ACTengine® IMA200 TCR-T Programs
Interim Phase 1a Update

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November 09, 2021

Additional late-breaking oral presentation at SITC Annual Meeting on November 13, 2021, by Martin Wermke MD, Coordinating Investigator of Immatics ACTengine® trials in Germany

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Agenda

- Introduction & Summary
- IMA203 Phase 1a Interim Update
- Comprehensive Strategy to Target PRAME
- ACTengine® IMA200 Programs Update
- Summary
- Q&A

Introduction & Summary

Immatics' Proprietary PRAME Peptide-HLA/TCR Pair

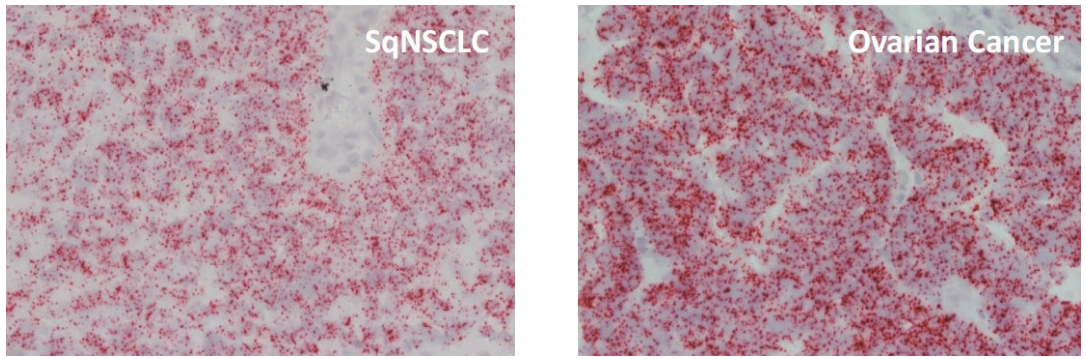
Broadly Expressed Target on Multiple Solid Cancers Combined with Highly Specific TCR

Peptide Target PRAME:

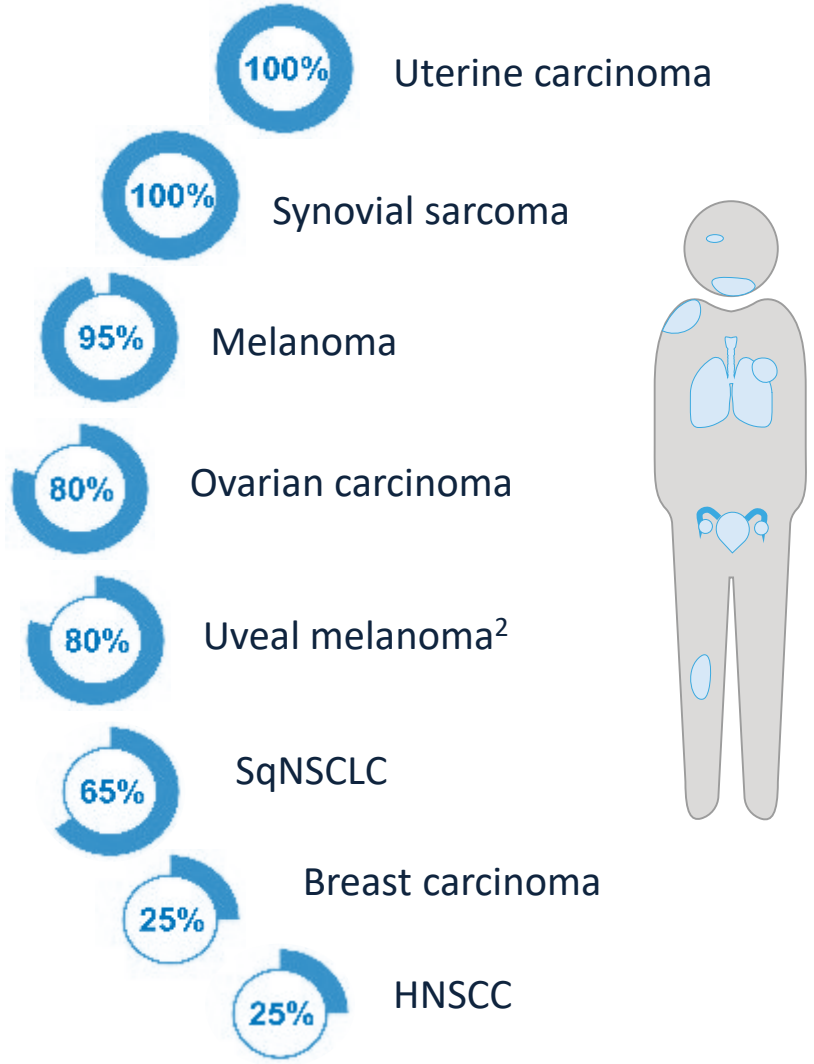
- HLA-A*02-restricted peptide identified by XPRESIDENT® quant. mass spec
- Naturally and specifically presented at high levels (100-1000 copies/cell)
- Homogenously expressed at high prevalence across multiple solid tumors[1]

