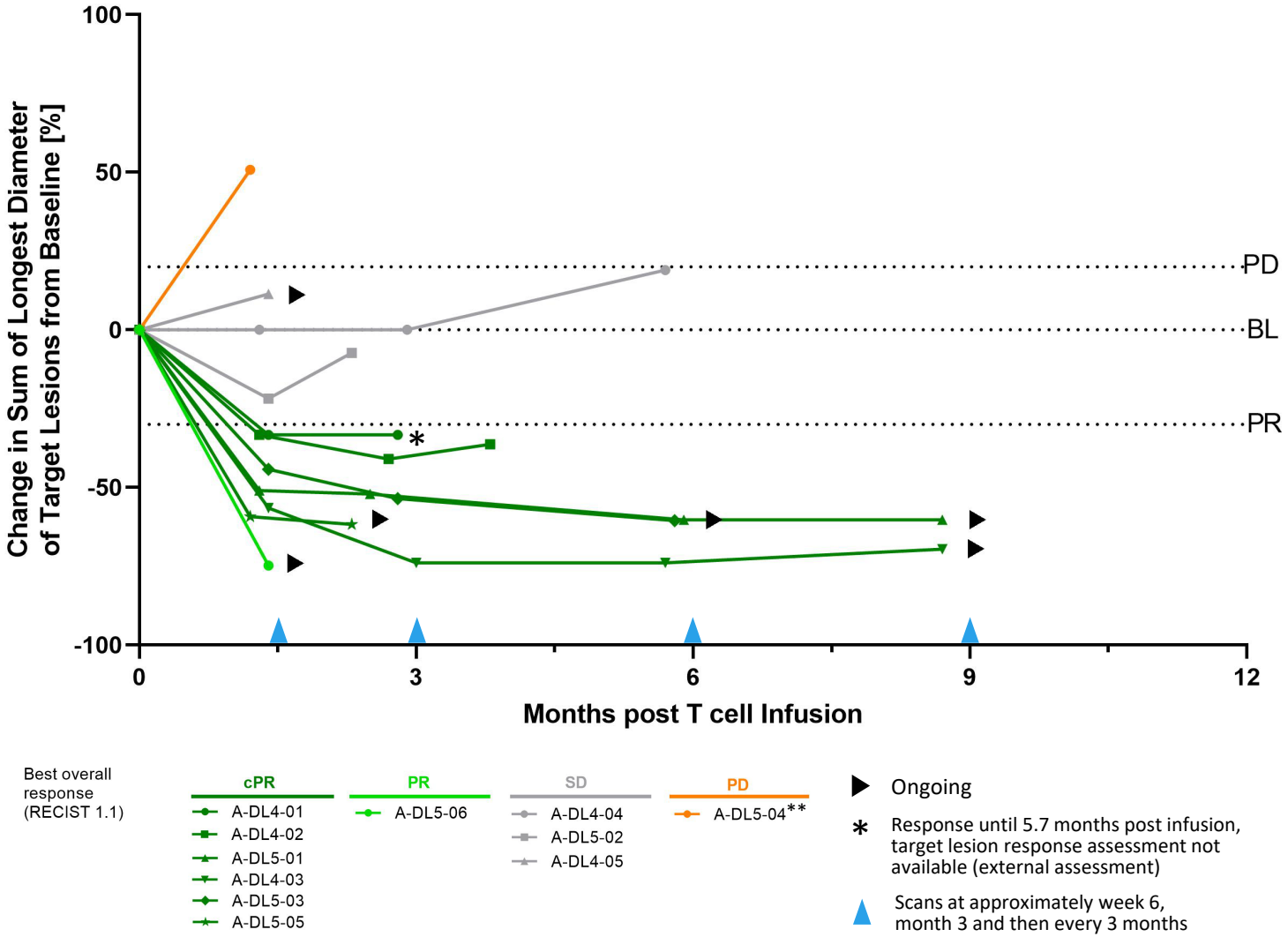
- Responses observed in cutaneous and uveal melanoma, synovial sarcoma, head and neck cancer, and ovarian cancer
- Initial responses at week 6 were confirmed in all 6 responders with available subsequent 3-month scan
- All cut. melanoma patients were CPI-refractory
- All ovarian cancer patients were platinum-resistant

IMA203

[1] Ovarian cancer patient A-DL5-04 erroneously received one dose of nivolumab and is part of intent-to-treat population (shown here) but not per-protocol population; [2] Initial ORR: Objective response rate according to RECIST 1.1 at first scan post infusion at ~week 6; [3] Confirmed ORR (cORR): Confirmed objective response rate according to RECIST 1.1 for patients with available second scan post infusion at ~month 3 or patients with progressive disease (PD) at any timepoint before this scan; PD: Progressive Disease; SD: Stable Disease; PR: Partial Response; cPR: Confirmed Partial Response; BL: Baseline; BOR: Best Overall Response; NET: Neuroendocrine Tumor; CPI: Checkpoint Inhibitor

Response over Time – Phase 1b Cohort A

Durable Partial Responses 9+ Months after IMA203 TCR-T Treatment



Median DOR[1], min, max DOR	**Not reached, 1.3+, 8.8+ months**
Median Follow-up[2]	**8.5 months**

Median time from IMA203 TCR-T infusion to onset of response was 1.4 months

Ongoing responses in 5 of 7 responders:

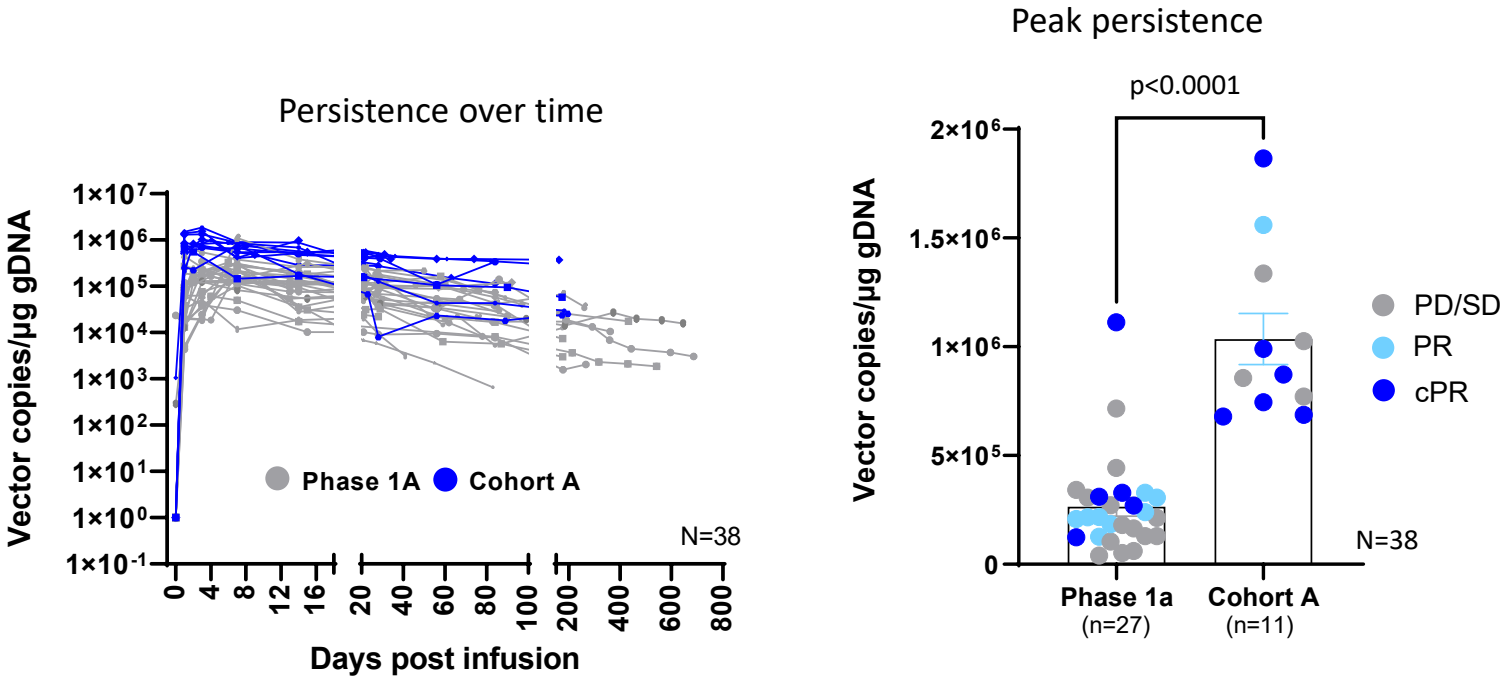
- 2 cPRs (cut. & uveal melanoma) ongoing at 9+ months
- 1 cPR (cut. melanoma) ongoing at 6+ months
- 1 cPR (ovarian cancer) ongoing at ~3 months
- 1 PR (synovial sarcoma) ongoing at 6+ weeks

**Ovarian cancer patient A-DL5-04 erroneously received one dose of nivolumab and is part of intent-to-treat population (shown here) but not per-protocol population; [1] Duration of response (DOR) in confirmed responders is defined as time from first documented response until disease progression/death. Patients with ongoing response will be censored at date of data cut-off. Median DOR is analyzed by using the Kaplan-Meier method; [2] Median Follow-up is analyzed by using the reverse Kaplan-Meier method; PD: Progressive Disease; SD: Stable Disease; PR: Partial Response; cPR: Confirmed Partial Response; BL: Baseline

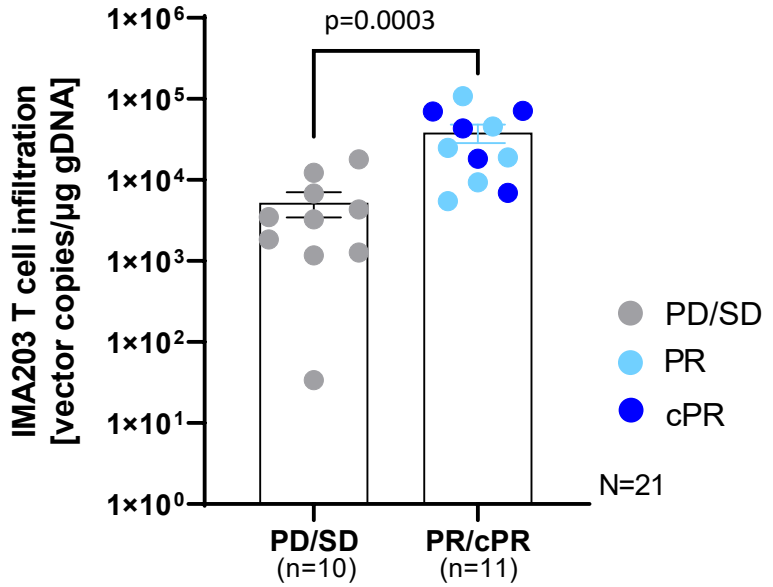
Biological Data Consistent with Clinical Data

IMA203 TCR-T Levels and Tumor Infiltration across Patients in Phase 1a and Phase 1b Cohort A

Increased levels of IMA203 T cells in the blood of patients in Cohort A following increase of cell dose and switch to monocyte depletion process



IMA203 T cells found in all evaluable tumor tissues, level of infiltration associated with objective responses[1]

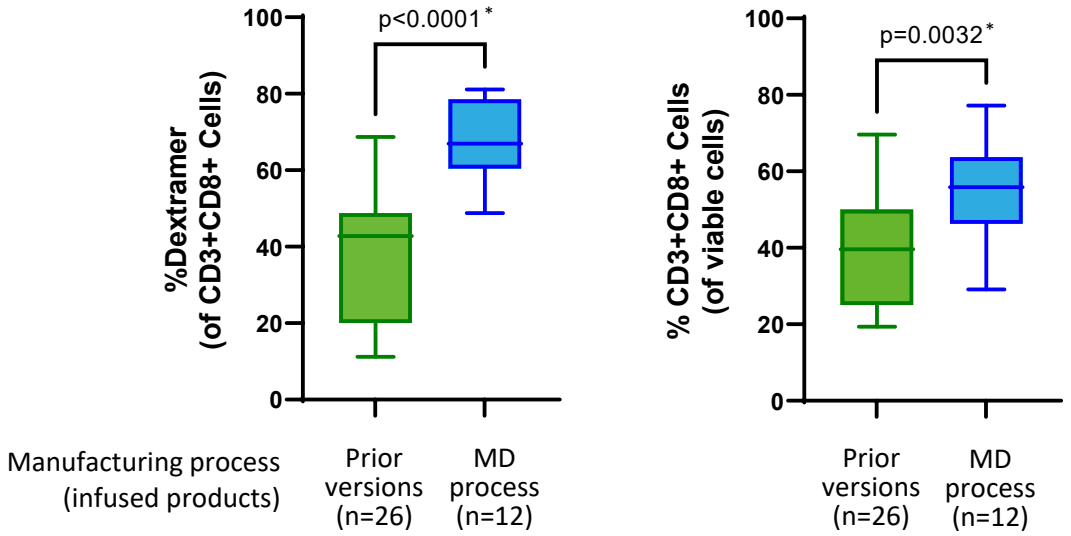


Mann-Whitney U test; [1] T cell infiltration for 21 patients (10 non-responder, 11 responder) with 6-week post infusion biopsy available (1 patient with ~4-week, 2 patients with ~13-week post infusion biopsy); PD: Progressive Disease; SD: Stable Disease; PR: Partial Response; cPR: Confirmed Partial Response

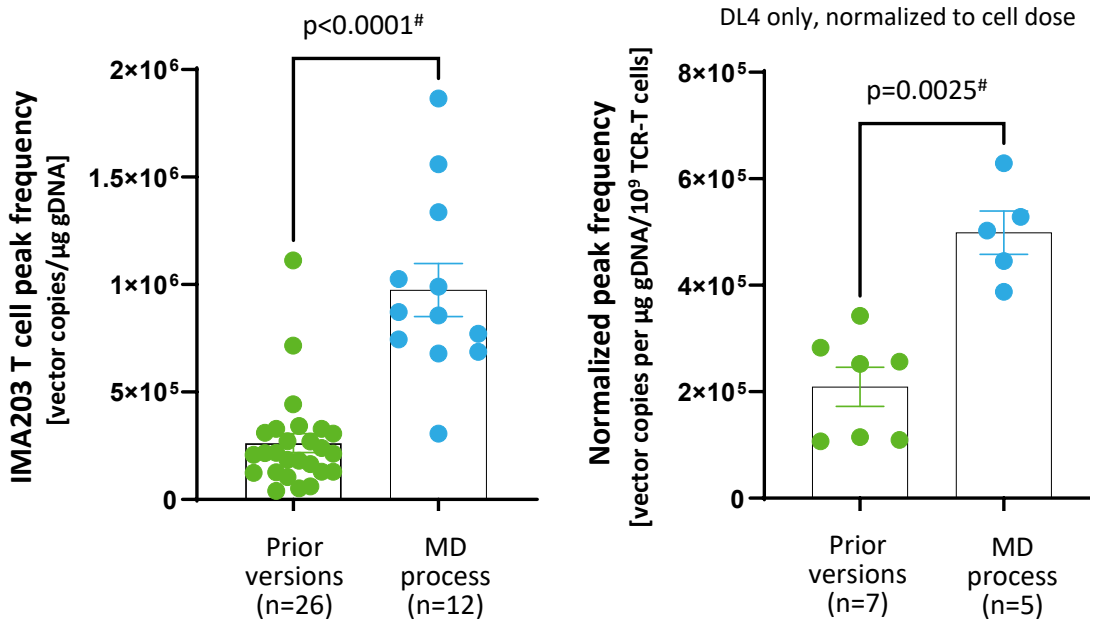
Favorable TCR-T Product Characteristics and High TCR-T Levels in Patients

Manufacturing Improvements Implemented in Phase 1b Enhance Key Features of the Cell Product

Improved TCR-T product features



Increased peak TCR-T levels in patients



Manufacturing success rate of 94% to reach provisional RP2D**

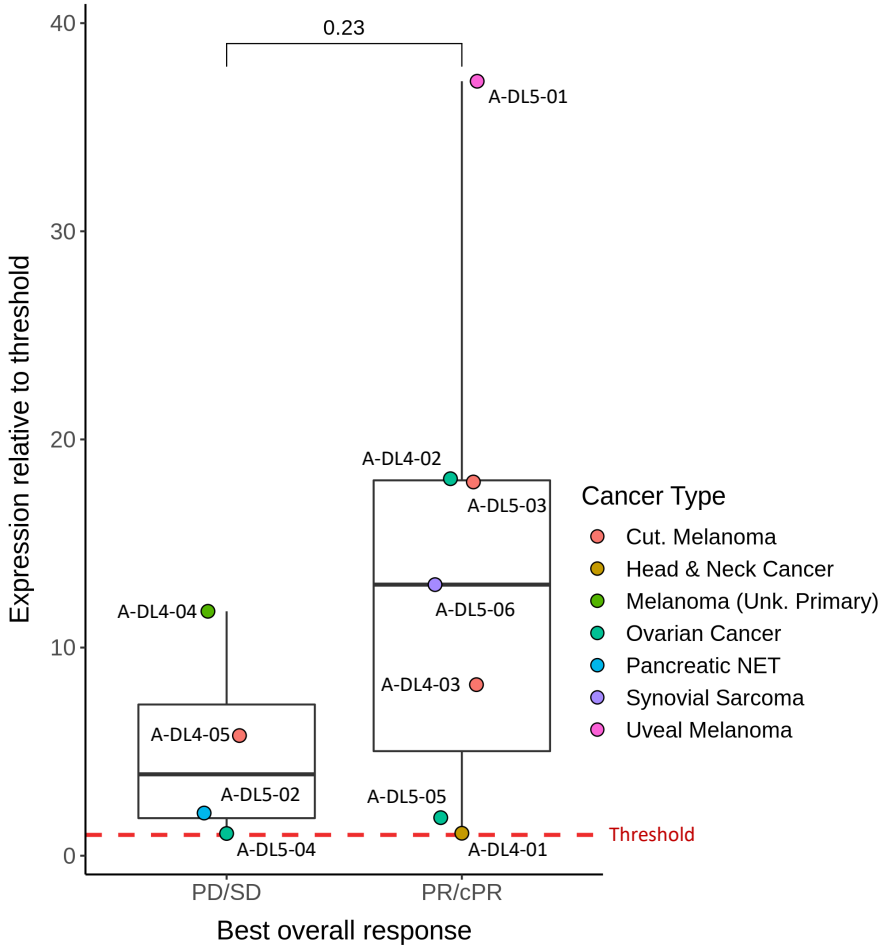
Mean cell dose infused in 11 patients in Phase 1b Cohort A was 3.67×10^9 TCR-T cells