PRAME T cell Receptor (TCR):

- Engineered to avoid mispairing
- Selected for high specificity guided by XPRESIDENT®
- High functional avidity: EC50 5ng/ml



PRAME RNA expression in native tumor samples (ISH analysis)



[1] Target prevalence for selected cancer indications based on mRNA expression (TCGA and Immatics inhouse data); [2] Based on metastatic uveal melanoma patients screened in IMA203 study (N=12)

ACTengine® IMA203 PRAME – Phase 1a Dose Escalation Interim Update

Preliminary Findings after Completion of Dose Level 3

Objective responses observed across multiple tumor types at dose levels below 1 billion T cells originally presumed to be subtherapeutic

SAFETY

3 Dose levels completed, all below 1 bn cells

0 Additional DLTs[1]

0 Grade ≥3 CRS or ICANS[2]

4th Dose level (target dose) commenced, first DL >1 bn cells

CLINICAL ACTIVITY

50% ORR[3] across all doses and multiple solid cancers (8/16 patients)

62% ORR[3] at DL2[*]& DL3 (8/13 patients) – all still dosed below 1 bn cells

BIOLOGICAL ACTIVITY

Blood High T cell engraftment and persistence

Tumor High T cell infiltration associated with clinical response

Data cut-off – 05-Oct-2021

[1] DLT: dose-limiting toxicity, since March 17, 2021 (reported DLT at DL2); [2] CRS: cytokine release syndrome, ICANS: Immune effector cell-associated neurotoxicity syndrome, both graded by CARTOX criteria (Neelapu *et al*., 2018);
[3] Objective response rate according to RECIST 1.1 including confirmed and unconfirmed partial responses; [*] Includes patients treated at enrichment cohorts EC1 and EC2

Comprehensive Strategy to Target PRAME

Focused and broad approach targeting PRAME:
Aiming to maximize clinical benefit through ACT programs and TCR Bispecifics

PRAME TCR-T (IMA203 Ph1a)

- Complete IMA203 Ph1a Dose Escalation with doses above 1 bn cells (DL4)
- Determine Recommended Phase 2 Dose (RP2D) in 1Q2022

PRAME TCR-T (IMA203 Ph1b)

- Initiate IMA203 Ph1b Dose Expansion in 1H2022
- Maximize therapeutic potential through multiple Ph1b cohorts
  - Monotherapy at RP2D
  - Checkpoint Inhibitor Combination
  - 2nd gen IMA203CD8

PRAME BISPECIFIC (IMA402)

- Focused development of half-life-extended Bispecific (TCER® IMA402) following promising preclinical data
- Complete GMP run in 2022 & advance IMA402 to phase 1 trial

IMA203 Phase 1a Interim Update

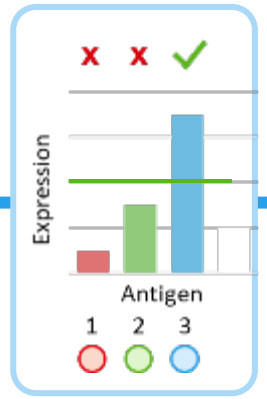
ACTengine® IMA203 – Patient Flow

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

Target Profiling
Fresh Tumor Biopsy;
IMADetect®



Leuka-pheresis

ACTengine® Manufacturing
by Immatics

Lymphodepletion
30 mg/m² Fludarabine[1] and
500 mg/m² Cyclophosphamide
for 4 days

Infusion of ACTengine® T cell Product

Low dose IL-2
1m IU daily days 1-5 and
twice daily days 6-10*

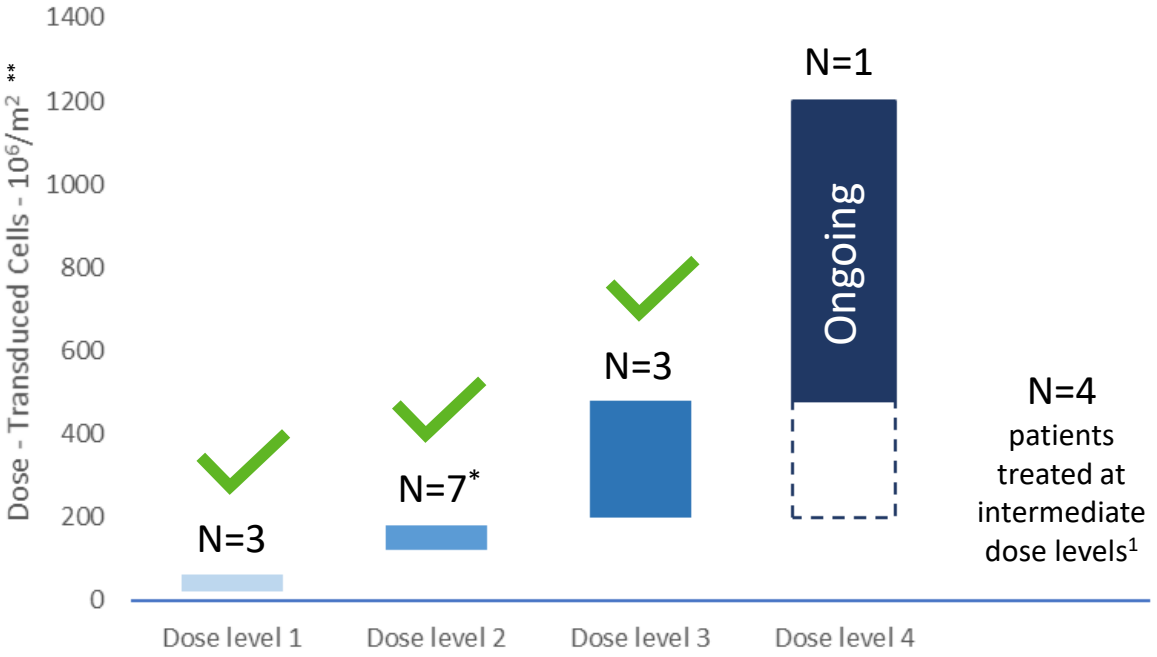
* IL-2 dose reduction from twice daily to daily for the first 5 days and dosing duration from 14 to 10 days introduced prior to treatment of first patients on dose level 3;
[1] Dose reduction of Fludarabine (from 40mg/m² to 30mg/m²) was introduced prior to treatment of the first patient on dose level 3

ACTengine® IMA203 – Key Objectives & Trial Design

Key Study Objectives

- **Primary: Safety**
  Investigation of Adverse Events,
  Determination of a recommended Phase 2 dose
- **Secondary: Biological and Clinical Activity**
  T cell engraftment and persistence
  Objective responses as per RECIST1.1
  Duration of response
- **Exploratory**
  Tumor Infiltration