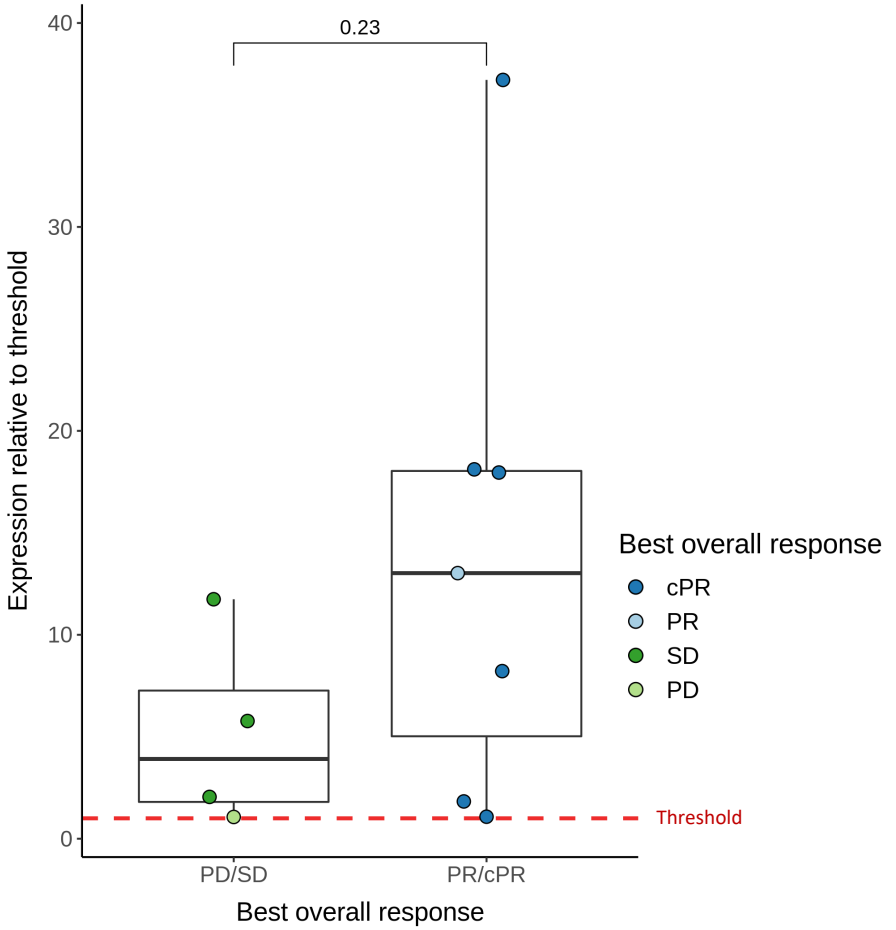
MD process: Monocyte depletion process; * Unpaired t test; # Mann-Whitney U test;
** Updated provisional RP2D comprises DL4 + DL5: 0.2-4.7x10^9 transduced viable CD8 T cells/m^2 BSA;

Responses above Immatics' PRAME RNA Threshold Independent of Tumor Type

Highlighting Tumor Types (left) and Type of Best Overall Response (right) – Phase 1b Cohort A

PRAME RNA expression in pre-treatment biopsies relative to threshold





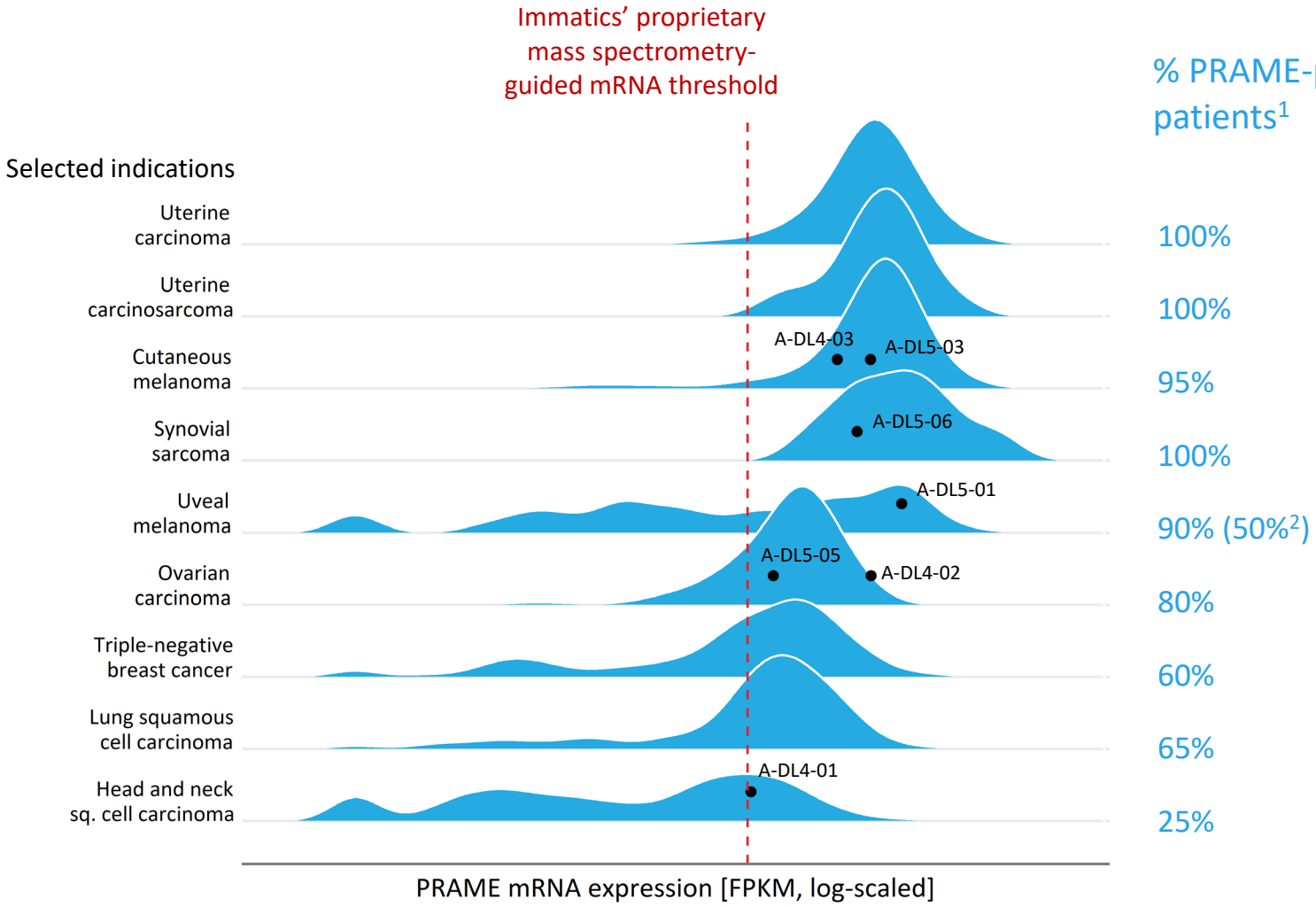
IMA203 achieved objective responses at <u>all</u> expression levels above Immatics' mass spectrometry-guided RNA threshold

IMA203 has the potential to provide clinical benefit for all PRAME biomarker-positive cancer patients

Mann-Whitney U test, p=0.23; PD: Progressive Disease; SD: Stable Disease; PR: Partial Response; cPR: Confirmed Partial Response; NET: Neuroendocrine Tumor

Potential of IMA203 in Additional Solid Cancer Indications

Based on PRAME Expression in IMA203 TCR-T Responders – Phase 1b Cohort A



● PRAME mRNA expression in Phase 1b Cohort A responders

Data cut-off Apr 04, 2023

PRAME target expression distribution (blue histogram) based on TCGA RNAseq data, patient data (black dots) based on IMADetect® qPCR testing of screening biopsies; [1] PRAME target prevalence is based on TCGA RNAseq data combined with a proprietary MS-guided RNA expression threshold; [2] PRAME target prevalence in uveal melanoma based on IMADetect® qPCR testing of screening biopsies from clinical trial patients (n=21) demonstrates substantial higher prevalence of 90% compared to prevalence based on TCGA data of 50%, TCGA: early & late-stage primary tumor samples, Immatics clinical trials: late-stage/metastatic tumor samples, Role of PRAME in metastasis of uveal melanoma: Field *et al.* 2016 Clinical Cancer Research; MS: mass spectrometry

ACTengine® IMA203 TCR-T Monotherapy Targeting PRAME

Summary of Phase 1b Cohort A Interim Data Update

- **Manageable tolerability** with no high-grade CRS, no ICANS in 11 patients in Cohort A[1]
- **Objective responses observed in heavily pre-treated last-line solid cancer patients** including checkpoint-refractory cutaneous melanoma, platinum-resistant ovarian cancer, uveal melanoma, head and neck cancer, synovial sarcoma
- **High objective response rate (ORR):**
  - 64% (7/11) ORR (at ~week 6)
  - 67% (6/9) cORR (at ~month 3)
- **Ongoing durable responses:**
  - Median duration of response not reached at a median follow-up time of 8.5 months
  - Ongoing PRs 9+ months after IMA203 TCR-T treatment
- **Objective responses independent of tumor type at low, medium and high PRAME levels above threshold**
- **Manufacturing success rate of 94%** to reach current RP2D, **rapid 7-day manufacturing process (+7-day release testing)**

Increased confidence in the success and broad potential of targeting PRAME and our product candidate IMA203 TCR-T

[1] For IMA203 TCR-T monotherapy tolerability profile including Phase 1a dose escalation, see appendix;
CRS: Cytokine Release Syndrome; ICANS: Immune effector cell-associated neurotoxicity syndrome; RP2D: provisional recommended Phase 2 dose

Immatics' ACTengine® IMA203 TCR-T Development Strategy

Two-Pillared Strategy

FAST & FOCUSED

Objective: Deliver best-in-class therapy in 1-2 last-line solid cancer types as fast as possible

- Focus on cutaneous melanoma, uveal melanoma and potentially other tumor types with high PRAME prevalence where clinical proof-of-concept has been demonstrated
- Highly modular and scalable manufacturing facility expected to be operational in 2024 to support efforts to maximize speed to market
- Planned start of a first Phase 2 trial in 1H 2024 – targeted to be already registration-directed

GO BROAD

Objective: Expand development to other cancer types

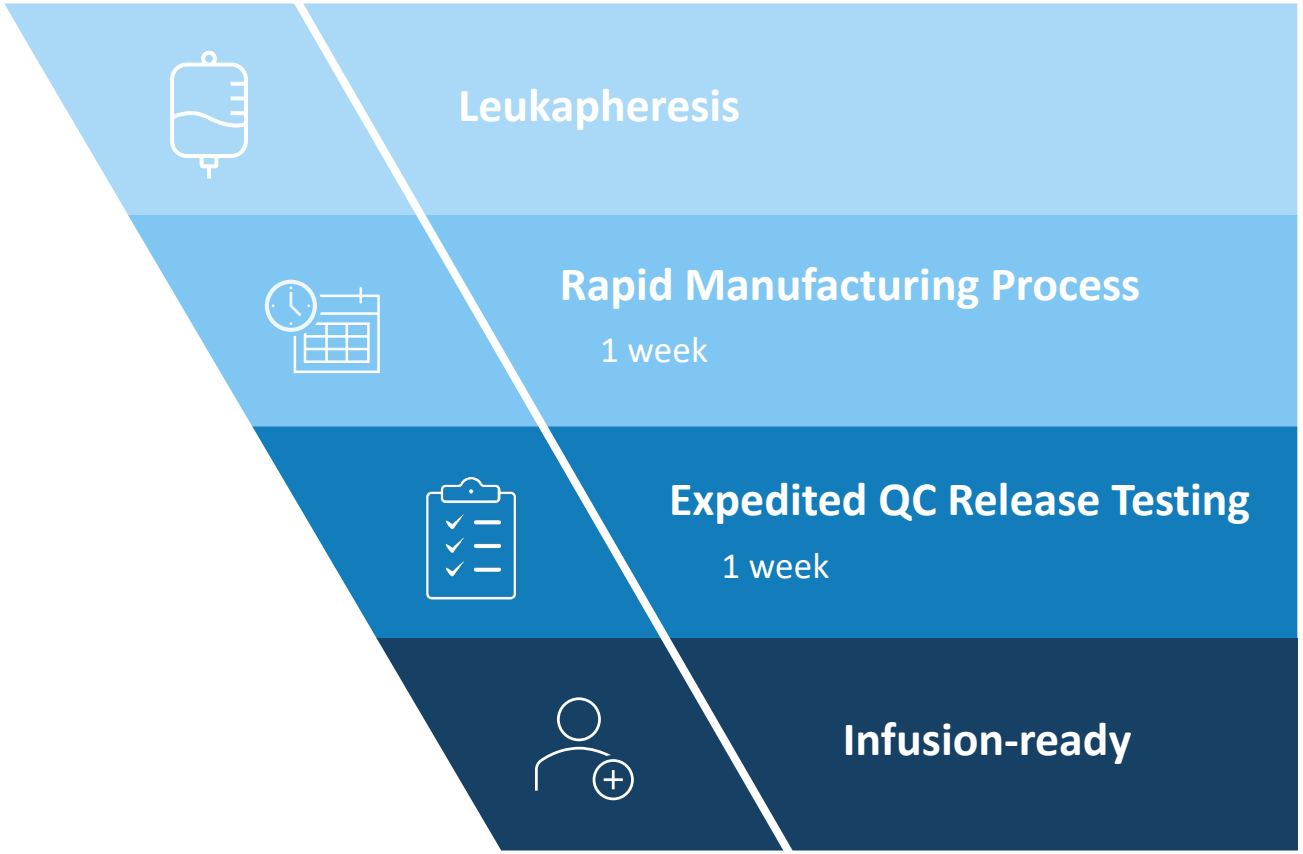
- Signal finding in other cancer types with a broad patient reach, such as ovarian cancer, uterine cancer, lung cancer, breast cancer, head and neck cancer

Next update on all three IMA203 Phase 1b cohorts including the projected clinical development path for PRAME-targeted TCR-T monotherapy towards registration-directed trials is planned for 4Q 2023

ACTengine® IMA203 TCR-T Product Manufacturing

Enhancing Manufacturing Process and Capabilities

Short manufacturing turnaround time



State-of-the-art research & GMP manufacturing facility

IMA203 TCR-T Has the Potential to Reach a Large Patient Population

~39,000 Patients per Year in the US only

Selected Indications	Incidence	R/R Incidence	PRAME Positive	Patient Population (Based on R/R Incidence; PRAME and HLA-A*02:01+)
Cut. Melanoma	99,800	7,700	95%	2,999
Uveal Melanoma	1,500	800	90%	295
Ovarian Carcinoma	19,900	12,800	80%	4,198
Uterine Carcinoma	62,700	10,700	100%	4,387
Uterine Carcinosarcoma	3,300	1,900	100%	779
Squamous NSCLC	57,000	34,600	65%	9,221
Small Cell Lung Cancer	31,900	19,400	55%	4,375
Adeno NSCLC	91,200	55,300	25%	5,668
HNSCC	66,500	15,100	25%	1,548
Breast Carcinoma	290,600	43,800	25% TNBC: 60%	4,490
Synovial Sarcoma	1,000	400	100%	164
Cholangiocarcinoma	8,000	7,000	35%	1,005

TOTAL ~39,000 annually in the US

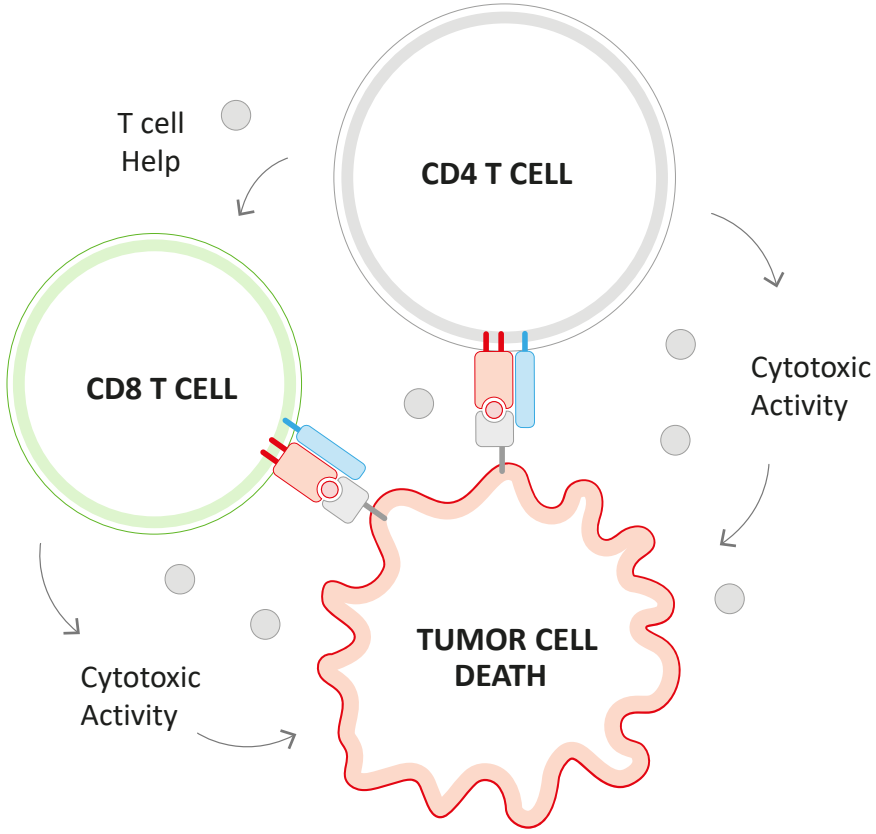
Multiple opportunities to broaden patient reach and patient benefit:

- Expand beyond US population
- Expand into other indications such as kidney, esophageal, bladder, other liver cancers, other sarcoma subtypes through indication-specific or indication-agonistic label expansion
- Move into earlier lines of therapy (R/R Incidence → Incidence)
- Inclusion of patients with lower PRAME-threshold

Incidences based on public estimates and Immatics internal model; Relapsed/refractory (R/R) or last-line patient population approximated by annual mortality; Estimated 41% HLA-A*02:01 positive population in the US; PRAME target prevalence is based on TCGA (for SCLC: in-house) RNAseq data combined with a proprietary mass spec-guided RNA expression threshold; Uveal melanoma target prevalence is based on IMADetect® qPCR testing of screening biopsies from clinical trial patients (n=21)