Trial Design & Recruitment Status



18 patients[1] infused with PRAME-directed T cells at 5 clinical sites – Highest Dose Level 4 has commenced

Data cut-off – 05-Oct-2021

[1] Enrichment cohorts EC1 & EC2: patients infused with intermediate doses enabling infusion of patients with medical need during dose escalation observation periods, or in case of lower production yields;
* One patient infused at the same dose level as part of the enrichment cohort; **Dose is shown as transduced viable CD8 T cells per m^2 total body surface area

ACTengine® IMA203 – Patient Characteristics & Manufacturing

Heavily Pre-Treated Patients Across Multiple Solid Cancers Were Infused

Patient Distribution	Number
Patients in Safety Population[1]	19
Thereof patients infused	18
Patients in Efficacy Population[2]	**16**
Synovial Sarcoma	5
Head & Neck Cancer	3
Cutaneous Malignant Melanoma	3
Uveal Melanoma	2
Other (NSCLC, Ovarian, Squamous Cell Carcinoma)	3
Patients with evaluable paired tumor biopsies	10

Efficacy Population (N=16)	Median (range)
Age [years]	53 (18 – 65)
Prior lines of systemic therapies	4 (2-8)
Years from diagnosis	4 (1-25)
Transduced T cells infused [x10^9]	0.33 (0.08 - 0.81)

Manufacturing	
Manufacturing duration[3]	6-7d
Overall manufacturing success rate	92%

16 patients (all dosed below 1 bn transduced cells)
evaluable for clinical and biological activity assessment

For remaining 2 treated patients first tumor assessment pending as of data cut-off

Data cut-off – 05-Oct-2021

[1] Patients that started lymphodepletion, one patient died from sepsis of unknown origin and did not receive IMA203 T cells;
[2] Patients with at least one tumor assessment post treatment, 2 patients infused but pending first tumor assessment; [3] Plus currently 14d release testing, expected to be reduced to 7d in 2022

ACTengine® IMA203 – Safety Profile

Manageable & Transient Treatment-emergent Adverse Events – No ≥ Grade 3 CRS or ICANS

TEAEs by maximum severity (N=19)[1]

Adverse event	All grades No.	All grades %	≥ Grade 3 No.	≥ Grade 3 %
Patients with any adverse event	19	100.0	19	100.0
Adverse Events of Special interest				
Cytokine release syndrome	17	89.5	0	0.0
ICANS[2]	4	21.1	0	0.0
Blood and lymphatic system disorders				
Neutropenia*	16	84.2	15	78.9
Anaemia	16	84.2	9	47.4
Thrombocytopenia	15	78.9	7	36.8
Lymphopenia*	14	73.7	14	73.7
Leukopenia*	12	63.2	11	57.9
Cytopenia	1	5.3	1	5.3
Infections and infestations				
Enterococcal infection	1	5.3	1	5.3
COVID-19	1	5.3	1	5.3
Appendicitis	1	5.3	1	5.3
Sepsis[3]	1	5.3	1	5.3
Respiratory, thoracic and mediastinal disorders				
Hypoxia	2	10.5	1	5.3
Pleural effusion	2	10.5	1	5.3
Bronchial obstruction	1	5.3	1	5.3
Metabolism and nutrition disorders				
Hyponatraemia	7	36.8	1	5.3
Hypokalaemia	5	26.3	1	5.3
Decreased appetite	3	15.8	0	0.0