ACTengine® IMA203CD8 – Next-generation TCR-T

Building on First-Gen IMA203 Success to Further Improve Anti-Tumor Activity

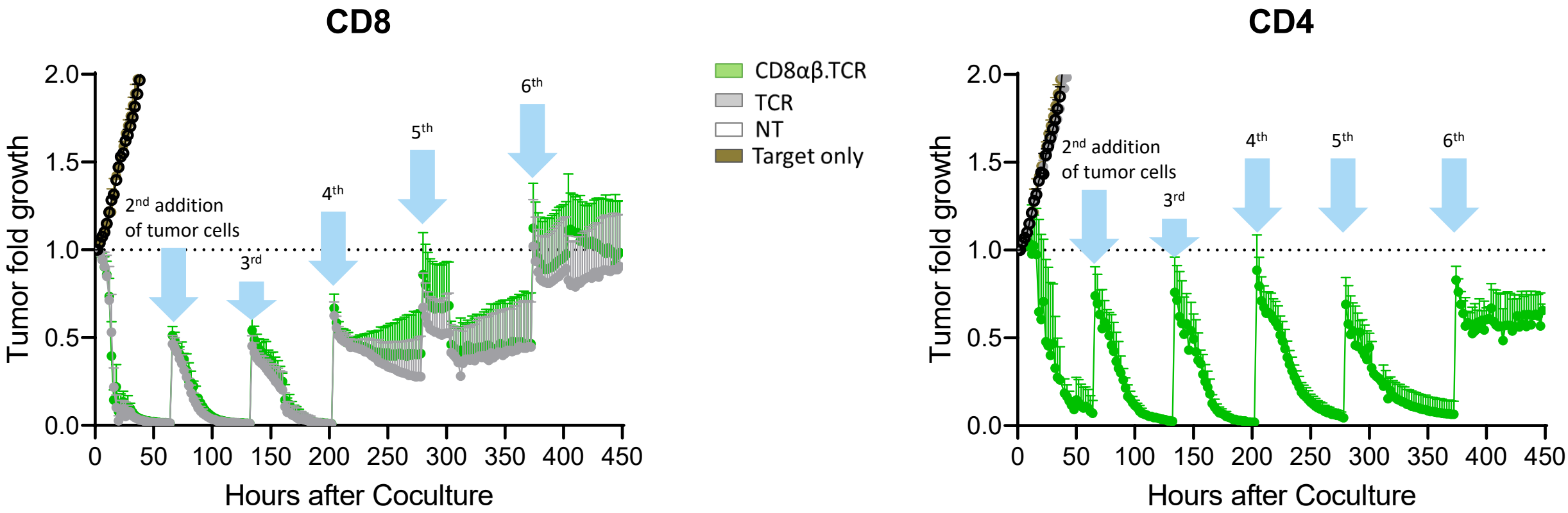


- Engagement of CD4 T cells by CD8 co-transduction reported to boost anti-tumor activity in TCR-T trials
- Recent data from leukaemia patients treated with CAR-T suggest a relevant role of engineered CD4 T cells in maintaining durable tumor responses over a long period of time[1]
- Functional superiority of the **CD8αβ** construct over multiple other CD8 constructs in preclinical experiments
- Proprietary 4-in-1 lentiviral vector to engineer CD4 and CD8 T cells with the PRAME-specific IMA203 TCR and CD8αβ construct (IMA203CD8)

[1] Melenhorst *et al.* 2022 Nature, Bai *et al.* 2022 Science Advances

ACTengine® IMA203CD8 – Preclinical Assessment of Anti-Tumor Efficacy

Functional CD4 T cells Mediate Longer Anti-Tumor Activity than CD8 T cells *in vitro*



Engagement of CD4 T cells may enhance depth and durability of anti-tumor response and clinical outcome of TCR-T in solid cancer patients

ACTengine® IMA204 – TCR-T Targeting COL6A3 Exon 6

ACTengine® IMA204 First-in-Class TCR-T Targeting Tumor Stroma

Key Features

TARGET

HLA-A*02-presented peptide derived from **COL6A3 exon 6**

Naturally and specifically presented on tumors at high target density[1]: **100-700 copies/cell**

Novel **tumor stroma target** identified and validated by XPRESIDENT® quant. mass spectrometry platform

TCR

High-affinity, specific TCR targeting COL6A3 exon 6

Affinity-maturated, CD8-independent TCR

High functional avidity[2]: **~0.01ng/ml**

Identified and characterized by XCEPTOR® TCR discovery and engineering platform

PRECLINICAL DATA

CD8-independent, next-generation TCR engages both, CD8 and CD4 T cells

In vitro anti-tumor activity against target-positive cell lines in CD8 and CD4 T cells

Complete tumor eradication in *in vivo* mouse models

PATIENT POPULATION[3]

Pancreatic Carcinoma – 80%
Breast Carcinoma – 75%
Stomach Carcinoma – 65%
Sarcoma – 65%
Esophageal Carcinoma – 60%
Squamous NSCLC– 55%
Adeno NSCLC– 55%
HNSCC – 55%
Uterine Carcinosarcoma – 55%
Colorectal Carcinoma – 45%
Mesothelioma – 45%
Cholangiocarcinoma – 40%
Ovarian Carcinoma – 40%
Melanoma – 35%
Bladder Carcinoma – 35%

IMA204 provides a promising therapeutic opportunity for a broad patient population as monotherapy or in combination with TCR-T cells directed against tumor targets

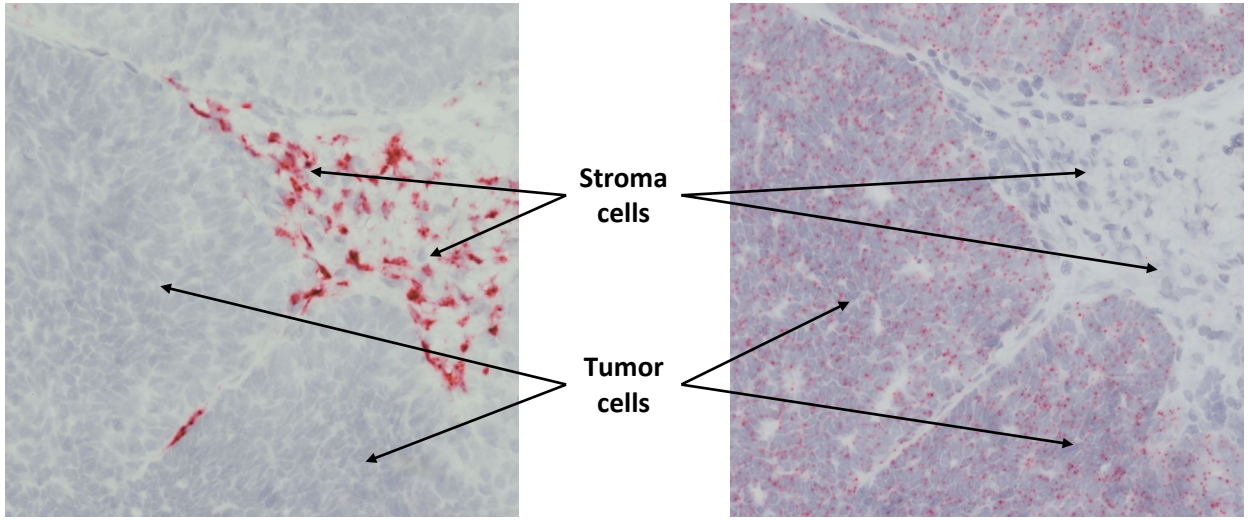
[1] Target density: peptide copy number per tumor cell, approximate range representing the majority of tumor samples analyzed; [2] Functional avidity: EC50 half maximal effective concentration;
[3] Solid cancer indications with 20% or more target expression, Target prevalence for selected cancer indications based on mRNA expression (TCGA and Immatics inhouse data)

ACTengine® IMA204 – High Affinity, CD8-independent TCR

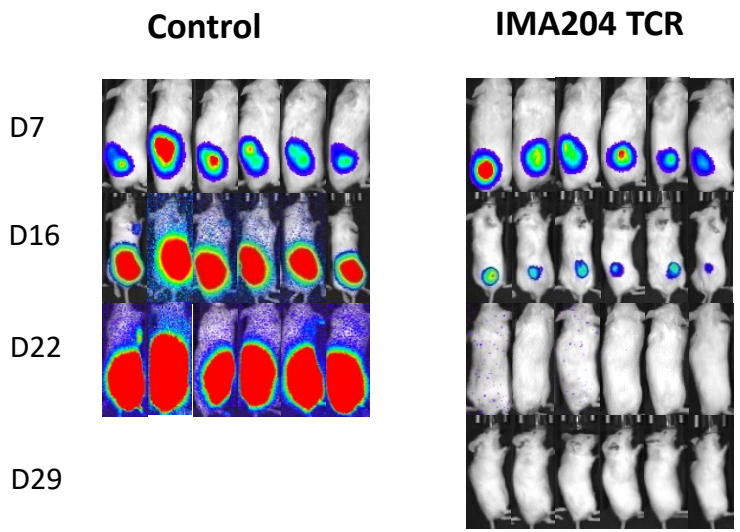
Complete Tumor Eradication *in vitro & in vivo*[1] by Affinity-enhanced IMA204 TCR

Stroma Target (COL6A3 exon 6)
in Ovarian Cancer sample

Example of a Tumor Target
in same Ovarian Cancer sample



COL6A3 exon 6 prevalently expressed at high target density in tumor stroma across many solid cancers



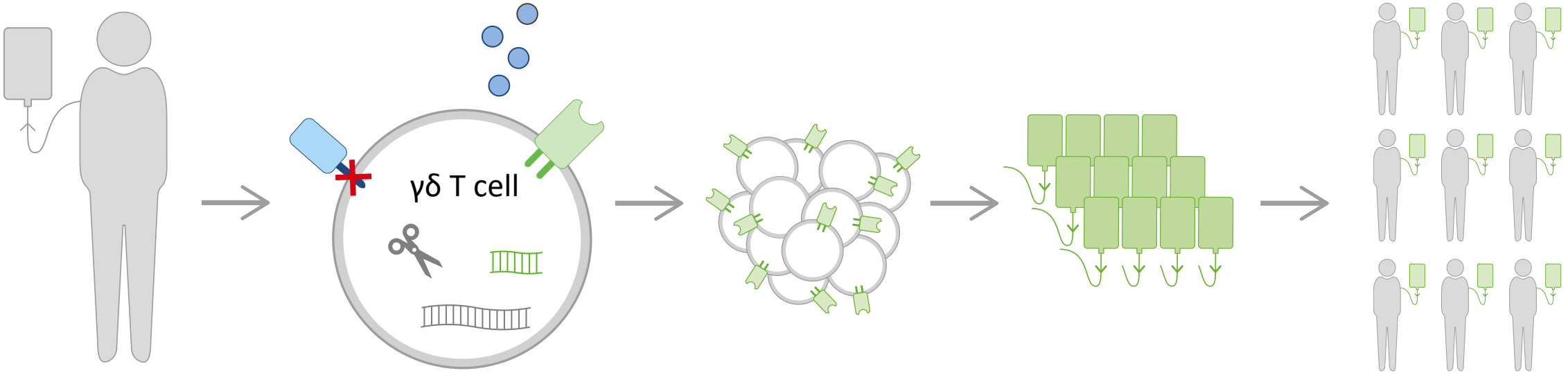
CD8-independent TCR leads to tumor eradication in all mice treated

Affinity maturated CD8-independent, next-generation TCR engages both CD4 and CD8 T cells without the need of CD8 co-transduction

[1] *In vivo* data in collaboration with Jim Riley, University of Pennsylvania, control: non-transduced T cells. TCR avidity and specificity data not shown, available in IMA204 presentation on Immatics website.

ACTallo® – Our Next-generation Off-the-shelf TCR-T

ACTallo® – Immatics' Allogeneic Cell Therapy Approach



- **Off-the-shelf cell therapy**, no need for personalized manufacturing → reduced logistics and time to application
- **Potential for hundreds of doses** from one single donor leukapheresis → lower cost of goods
- **Use of healthy donor material** provides standardized quality and quantity of starting material

- Strategic collaborations combining Immatics' proprietary ACTallo® platform with Bristol Myers Squibb's next-gen technologies and Editas Medicine's CRISPR gene editing technology to develop next-gen allogeneic γδ TCR-T/CAR-T programs

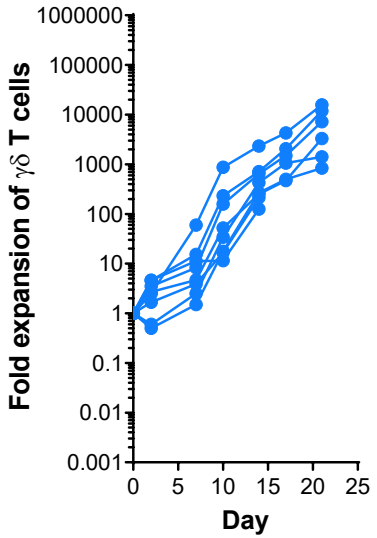
Why γδ T cells?

γδ T cells Are Well Suited for an Off-the-shelf Cell Therapy Approach

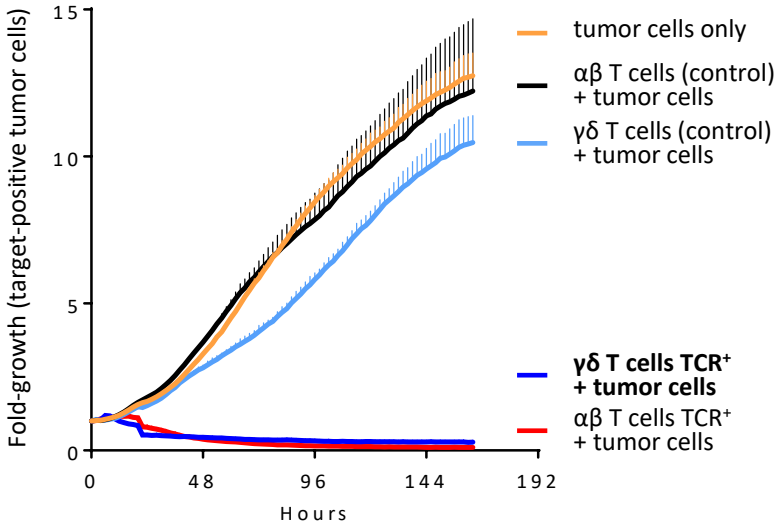
γδ T cells

- ✓ are abundant in the peripheral blood
- ✓ show intrinsic anti-tumor activity
- ✓ naturally infiltrate solid tumors & correlate with favorable prognosis
- ✓ are HLA-independent, thus do not cause graft-vs-host disease in allogeneic setting
- ✓ can be expanded to high numbers in a cGMP-compatible manner
- ✓ can be effectively redirected using αβ TCR or CAR constructs

Expansion



In vitro anti-tumor activity

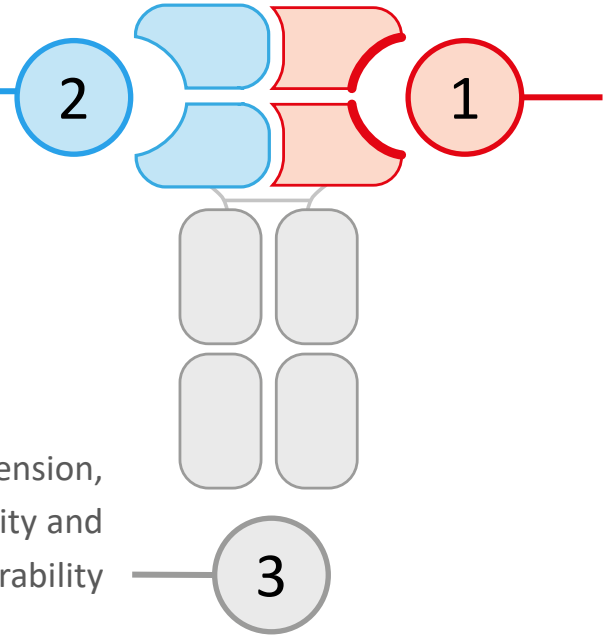


TCER® – TCR Bispecifics

TCER® – Immatics' Next-generation, Half-Life Extended Bispecifics

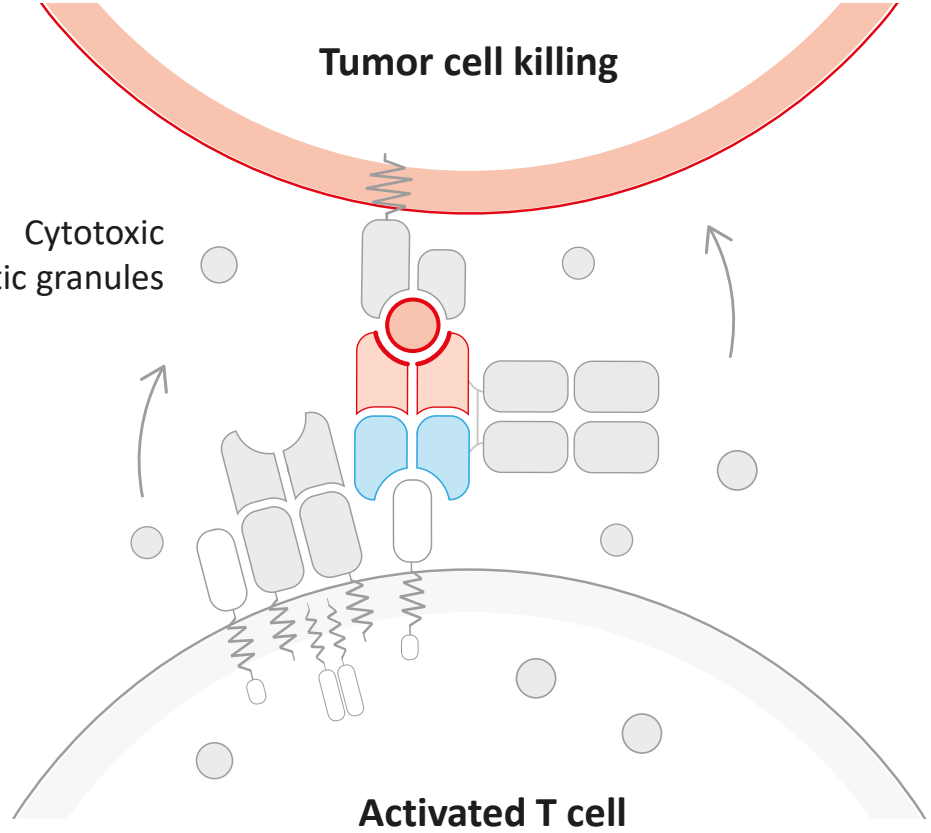
Proprietary TCER® Format Consisting of Three Distinct Elements

Low-affinity
T cell recruiter
against CD3/TCR



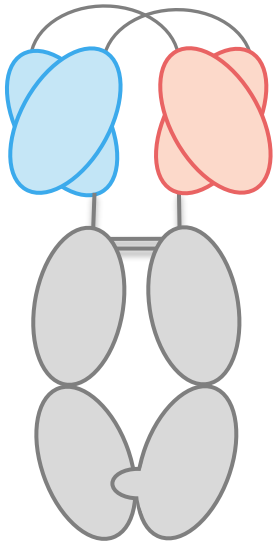
High-affinity TCR domains targeting **XPRESIDENT®-selected** tumor-specific peptide-HLA molecules

Fc part for half-life extension, favorable stability and manufacturability



Next-gen, half-life extended TCER® format designed to
→ safely apply high drug doses for activity in a broad range of tumors
→ achieve optimized scheduling

TCER® – Immatics' Next-generation, Half-Life Extended Bispecifics



1 **pHLA targeting TCR**

- ✓ **High-affinity** (single digit nM) TCR targeting **XPRESIDENT®-selected** tumor-specific peptide-HLA molecules
- ✓ Broad therapeutic window through **XPRESIDENT®-guided** affinity maturation (>1000x)[1]
- ✓ **Complete tumor eradication** in mouse xenograft models at low doses

2 **T cell recruiting antibody**

- ✓ **Low-affinity** (triple digit nM) T cell recruiter against both **TCR & CD3**
- ✓ **Optimized biodistribution** aiming for enrichment at tumor site and **prevention of CRS**[2]
- ✓ **Superior anti-tumor activity** in mouse models as compared to widely used CD3 recruiters

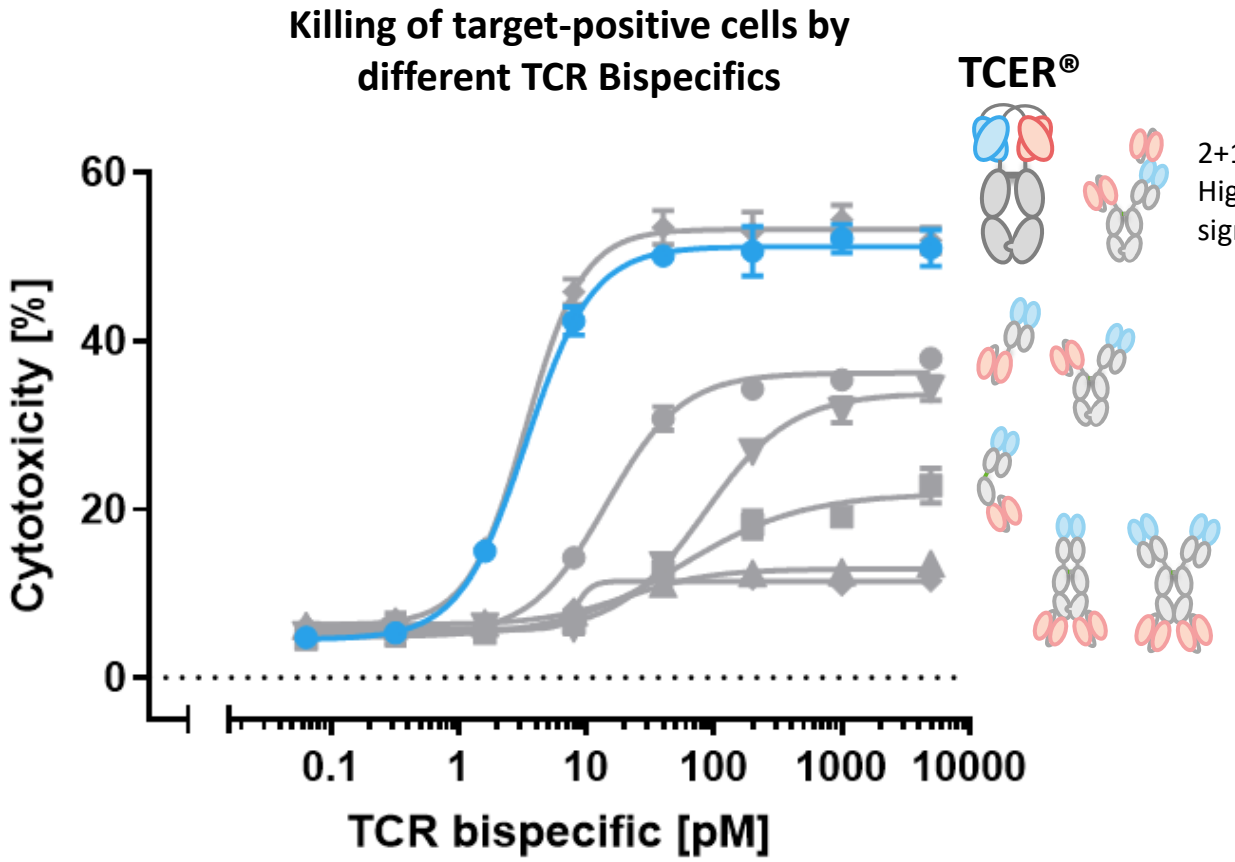
3 **Next-generation TCER® format**

- ✓ Off-the-shelf biologic with antibody-like manufacturability[3] and low cost of goods
- ✓ Superior anti-tumor activity[4] compared to six alternative bispecific formats
- ✓ Half-life of several days expected in humans

Our TCER® format is designed to maximize efficacy while minimizing toxicities in patients

[1] As compared to natural TCR; [2] Based on literature data for other low-affinity recruiters (e.g. Harber *et al*., 2021, Nature; Trinklein *et al*., 2019, mAbs);
[3] Production in mammalian cells (CHO cells); [4] Based on preclinical testing

Potency of Our Proprietary TCR Bispecific Format TCER®



TCER®

2+1 TCR bispecific format:
High potency was linked to a significantly reduced specificity profile

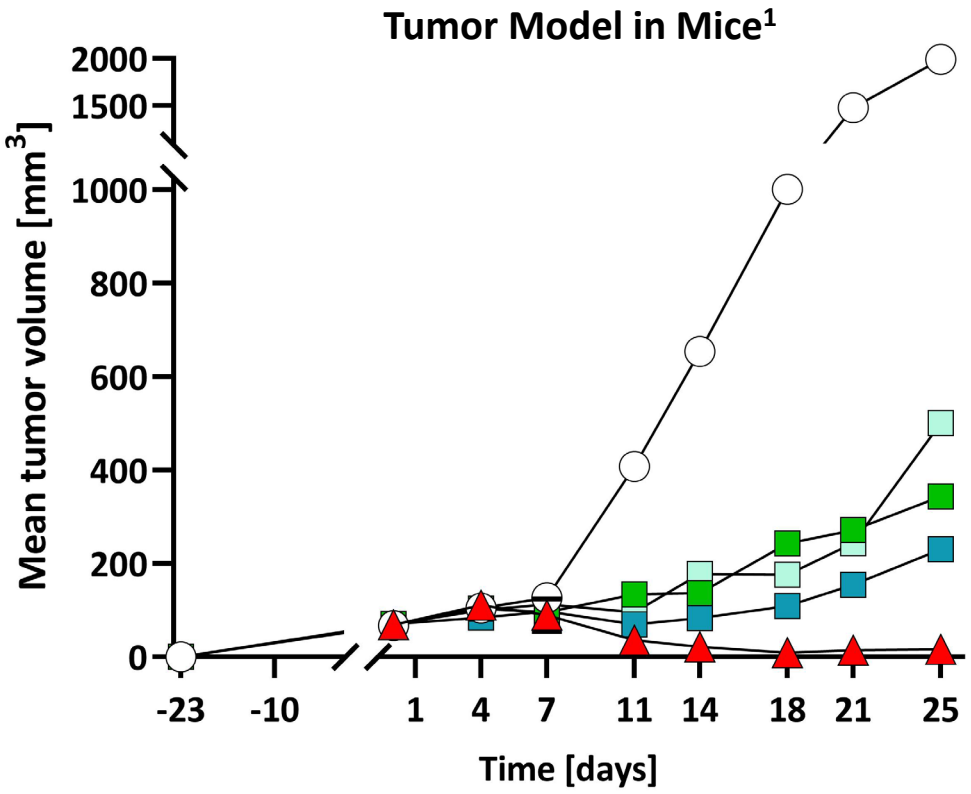
- Seven different TCR Bispecific formats were evaluated with a pHLA targeting TCR and the identical T cell recruiting antibody
- TCER® format had higher combination of potency and specificity[1] than six alternative TCR Bispecific format designs evaluated

Flexible Plug-and-play platform: TCER® format successfully validated for different TCRs & different T cell recruiting antibodies

[1] Preclinical data on specificty not shown

TCER® Format Is Designed for Optimized Efficacy and Safety

Superior Tumor Control Using a Novel, Low-Affinity Recruiter



Vehicle

TCER®-Ab1

TCER®-Ab2

TCER®-Ab3

Widely used T cell recruiting Ab (3 variants)
medium to high affinity
(single to double digit nM)

IMA402

Immatics' T cell recruiting Ab
low affinity (triple digit nM)

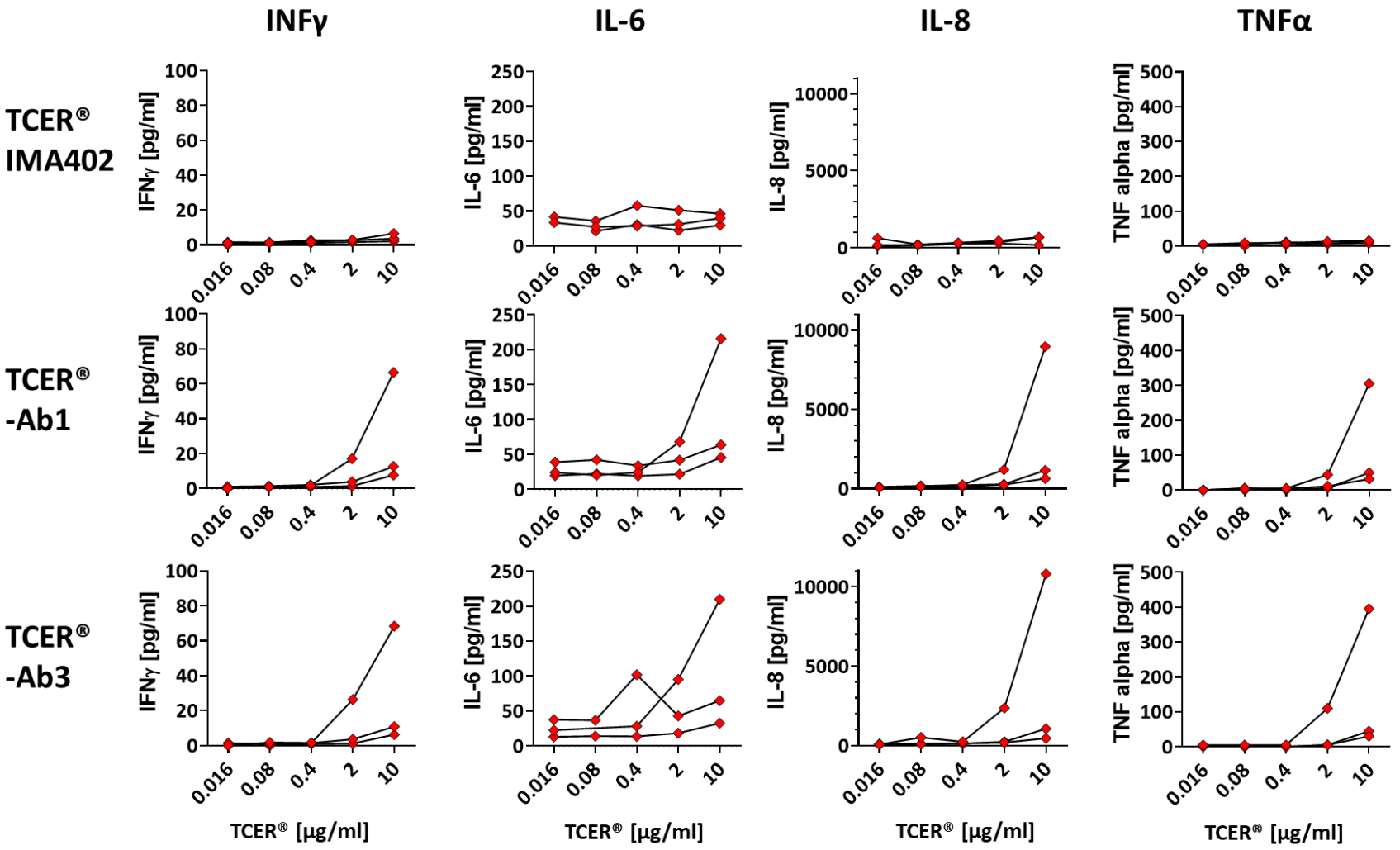
n = 6 mice/treatment group,
n = 10 mice in vehicle group,
2 donors/group
Dose: 0.025 mg/kg

Proprietary, **low-affinity T cell recruiting region** demonstrates superior tumor control compared to analogous TCER® molecules designed with higher-affinity variants of a widely used recruiter

[1] Hs695T xenograft model in NOG mice, tumor volume of group means shown

TCER® Format Is Designed for Optimized Efficacy and Safety

Reduced Target-Unrelated Recruiter-Mediated Cytokine Release using a Low-Affinity Recruiter



Whole blood cytokine release assay
N=3 HLA-A*02-positive donors
N=16 cytokines tested,
4 exemplary cytokines shown

Our TCER® Portfolio

Broad Pipeline of Next-Gen Half-Life Extended TCR Bispecifics

CLINICAL

IMA401
Bristol Myers Squibb

- MAGEA4/8 peptide presented by HLA-A*02:01
- Dose escalation ongoing

IMA402

- PRAME peptide presented by HLA-A*02:01
- Start of clinical trial in Aug 2023, first clinical data expected 2024

PRECLINICAL

IMA40x
Several innovative programs

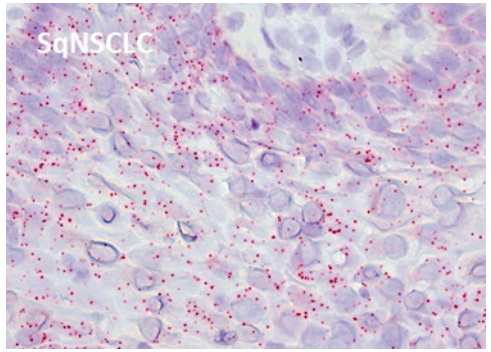
- Undisclosed peptides presented by HLA-A*02:01 and other HLA-types
- TCER® engineering and preclinical testing ongoing

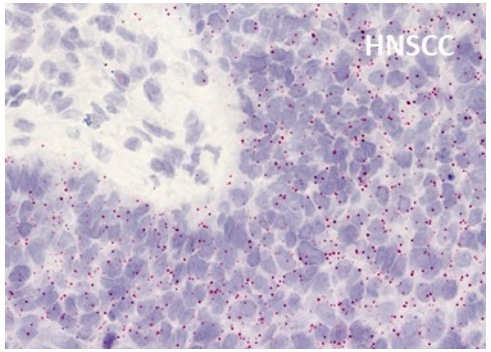
Potential for addressing different indications and large patient populations with novel, off-the-shelf TCR Bispecifics

TCER® IMA401 Targeting MAGEA4/8

Homogeneous Expression, Broad Prevalence and High Copy Number Target

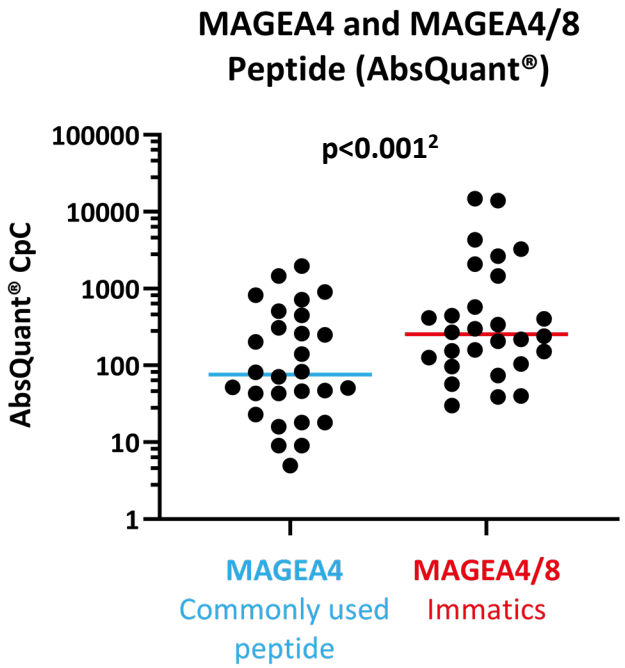
MAGEA4 RNA detection in tumor samples (ISH)





MAGEA4/8 target prevalence in selected cancer indications

Indications	Target prevalence [%]
Squamous non-small cell lung carcinoma	50%
Head and neck squamous cell carcinoma	35%
Bladder carcinoma	30%
Uterine carcinosarcoma	25%
Esophageal carcinoma	25%
Ovarian carcincoma	20%
Melanoma	20%
plus several further indications	



MAGEA4/8 target is presented at >5-fold higher target density[1] than a commonly used MAGEA4 target peptide

IMA401

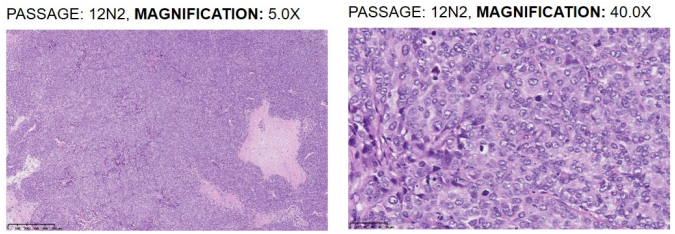
MAGEA4/8 target prevalences are based on TCGA data combined with a XPRESIDENT®-determined target individual MS-based mRNA expression threshold; [1] Copy number per tumor cell (CpC) measured on a paired-sample basis by AbsQuant®, i.e. comparing MAGEA4 vs. MAGEA4/A8 peptide presentation on same sample, [2] Students paired T test