Adverse event	All grades No.	All grades %	≥ Grade 3 No.	≥ Grade 3 %
table continued…				
Cardiac or vascular disorders				
Hypertension	3	15.8	2	10.5
Atrial fibrillation	2	10.5	1[4]	5.3
General disorders and administration site conditions				
Fatigue	7	36.8	1	5.3
Pyrexia	5	26.3	0	0.0
Oedema peripheral	3	15.8	0	0.0
Gastrointestinal disorders				
Nausea	12	63.2	0	0.0
Vomiting	7	36.8	0	0.0
Diarrhoea	7	36.8	0	0.0
Constipation	6	31.6	0	0.0
Investigations				
Aspartate aminotransferase increased	5	26.3	0	0.0
Alanine aminotransferase increased	4	21.1	0	0.0
Blood creatinine increased	4	21.1	0	0.0
Other				
Rash	5	26.3	0	0.0
Myalgia	4	21.1	0	0.0
Arthralgia	3	15.8	0	0.0
Alopecia	3	15.8	0	0.0
Rash maculo-papular	2	10.5	1	5.3
Orchitis	1	5.3	1	5.3
Contrast media allergy	1	5.3	1	5.3

CRS/ICANS: No ≥ Grade 3 CRS or ICANS observed so far

Most Adverse Events were associated with lymphodepletion

DLT: Transient, Grade 3 atrial fibrillation Onset on day 5 post infusion that resolved within 48h DLT triggered expansion of DL2

[1] All treatment-emergent adverse events (TEAEs) with grade 1-2 occurring in at least 3 patients (incidence ≥15.8%) and additionally all events with grade 3-5 regardless of relatedness to study treatment are presented. Data source: clinical database. 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 (CTCAE), version 5.0. Grades for Cytokine release syndrome and ICANS were determined according to CARTOX criteria (Neelapu *et al.*, 2018). Patients are counted only once per adverse event and severity classification; [2] ICANS: Immune effector cell-associated neurotoxicity syndrome; [3] Patient died from sepsis of unknown origin and did not receive IMA203 T cells; [4] DLT: Dose limiting toxicity; *100% of patients experienced transient cytopenias ≥ Grade 3 (CTCAE v5.0)

Data cut-off – 05-Oct-2021

ACTengine® IMA203 – Best Overall Response Assessment (RECIST 1.1)

Multiple Objective Responses in Various Solid Cancer Indications During Dose Escalation