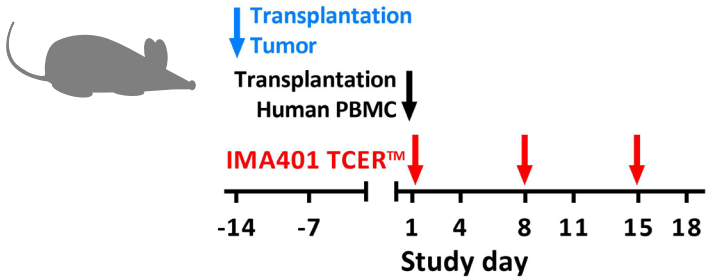
TCER® IMA401 (MAGEA4/8) – Assessment of Anti-Tumor Activity *in vitro*

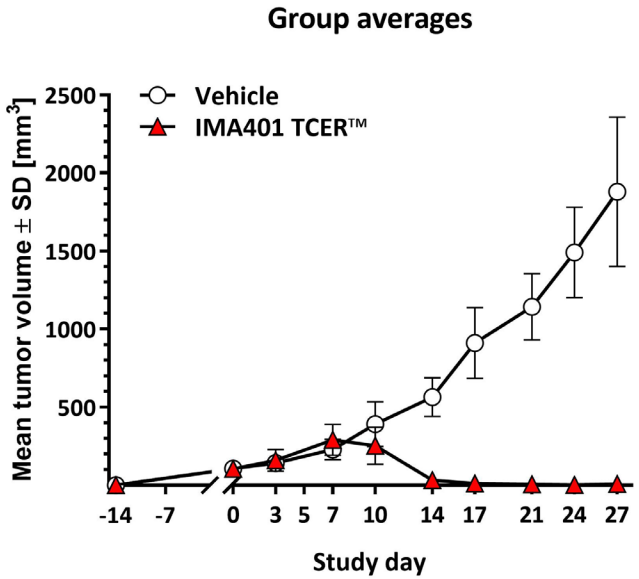
Patient-Derived Tumor Model

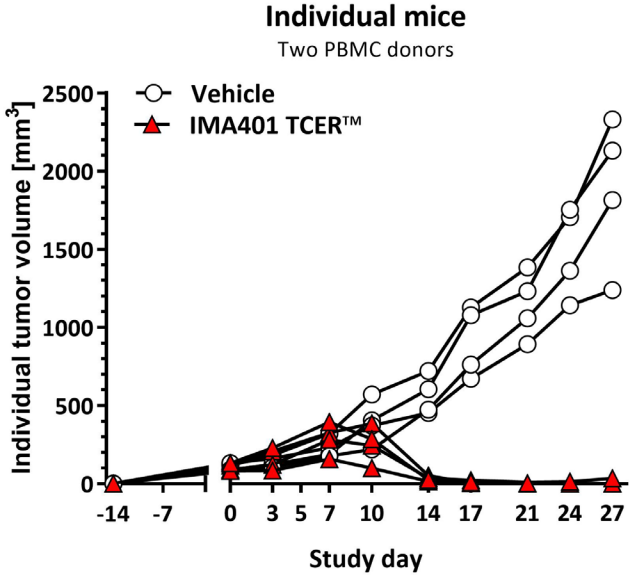
NSCLC adenocarcinoma:

- Male, Caucasian, age 58, no therapy prior to surgery
- Site of origin: lung, differentiation poor
- Date of surgery: 1987, Freiburg Medical Center
- Volume doubling time: 7.3 day
- Histology:
  - Stroma content, 4%
  - Vascularization, high
  - Grading, undifferentiated





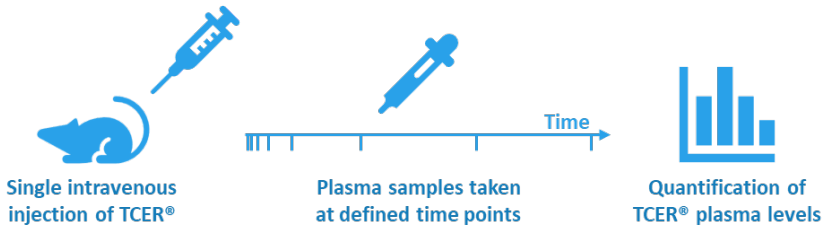


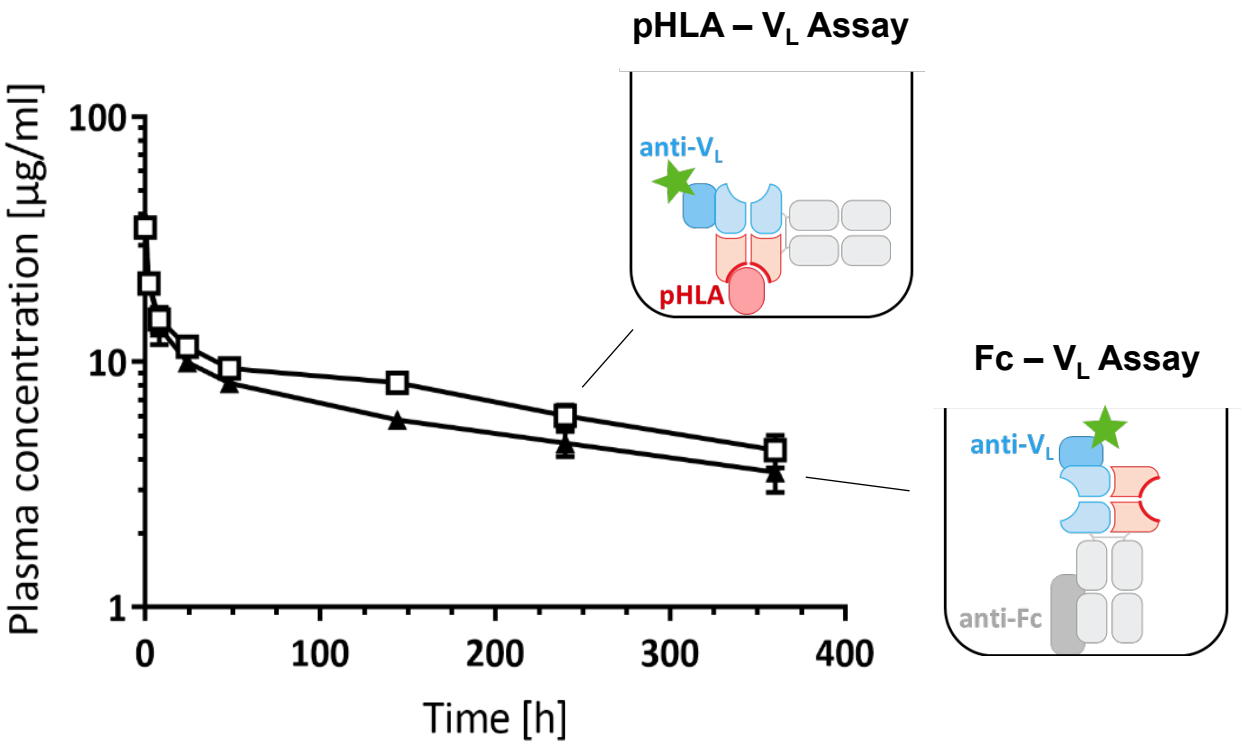


- TCER® IMA401 shows **high anti-tumor activity in Patient-derived xenograft model** of non-small cell lung adenocarcinoma
- **Remission observed in all mice (3 out of 4 mice with complete remission)**

TCER® IMA401 (MAGEA4/8) – Pharmacokinetics

PK Analysis in NOG Mice





- Two different PK assays established to ensure functional integrity of protein domains
- **Terminal half-life in mice: 10-11 days**

Phase 1 Clinical Trial to Evaluate TCER® IMA401 Targeting MAGEA4/8

Phase 1a: Dose Escalation

Adaptive design aimed at accelerating dose escalation → **MTD/ RP2D**

- Weekly i.v. infusions[1]
- Dose escalation decisions based on cohorts of 1-6 patients in adaptive design (BLRM model)

Phase 1b: Dose Expansion

Monotherapy expansion cohort

Potential development option for checkpoint inhibitor combination or other combination therapies[2]

- Focus on specific indications planned

Primary Objective

- Determine MTD and/or RP2D

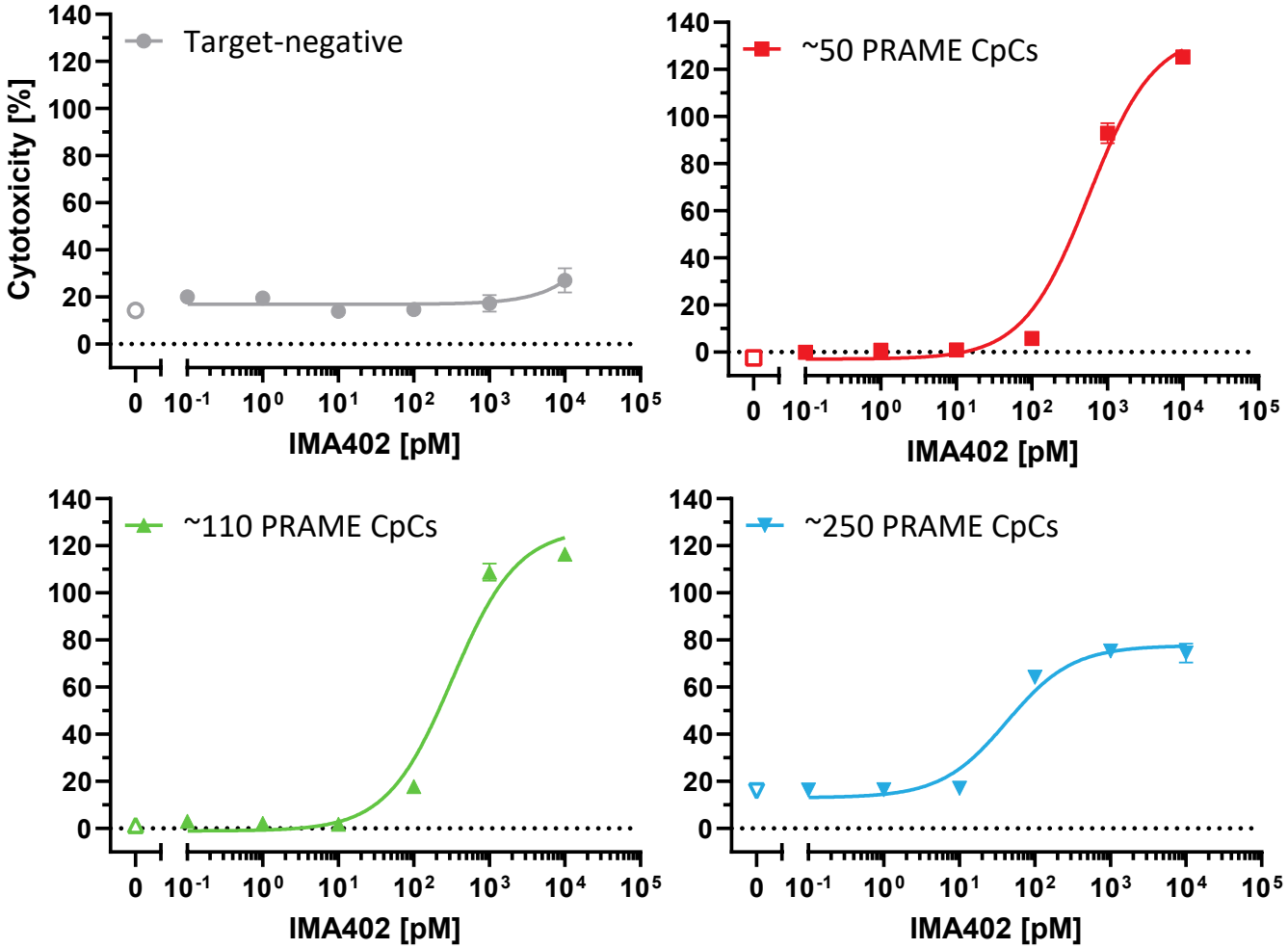
Secondary Objectives

- Safety and tolerability
- Initial anti-tumor activity
- Pharmacokinetics

MTD: maximum tolerated dose, RP2D: recommended phase 2 dose; MABEL: minimum anticipated biological effect level; BLRM: Bayesian logistic regression model;
[1] Pharmacokinetics data assessed throughout the trial might provide an opportunity to optimize scheduling to a less frequent regimen. [2] Conducted in collaboration with BMS

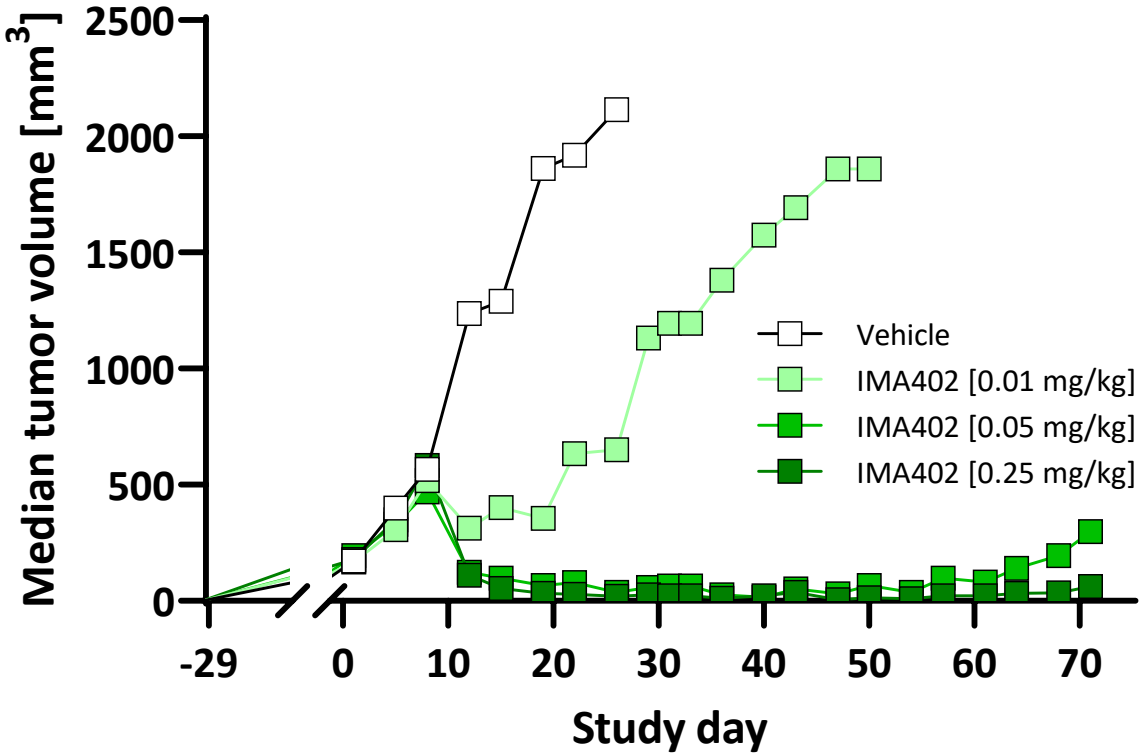
TCER® IMA402 Targeting PRAME – Efficacy Assessment *in vitro*

Tumor Cell Killing at Low Physiological PRAME Peptide Levels



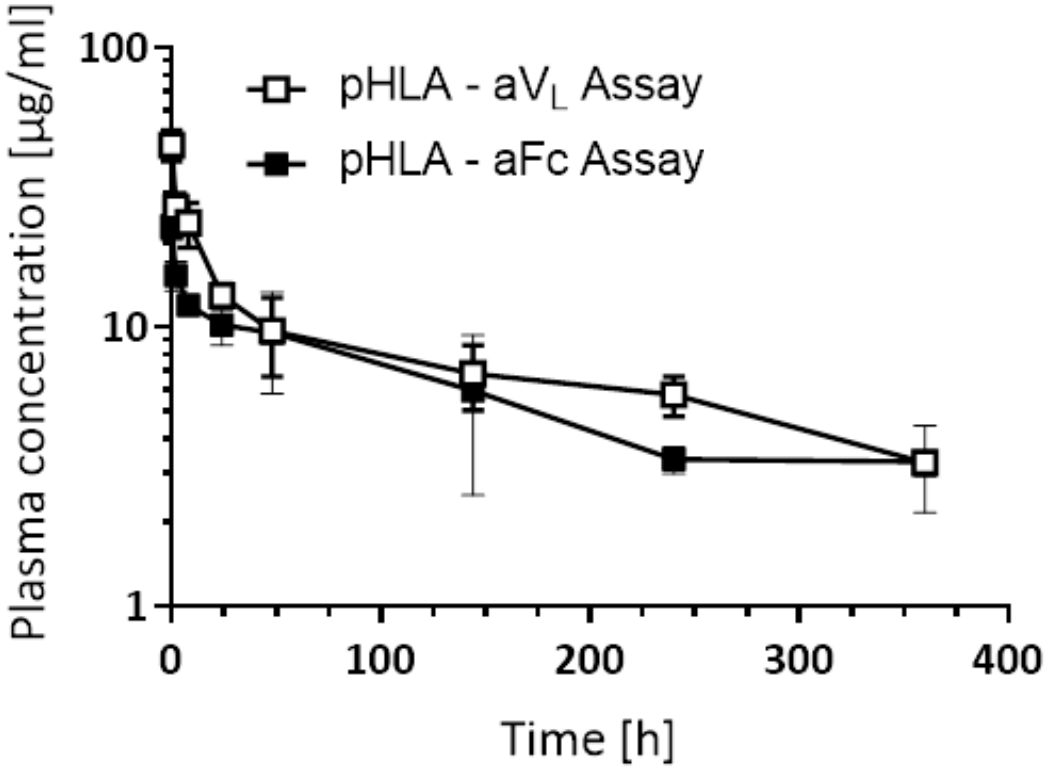
- TCER® IMA402 induces killing of tumor cells with PRAME target copies as low as 50 CpCs
- Physiological PRAME levels detected in majority of cancer tissues from patients are 100 – 1000 CpCs
- Preclinical activity profile enables targeting of a broad variety of tumor indications, such as lung cancer, breast cancer, ovarian cancer, uterine cancer, melanoma and others

TCER® IMA402 Achieves Durable Tumor Control of Large Tumors *in vivo*

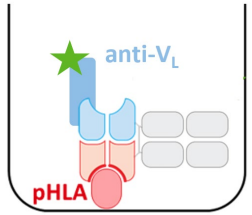


- Dose-dependent efficacy of IMA402 in cell line-derived *in vivo* mouse model
- Durable shrinkage of large tumors including complete responses over prolonged period
- Sufficiently high drug doses are key to achieving desired anti-tumor effect

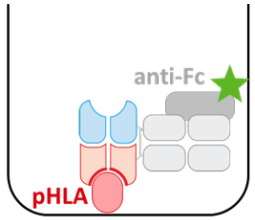
Half-life Extended Format of IMA402 Confers Terminal Half-life of >1 Week



pHLA – aV$_L$ Assay



pHLA – aFc Assay



- IMA402 shows a terminal serum half-life of ≈ 8 days in mice
- IMA402 will be initially dosed weekly in the clinical trial
- Dosing frequency may be adapted based on clinical data

Phase 1/2 Clinical Trial to Evaluate TCER® IMA402 Targeting PRAME

First Clinical Data Planned in 2024

Trial Overview

Phase 1/2 clinical trial to evaluate safety, tolerability and anti-tumor activity of IMA402

- HLA-A*02:01-positive patients with PRAME-expressing recurrent and/or refractory solid tumors
- Initially weekly i.v. infusions
- Potential for early adjustment of treatment interval based on PK data of half-life extended TCER® format

Phase 1: Dose Escalation

Adaptive design aimed at accelerating dose escalation

MTD/ RP2D

- Basket trial in focus indications to accelerate signal finding
- Cut. and uveal melanoma, ovarian, lung, uterine cancer, synovial sarcoma

Phase 2a: Dose Expansion

Expansion cohort

Expansion cohort

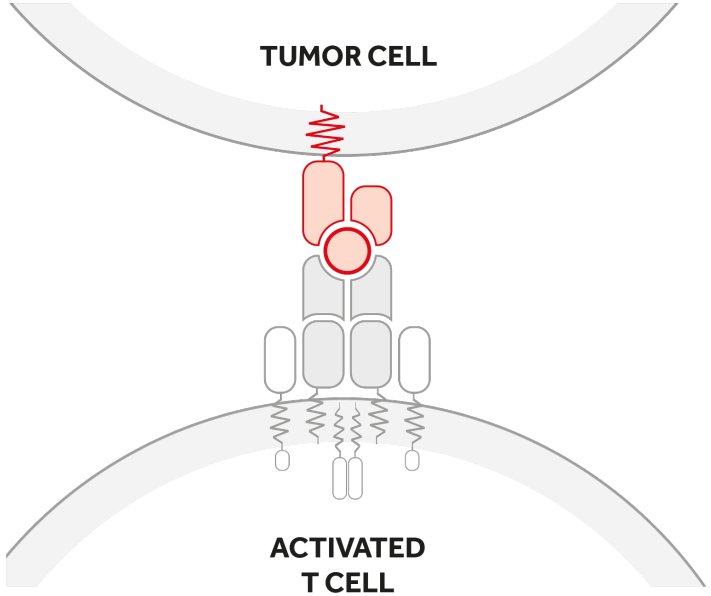
Expansion cohort

- Specific indications plus ongoing basket
- Combination therapies
- Optional dose/application optimization

Immatics' Proprietary Target and TCR Discovery Platforms

True Cancer Targets & Matching Right TCRs

Goal to Maximize Anti-Tumor Activity and Minimize Safety Risks of TCR-based Immunotherapies



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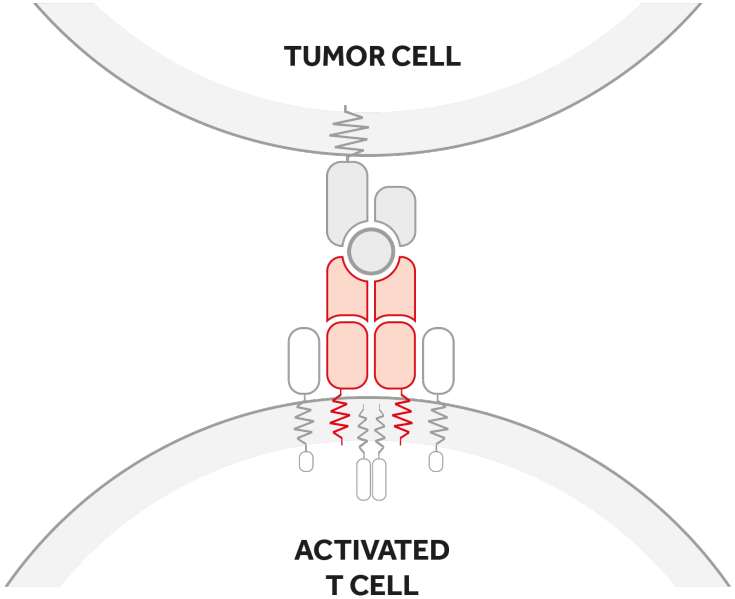


True Targets via XPRESIDENT® technology platform

- are naturally presented on tumor tissues as identified by mass-spec
- are absent or presented at only low levels on normal tissues
- are presented at high copy numbers to trigger a pharmacological response

Right TCRs via XCEPTOR® technology platform

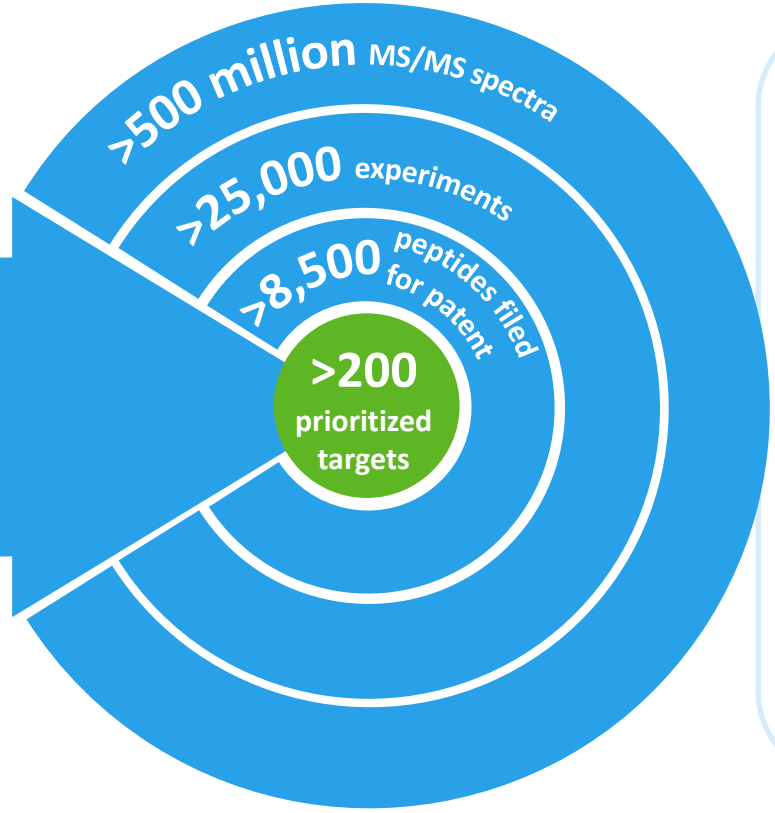
- recognize the target peptide with high affinity and specificity
- show selective killing of tumor cells
- are developed to be suitable for two different therapeutic modalities, Cell Therapies and TCR Bispecifics

Pool of 200 Prioritized Targets as Foundation for Future Value Generation

XPRESIDENT® Target Platform

pHLA Database
based on primary tissues

>2,500 cancer & normal tissues analyzed by **Quantitative, Ultra-Sensitive Mass Spectrometry**



200 Prioritized Targets

Grouped in 3 Target Classes:

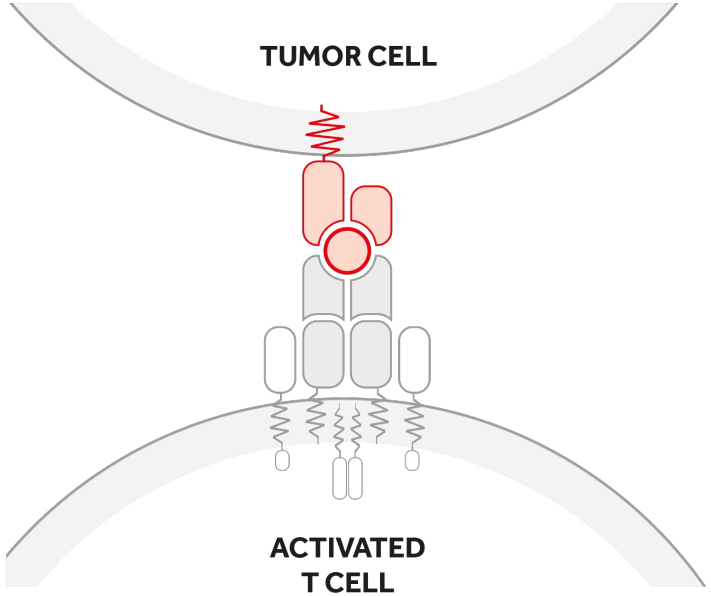
1. **Well known and characterized parent protein (20%)**
   e.g. MAGE family cancer testis antigens
2. **Unknown or poorly characterized parent protein (60%)**
   e.g. stroma target COL6A3 exon 6
3. **Crypto-targets/Neoantigens (20%)**
   Novel target class which includes RNA-edited peptides & non-classical neoantigens

~50% of our prioritized targets are non-HLA-A*02 restricted, substantially broadening the potential patient reach

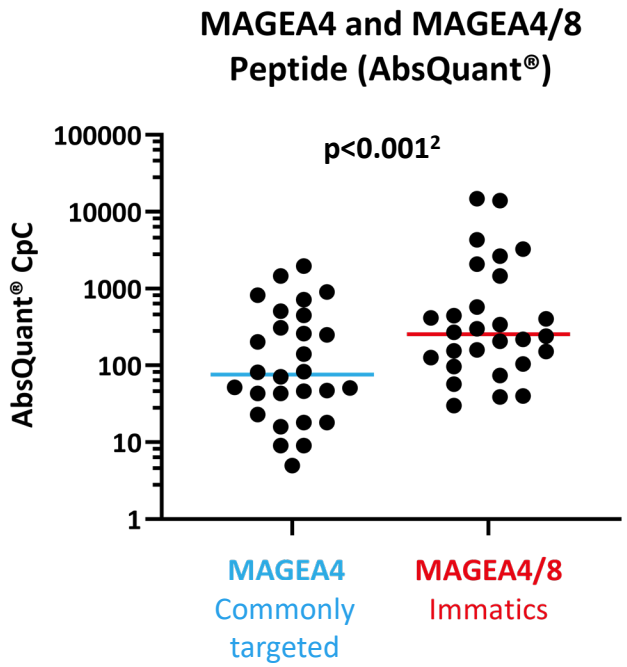
This large data set is leveraged by our bioinformatics & AI-platform XCUBE™ – *„AI is where the data is®“*

Immatics' Unique Capability – Identification of the most Relevant Target

Example of MAGEA4/8 Peptide Target



Ranking of pHLA targets



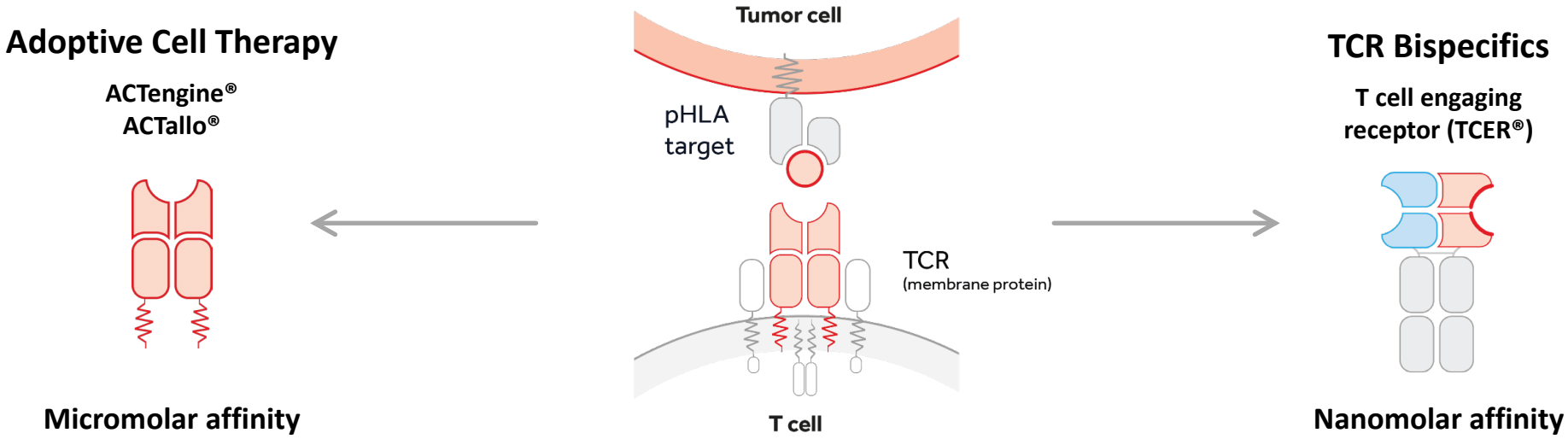
XPRESIDENT® quantitative information on target density[1] between peptides originating from the same source protein

MAGEA4/8 target is presented at >5-fold higher target density[1] than a commonly targeted MAGEA4 target peptide

[1] Copy number per tumor cell (CpC) measured on a paired-sample basis by AbsQuant®, i.e. comparing MAGEA4 vs. MAGEA4/A8 peptide presentation on same sample, [2] Students paired T test

Development of the Right TCR – XCEPTOR® Technology

TCR Discovery and Engineering for ACT and TCR Bispecifics

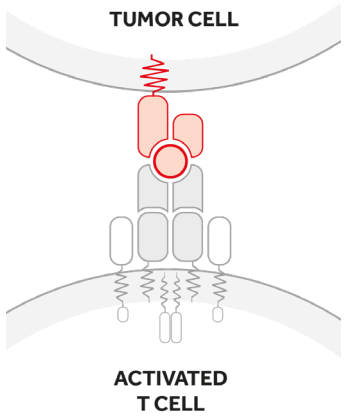
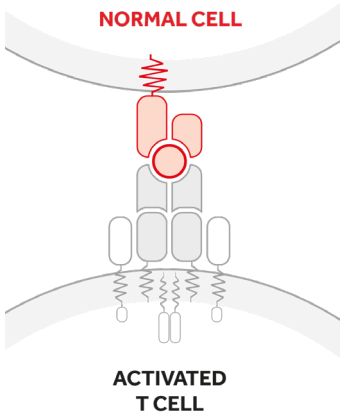
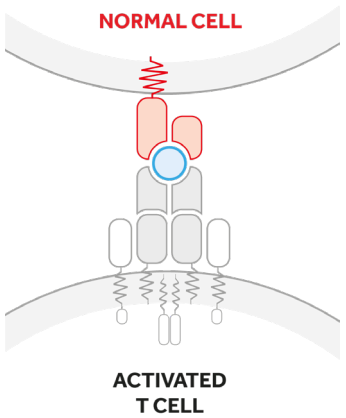
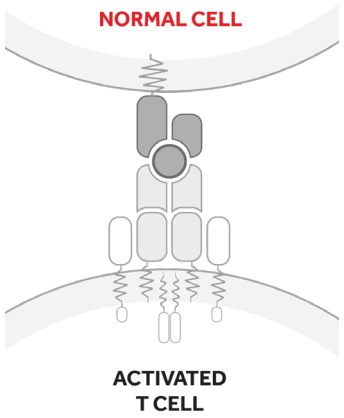


- Fast, efficient and highly sensitive discovery of highly specific, natural TCRs
- Protein engineering capabilities to design and maturate TCRs with increased affinity while retaining specificity
- Early de-selection of cross-reactive TCRs by the unique interplay between Immatics' target and TCR discovery platforms XPRESIDENT® and XCEPTOR® during TCR discovery[1] and TCR maturation[2] (empowered by our bioinformatics & AI-platform XCUBE™)

[1] XPRESIDENT®-guided off-target toxicity screening; [2] XPRESIDENT®-guided similar peptide counterselection

Optimal Target Selection & TCR Specificity for Minimizing Safety Risks

Unique Interplay between Technology Platforms Allows Early De-risking for Clinical Development

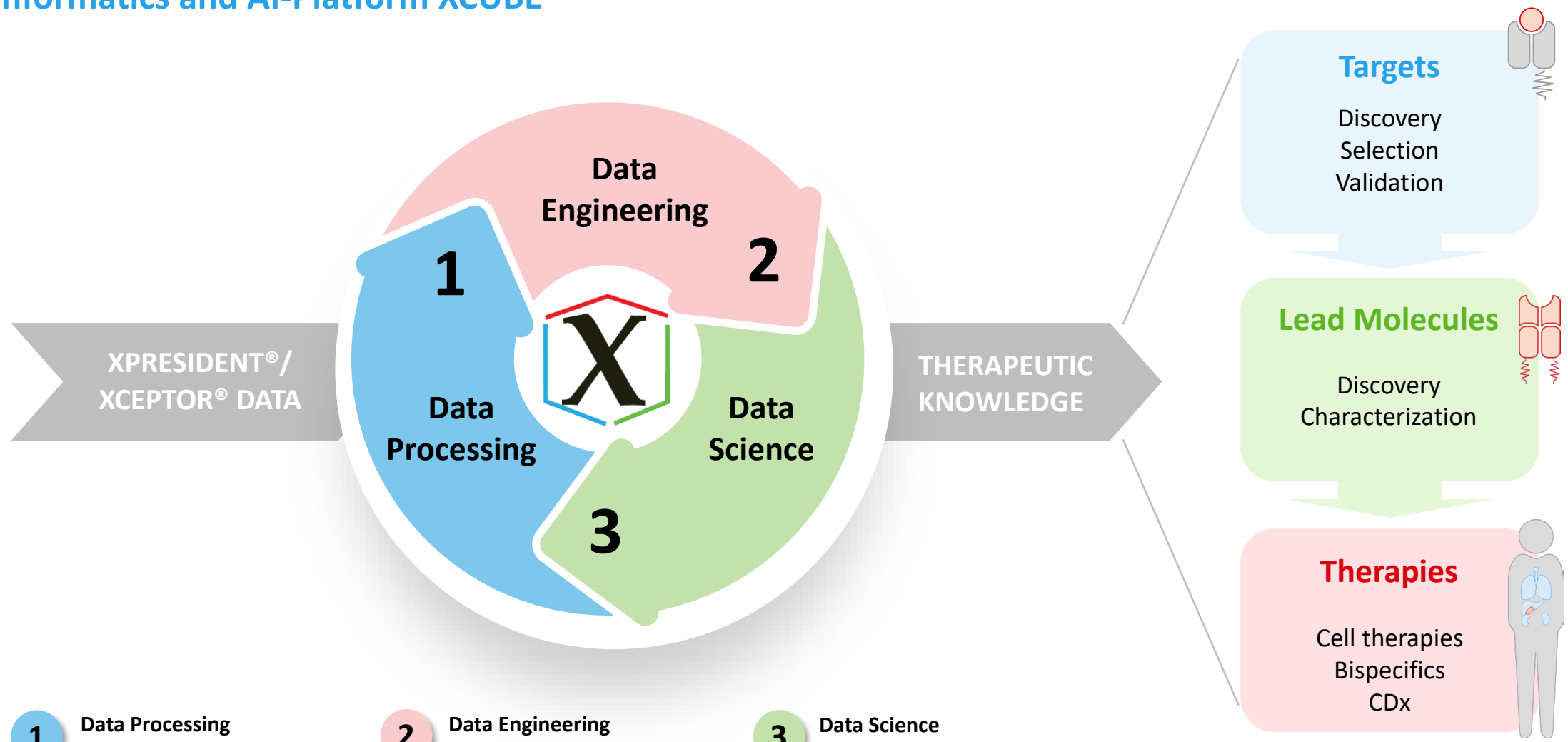
Target peptide presented on tumor cells	Target peptide presented on normal cells	Similar peptide presented on normal cells[1]	A different HLA is recognized on normal cells
			