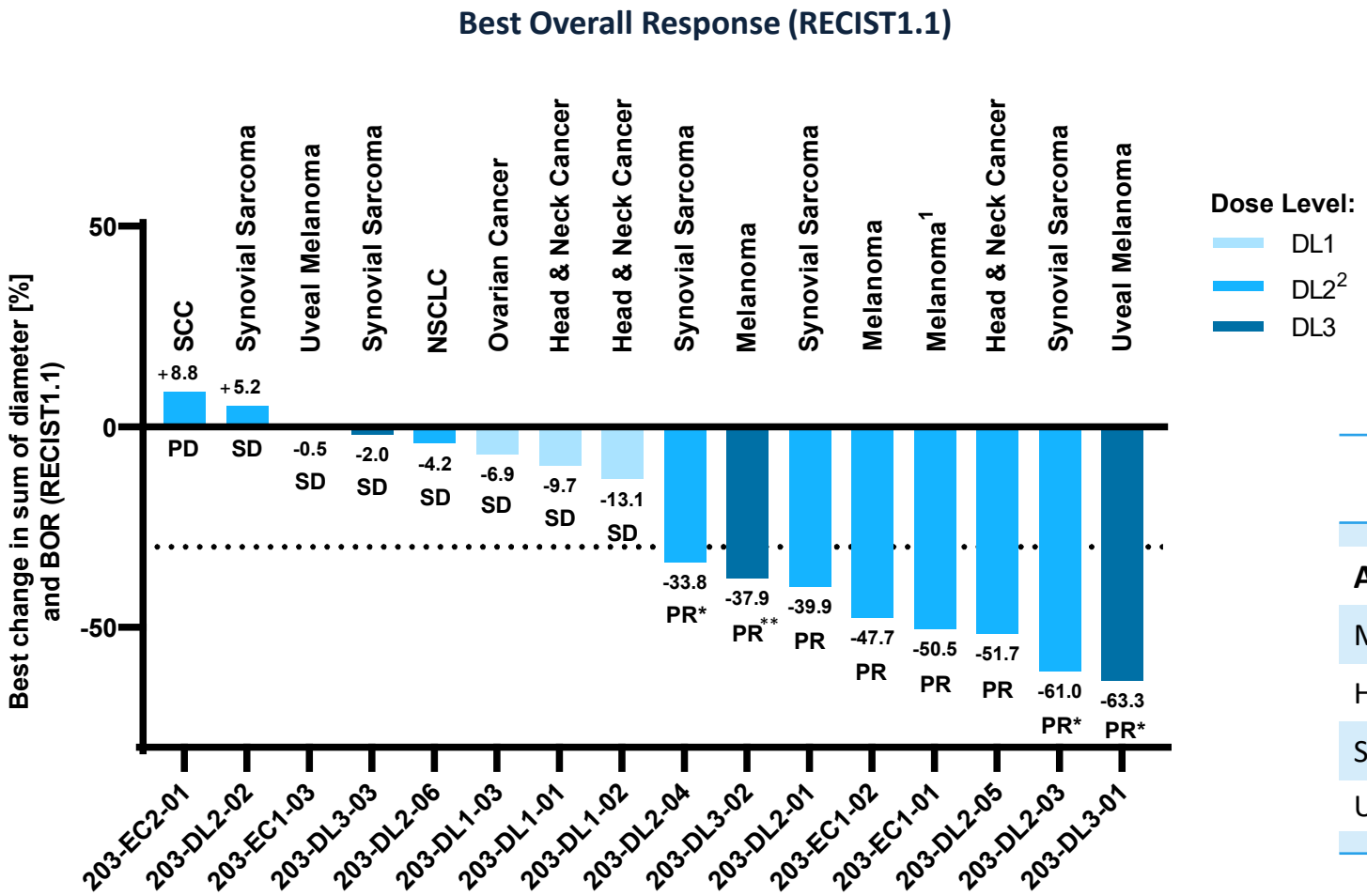
	203-DL1-01	203-DL1-02	203-DL1-03	203-EC1-01	203-EC1-02	203-EC1-03	203-DL2-01	203-DL2-02	203-DL2-03	203-DL2-04	203-DL2-05	203-DL2-06	203-EC2-01	203-DL3-01	203-DL3-02	203-DL3-03
Median total transduced cells (10^9)[1]	0.11			0.20			0.36						0.36	0.59		
Age (gender)	40 (F)	63 (M)	61 (F)	18 (F)	65 (M)	42 (M)	57 (M)	40 (M)	20 (M)	49 (M)	50 (F)	55 (F)	65 (M)	62 (F)	50 (M)	59 (F)
Diagnosis	Head and Neck Cancer		Ovarian Cancer	Malig. Melanoma		Uveal Melanoma	Synovial Sarcoma				Head & Neck Cancer	NSCLC	SCC	Uveal Melanoma	Malig. Melanoma	Synovial Sarcoma
Prior lines of systemic therapy	6	4	7	4	7	2	2	3	2	2	3	8	4	4	3	5
Prior lines of ICI[2] treatment	2	-	1	2	4	1	-	-	-	-	-	4	1	2	2	-
Disease status at infusion	Patients with recurrent and/or refractory solid tumors failing all prior lines of treatment															
Best response RECIST1.1	SD	SD	SD	PR	PR	SD	PR	SD	PR[3]	PR[3]	PR	SD	PD	PR[3]	PR[4]	SD
Objective Response Rate per Dose Level	0/3 Objective Responses (0% ORR)			6/10 Objective Responses (60% ORR)										2/3 Objective Responses (67% ORR)		

Data cut-off – 05-Oct-2021

DL: Dose level; EC1: Enrichment cohort with intermediate dose level between DL1 and DL2; EC2: Enrichment cohort with intermediate dose level between DL2 and DL3; SD: Stable disease; PR: Partial response.
[1] Total infused dose of transduced viable CD8 T cells; [2] Immune checkpoint inhibitor; [3] PR confirmed at subsequent scan; [4] Pending confirmation