Selective killing of tumor cells	On-target (off-tumor) toxicity	Off-target toxicity	Alloreactivity

XPRESIDENT®-guided screening for on- and off-target toxicities of TCRs based on the extensive database of peptides presented on normal tissues

[1] Clinical fatalities have occurred in TCR-T trials using a titin cross-reactive TCR (Cameron *et al.*, Sci Transl Med)

“AI Is Where the Data Is®”

Bioinformatics and AI-Platform XCUBE™



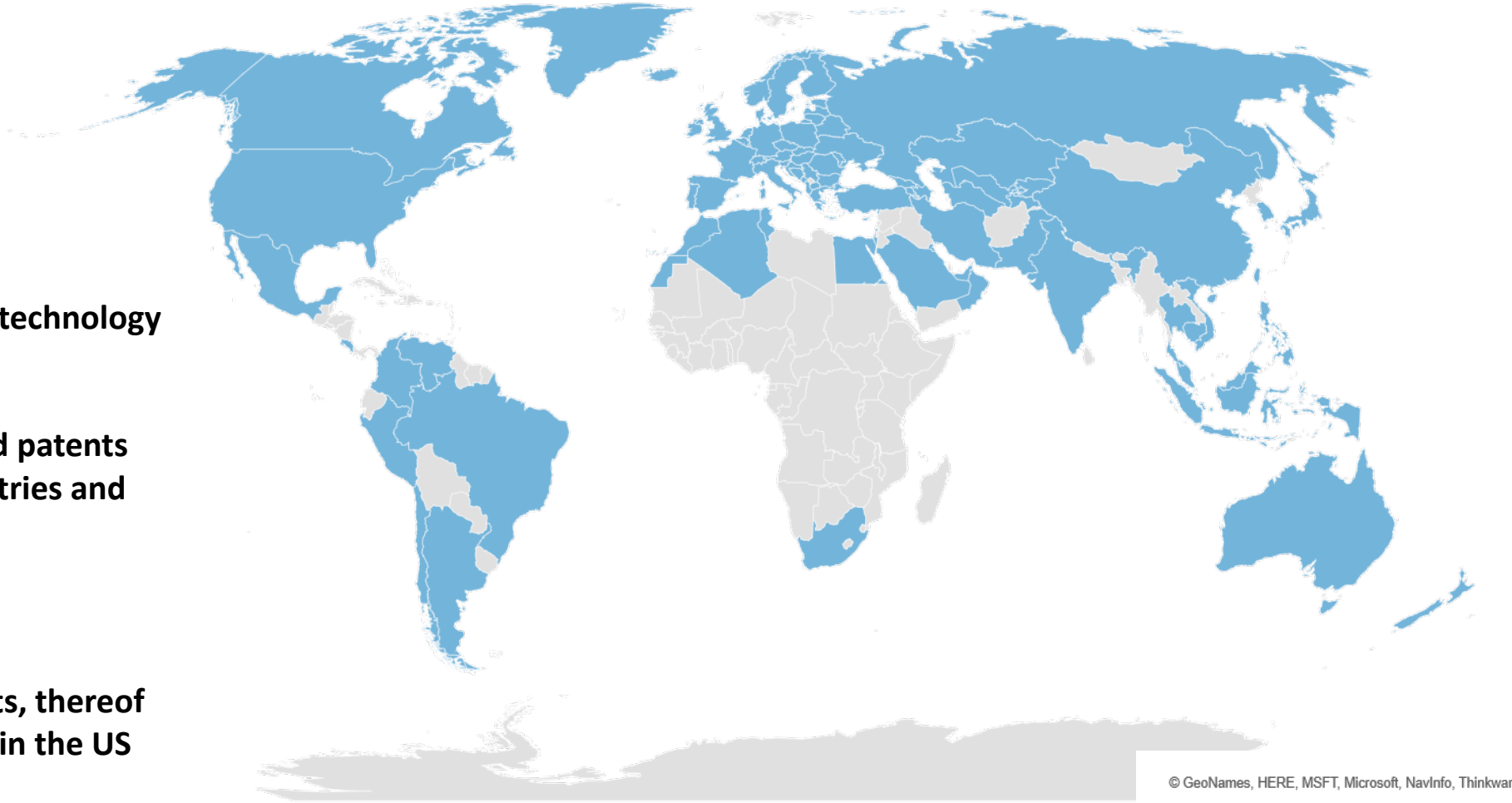
1 Data Processing
Processing of mass-spec & next-gen sequencing data

2 Data Engineering
Development of data warehouses & user interfaces

3 Data Science
Development of statistical & machine learning models

Robust IP Portfolio

Immatics' Patent Estate – Territorial Coverage



Cancer targets, TCRs and technology protected by:

- **5,800 applications and patents filed in all major countries and regions**
- **>115 patent families**
- **>2,400 granted patents, thereof >550 granted patents in the US**

Corporate Information & Milestones

Experienced Global Leadership Team Across Europe and the US

Harpreet Singh
Chief Executive Officer
Co-Founder
>20 yrs biotech experience

Arnd Christ
Chief Financial Officer
>20 yrs biotech experience
(InflaRx, Medigene, NovImmune, Probiodrug)

Carsten Reinhardt
Chief Development Officer
>20 yrs pharma & biotech experience
(Micromet, Roche, Fresenius)

Cedrik Britten
Chief Medical Officer
15 yrs pharma & biotech experience
(GSK, BioNTech)

Rainer Kramer
Chief Business Officer
25 yrs pharma & biotech experience
(Amgen, MorphoSys, Jerini, Shire, Signature Dx)

Steffen Walter
Chief Operating Officer
Co-Founder Immatics US
>15 yrs biotech experience

Toni Weinschenk
Chief Innovation Officer
Co-Founder
>15 yrs biotech experience

Edward Sturchio
General Counsel
>15 yrs pharma & biotech experience
(Abeona Therapeutics, AAA, Novartis, Merck, Schering)

Jordan Silverstein
Head of Strategy
>10 yrs biotech experience
(InflaRx, AAA)

Strong, Focused and Highly Integrated Trans-Atlantic Organization

Tübingen, Germany
~215 FTEs
Target & TCR discovery and TCR Bispecifics development

Munich, Germany
~65 FTEs
Various operating functions

Houston, Texas
~150 FTEs
Cell therapy development & manufacturing

Delivering

the Power of T cells to Cancer Patients

Appendix

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ACTengine® IMA203 TCR-T 1st Gen Monotherapy Tolerability Data

Focus on IMA203 Phase 1b Cohort A – All ≥Grade 3 Adverse Events (N=11)

TEAEs by maximum severity for all patients in Ph1b Cohort A dose expansion (N=11)

Adverse event (System organ class, Preferred term)	≥ Grade 3 No.	≥ Grade 3 %
Patients with any adverse event	**11**	**100.0**
Adverse Events of Special Interest		
Cytokine release syndrome	0	0.0
ICANS[1]	0	0.0
Blood and lymphatic system disorders		
Neutropenia	10	90.9
Lymphopenia	6	54.5
Leukopenia	5	45.5
Anaemia	5	45.5
Thrombocytopenia	4	36.4
Leukocytosis	1	9.1
Lymphocytosis	1	9.1

Adverse event (System organ class, Preferred term)	≥ Grade 3 No.	≥ Grade 3 %
table continued…		
Investigations		
Alanine aminotransferase increased	1	9.1
Aspartate aminotransferase increased	1	9.1
Blood alkaline phosphatase increased	1	9.1
Eye disorders		
Ulcerative keratitis	1	9.1
Gastrointestinal disorders		
Ileus	1	9.1
Infections and infestations		
Infection	1	9.1
Nervous system disorders		
Headache	1	9.1
Respiratory, thoracic and mediastinal disorders		
Laryngeal inflammation	1	9.1

All treatment-emergent adverse events (TEAEs) with ≥ Grade 3 regardless of relatedness to study treatment that occurred in at least 1 patient (except for CRS and ICANS, where only Grade 1-2 occurred; listed for completeness due to being adverse events of special interest) are presented. Adverse events were coded using the Medical Dictionary for Regulatory Activities. Grades were determined according to National Cancer Institute Common Terminology Criteria of Adverse Events, version 5.0. Grades for CRS and ICANS were determined according to CARTOX criteria (Neelapu *et al.*, 2018). Patients are counted only once per adverse event and severity classification. Based on interim data extracted from open clinical database (04-Apr-2023). [1] ICANS: Immune effector cell-associated neurotoxicity syndrome.

- IMA203 was well tolerated
- No Adverse Event ≥Grade 3 was observed with a frequency ≥10% when excluding expected cytopenias associated with lymphodepletion
- No IMA203-related Grade 5 Adverse Events

Deep & Durable Responses in Heavily Pre-Treated Patients – Phase 1b Cohort A

Patient ID	Indication	No of prior treatment lines	Prior treatments	Total infused dose TCR-T cells[1] [x10^9]	BOR	BOR (Max % change of target lesions)	Comment
A-DL5-01	Uveal Melanoma	1	ARRY614/Nivolumab	**4.16**	**cPR**	**-60.3**	Ongoing response 10.1 months post infusion
A-DL4-03	Cut. Melanoma	7	Dabrafenib/Trametinib, Pembrolizumab, Dabrafenib/Trametinib, Vemurafenib/Cobimetinib, Dabrafenib/Trametinib, IMCgp-100, Encorafenib/Binimetinib	**1.30**	**cPR**	**-73.9**	Ongoing response 9.9 months post infusion
A-DL5-03	Cut. Melanoma	3	Interferon, Pembrolizumab, Nivolumab/Ipilimumab	**5.12**	**cPR**	**-60.5**	Ongoing response 6.2 months post infusion
A-DL4-01	Head & Neck Cancer	1	Carboplatin/Paclitaxel	**1.92**	**cPR**	**-33.3**	Response until 5.7 months post infusion
A-DL4-02	Ovarian Cancer	10	Carboplatin/Taxol, Taxol, Gemcitabine/Carboplatin, Olaparib, Letrozole, Rucaparib, UPCC 03118 (CAR-T cell directed folate receptor), Bevacizumab/Cyclophosphamide, Carboplatin, Doxorubicin	**1.97**	**cPR**	**-41.0**	Response until 3.8 months post infusion
A-DL5-05	Ovarian Cancer	3	Adriamycin/Cytotaxan/Taxol, Carboplatin/Taxol, Carboplatin/Doxil	**8.84**	**cPR**	**-61.7**	Ongoing response 2.5 months post infusion
A-DL5-06	Synovial Sarcoma	1	Adriamycin/Ifosfamide/Mesna	**3.94**	**PR**	**-74.8**	Initial PR at week 6, 3-month scan pending
A-DL4-04	Melanoma (Unk. Primary)	2	Nivolumab/Ipilimumab, Nivolumab	**1.73**	**SD**	**0.0**	Disease stabilization until 5.7 months post infusion
A-DL4-05	Cut. Melanoma	5	Nivolumab, Nivolumab (re-exposure), Nivolumab/Ipilimumab, Dabrafenib/Trametinib, Nivolumab	**1.63**	**SD**	**11.4**	Ongoing disease stabilization 2.1 months post infusion
A-DL5-02	Pancreatic Neuroendocrine Tumor	3	Lanreotid, Streptozocin/5-Fluorouracil, Everolismus	**5.12**	**SD**	**-21.8**	Disease stabilization until 2.3 months post infusion
A-DL5-04*	Ovarian Cancer	5	Paclitaxel/Carboplatin, Niraparib, Doxorubicin/Liposomal/Carpoplatin, 2020-0808 ZN-C3/Gemcitabine, 2020-0755 COM 701/BMS-986207/Nivolumab	**4.68**	**PD**	**50.8**	Progressive disease at 1.2 months post infusion

[1] Transduced viable CD8 T cells; PD: Progressive Disease; SD: Stable Disease; PR: Partial Response; cPR: Confirmed Partial Response; BL: Baseline; BOR: Best Overall Response

*Ovarian cancer patient A-DL5-04 erroneously received one dose of nivolumab and is part of intent-to-treat population (shown here) but not per-protocol population.

ACTengine® IMA203 TCR-T 1st Gen Monotherapy Tolerability Data

Phase 1a and Phase 1b Cohort A – All ≥Grade 3 Adverse Events (N=39)

TEAEs by maximum severity for all patients in Ph1a dose escalation and Ph1b Cohort A dose expansion (N=39)[1]

Adverse event (System organ class, Preferred term)	≥ Grade 3 No.	≥ Grade 3 %
Patients with any adverse event	39	100.0
Adverse Events of Special Interest		
Cytokine release syndrome	2	5.1
ICANS[2]	0	0.0
Blood and lymphatic system disorders		
Neutropenia	32	82.1
Lymphopenia	24	61.5
Leukopenia	22	56.4
Anaemia	20	51.3
Thrombocytopenia	15	38.5
Cytopenia	1	2.6
Leukocytosis	1	2.6
Lymphocytosis	1	2.6
Infections and infestations		
Appendicitis	1	2.6
COVID-19	1	2.6
Enterococcal infection	1	2.6
Infection	1	2.6
Orchitis	1	2.6
Sepsis[4,5]	1	2.6
Septic shock[4]	1	2.6
Respiratory, thoracic and mediastinal disorders		
Hypoxia	2	5.1
Bronchial obstruction	1	2.6
Laryngeal inflammation	1	2.6
Pleural effusion	1	2.6
Respiratory failure	1	2.6
Investigations		
Alanine aminotransferase increased	1	2.6
Aspartate aminotransferase increased	1	2.6
Blood alkaline phosphatase increased	1	2.6
Blood creatinine increased	1	2.6
Blood fibrinogen decreased	1	2.6
Gastrointestinal disorders		
Abdominal pain	1	2.6
Diarrhoea	1	2.6
Ileus	1	2.6
Vomiting	1	2.6

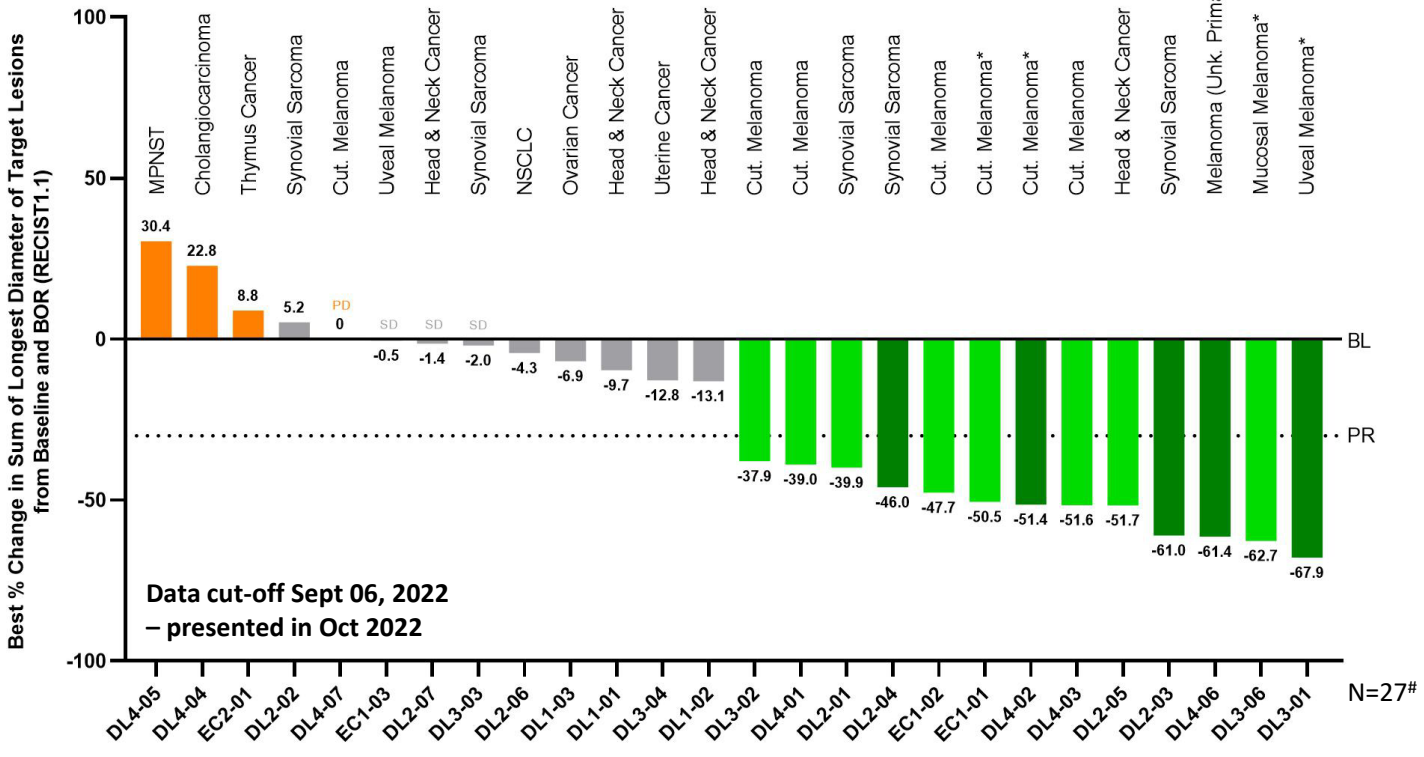
Adverse event (System organ class, Preferred term)	≥ Grade 3 No.	≥ Grade 3 %
table continued…		
General disorders and administration site conditions		
Condition aggravated[4]	1	2.6
Fatigue	1	2.6
Pyrexia	1	2.6
Swelling face	1	2.6
Vascular disorders		
Hypertension	3	7.7
Hypotension	1	2.6
Metabolism and nutrition disorders		
Hypokalaemia	2	5.1
Failure to thrive	1	2.6
Injury, poisoning and procedural complications		
Humerus fracture	1	2.6
Infusion related reaction	1	2.6
Renal and urinary disorders		
Acute kidney injury	1	2.6
Proteinuria	1	2.6
Cardiac disorders		
Atrial fibrillation[3]	1	2.6
Endocrine disorders		
Inappropriate antidiuretic hormone secretion	1	2.6
Eye disorders		
Ulcerative keratitis	1	2.6
Hepatobiliary disorders		
Cholangitis	1	2.6
Immune system disorders		
Contrast media allergy	1	2.6
Musculoskeletal and connective tissue disorders		
Muscle spasms	1	2.6
Nervous system disorders		
Headache	1	2.6
Reproductive system and breast disorders		
Vaginal haemorrhage	1	2.6
Skin and subcutaneous tissue disorders		
Rash maculo-papular	1	2.6

- IMA203 was well tolerated
- No Adverse Event ≥Grade 3 was observed with a frequency ≥10% when excluding expected cytopenias associated with lymphodepletion
- No IMA203-related Grade 5 Adverse Events

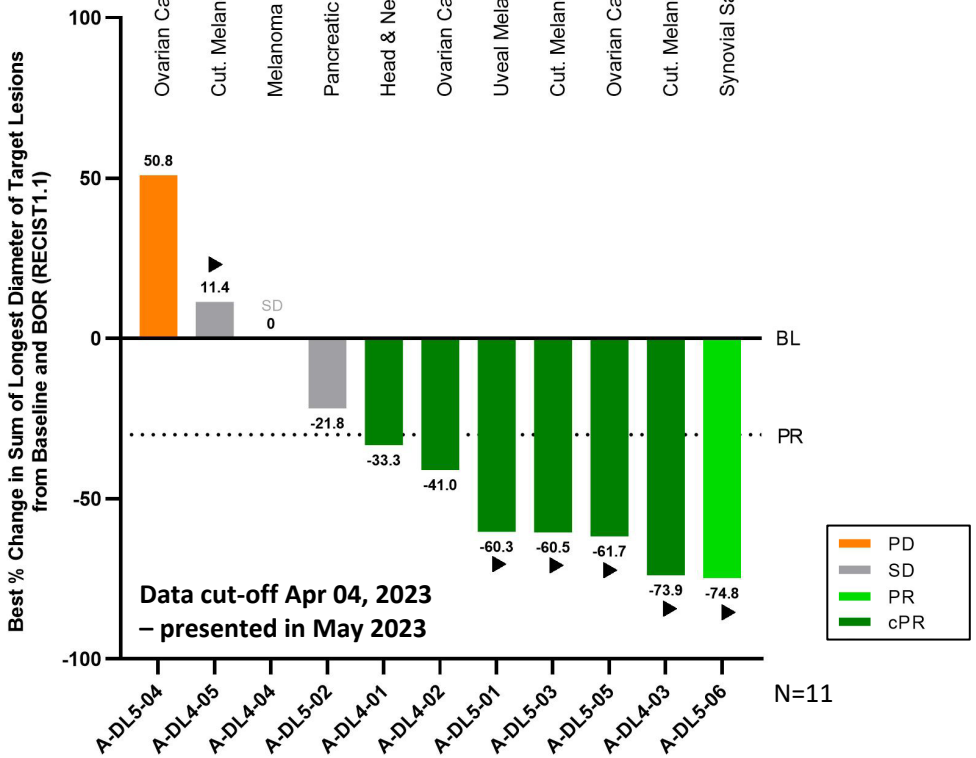
All treatment-emergent adverse events (TEAEs) with ≥ Grade 3 regardless of relatedness to study treatment that occurred in at least 1 patient (except for ICANS, where only Grade 1-2 occurred; listed for completeness due to being an adverse event of special interest) are presented. Adverse events were coded using the Medical Dictionary for Regulatory Activities. Grades were determined according to National Cancer Institute Common Terminology Criteria of Adverse Events, version 5.0. Grades for CRS and ICANS were determined according to CARTOX criteria (Neelapu et al., 2018). Patients are counted only once per adverse event and severity classification. Based on interim data extracted from open clinical database (04-Apr-2023); [1] Two patients with disease progression after first IMA203 infusion received exploratory second IMA203 infusion. They had these ≥ Grade 3 TEAEs only after second infusion, which are included in the table: First patient: Abdominal pain, Cytokine release syndrome, Diarrhoea, Hypokalaemia, Proteinuria; Second patient: Humerus fracture, Muscle spasms, Neutropenia, Thrombocytopenia; [2] ICANS: Immune effector cell-associated neurotoxicity syndrome; [3] DLT: Dose limiting toxicity in phase 1a at DL2 reported on March 17, 2021; [4] Fatal Adverse events were not considered related to any study drug; [5] Patient died from sepsis of unknown origin and did not receive IMA203 TCR-T cells.

Phase 1a and Phase 1b Cohort A – Best Overall Response

Phase 1a (Dose Escalation)



Phase 1b (Cohort A)



Confirmed objective responses across a broad spectrum of different tumor types such as cutaneous melanoma, uveal melanoma, head and neck cancer, ovarian cancer, synovial sarcoma

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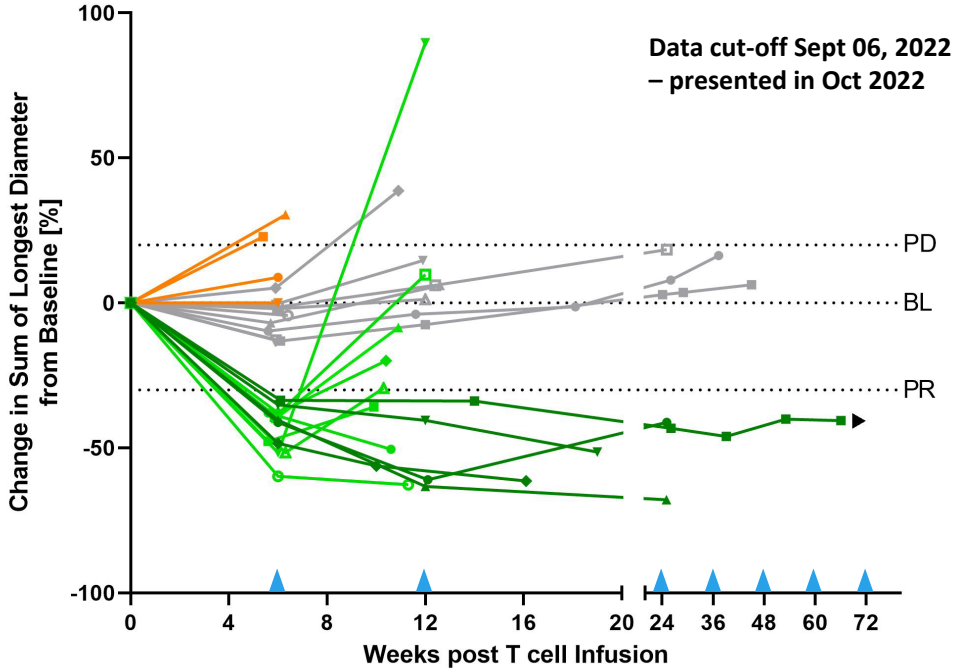
* Maximum change of target lesions and RECIST 1.1 BOR at different timepoints; # Synovial sarcoma patient (DL3) PD at week 6 not shown as target lesions were not evaluable;
[1] Indication was updated to cutaneous melanoma post data cut-off; PD: Progressive disease; SD: Stable disease; PR: Partial response; cPR: Confirmed partial response; BL: Baseline

Phase 1a and Phase 1b Cohort A – Responses over Time

Improved Durability at Higher Dose and in Phase 1b Patients

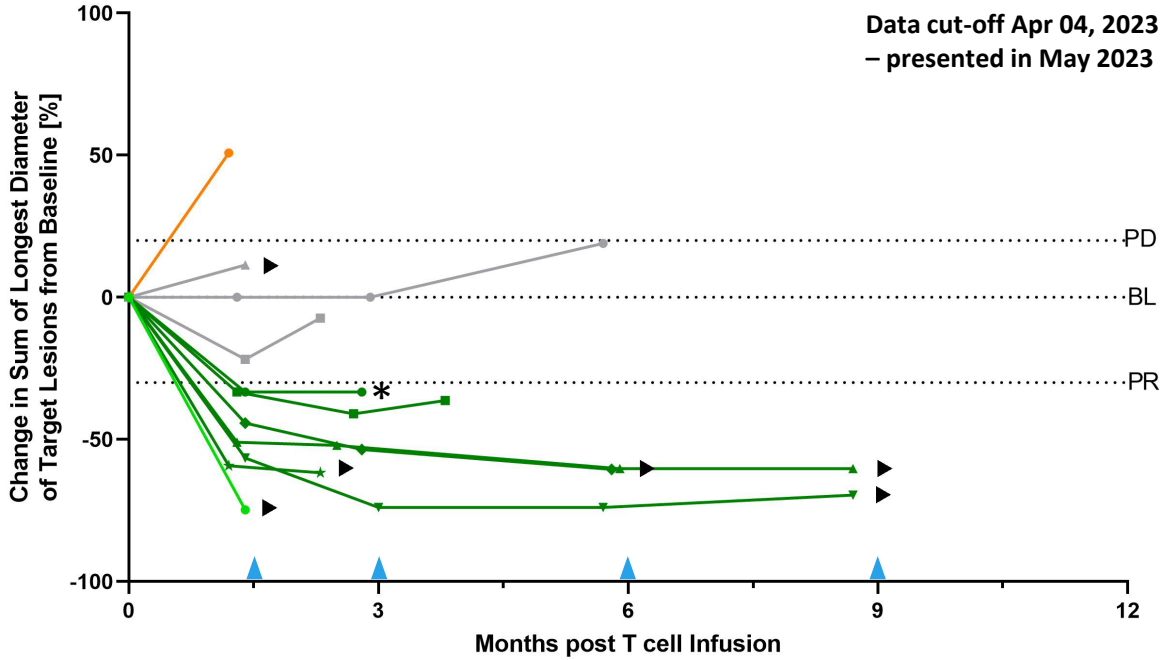
Phase 1a (Dose Escalation)

N=27#



Phase 1b (Cohort A)

N=11



Best overall response (RECIST1.1)

cPR	PR		SD		PD
DL2-03	EC1-01	DL3-06	DL1-01	DL2-06	EC2-01
DL2-04	EC1-02	DL4-01	DL1-02	DL2-07	DL4-04
DL3-01	DL2-01	DL4-03	DL1-03	DL3-03	DL4-05
DL4-02	DL2-05		EC1-03	DL3-04	DL4-07
DL4-06	DL3-02		DL2-02		

PD
SD
PR
cPR
ongoing

cPR	PR	SD	PD
A-DL4-01	A-DL5-06	A-DL4-04	A-DL5-04 [1]
A-DL4-02		A-DL5-02	
A-DL5-01		A-DL4-05	
A-DL4-03			
A-DL5-03			
A-DL5-05			

▶ Ongoing

✱ Response until 5.7 months post infusion, target lesion response assessment not available (external assessment)

▲ Scans at approximately week 6, month 3 and then every 3 months

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Synovial sarcoma patient (DL3) PD at week 6 not shown as target lesions were not evaluable; [1] Ovarian cancer patient A-DL5-04 erroneously received one dose of nivolumab and is part of intent-to-treat population (shown here) but not per-protocol population; PD: Progressive Disease; SD: Stable Disease; PR: Partial Response; cPR: Confirmed Partial Response; BL: Baseline

Focus on Melanoma Patients Phase 1a (DL4 only) and Phase 1b Cohort A

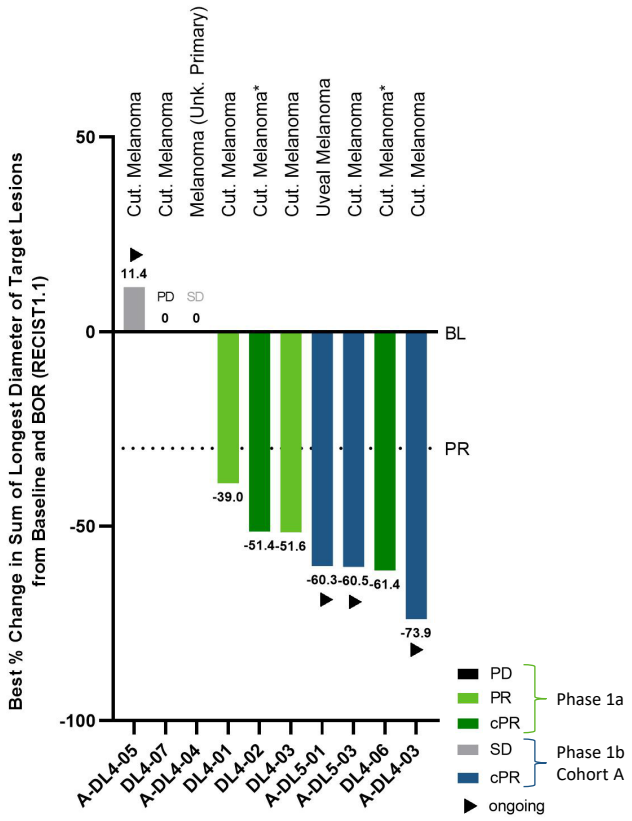
Continuous Improvement from Phase 1a to Phase 1b Cohort A

Patient Characteristics (n=10)	
Prior lines of treatment Mean (min, max)	4.5 (1, 7)
Previous lines of CPI Mean (Min, Max)	2.6 (1, 4)
LDH at baseline >1 x ULN [% of patients]	60.0
Baseline tumor burden Mean target lesion sum of diameter [mm] (min, max)	66.9 (21.0, 178.7)
Total infused dose Mean TCR-T cells[1] infused [x10^9] (min, max)	2.12 (1.07, 5.12)
No. of Target- & Non-Target Lesions	60.0% with >3 lesions 40.0% with liver/brain lesions

- Heavily pre-treated melanoma patients after 1-4 lines of CPI: Cutaneous (N=8), uveal (N=1) and melanoma of unk. primary (N=1)

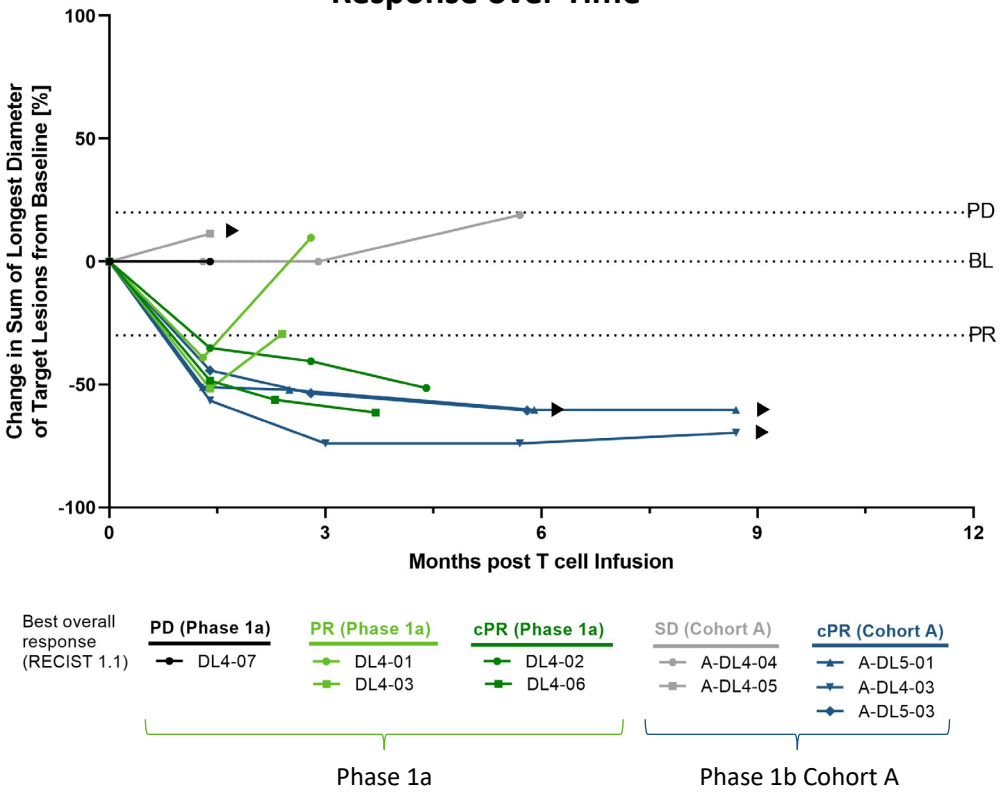
- Phase 1a (N=5): previous manufacturing process
- Phase 1b Cohort A (N=5): new monocyte depletion process, higher dose

Best Overall Response



ORR[2] = 70% (7/10)
cORR[3] = 56% (5/9)

Response over Time



Median DOR[4], min, max DOR	Not reached, 2.4, 8.8+ months
Median Follow-up[5]	8.5 months

* Maximum change of target lesions and RECIST 1.1 at different timepoints. [1] Transduced viable CD8 T cells; [2] Initial ORR: Objective response rate according to RECIST 1.1 at first scan post infusion at ~week 6; [3] Confirmed ORR (cORR): Confirmed objective response rate according to RECIST 1.1 for patients with available second scan post infusion at ~3 months or patients with progressive disease (PD) at any timepoint before this scan; [4] Duration of response (DOR) in confirmed responders is defined as time from first documented response until disease progression/death. Patients with ongoing response will be censored at date of data cut-off. Median DOR is analyzed by using the Kaplan-Meier method; [5] Median Follow-up is analyzed by using the reverse Kaplan-Meier method; PD: Progressive Disease; SD: Stable Disease; PR: Partial Response; cPR: Confirmed Partial Response; BOR: Best Overall Response; BL: Baseline; CPI: Checkpoint inhibitor; LDH: Lactate dehydrogenase

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