ACTengine® IMA203 – Change in Target Lesions

Objective Responses across Multiple Tumor Types at Doses below 1 billion Transduced Cells



Preliminary Objective Response Rates (RECIST1.1., confirmed and unconfirmed)

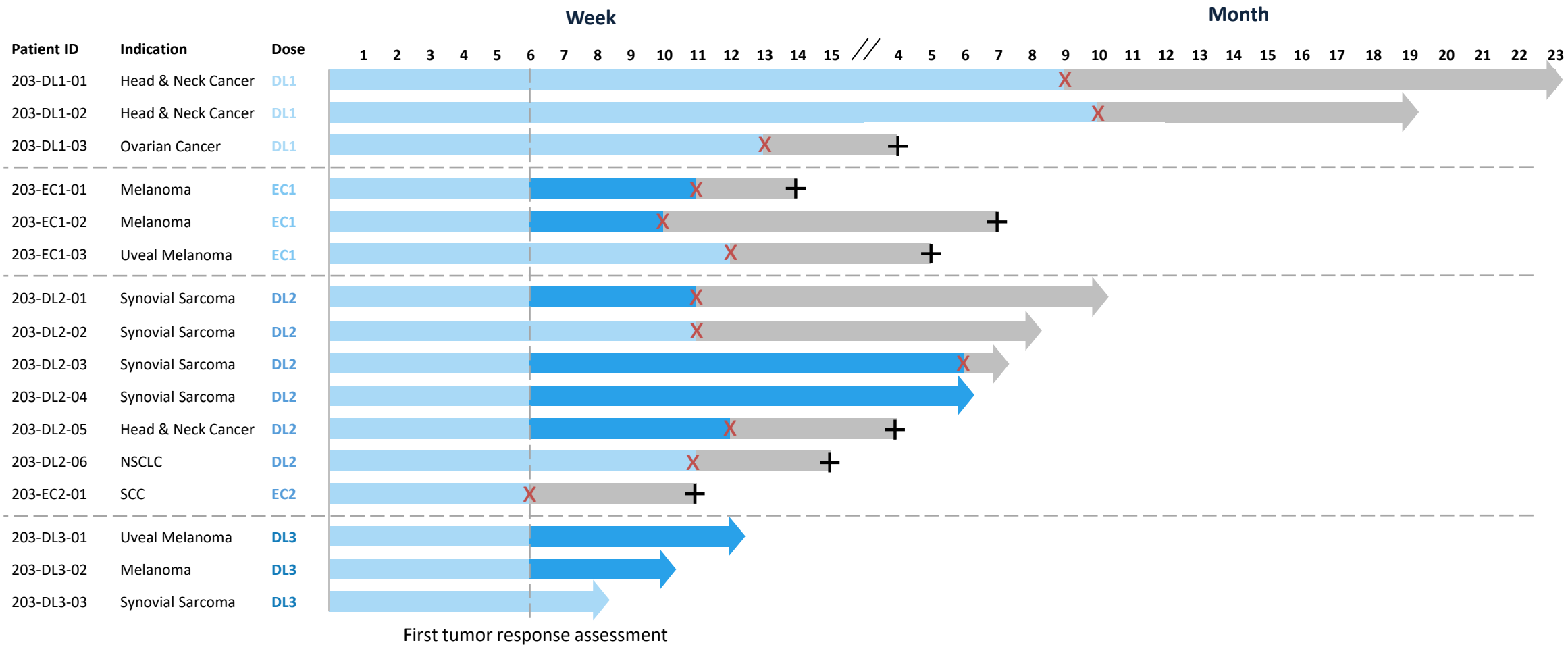
	All doses	Dosed above DL1
All comers	**8/16 (50%)**	**8/13 (62%)**
Melanoma	3/3 (100%)	3/3 (100%)
Head & Neck Cancer	1/3 (33%)	1/1 (100%)
Synovial Sarcoma	3/5 (60%)	3/5 (60%)
Uveal Melanoma	1/2 (50%)	1/2 (50%)

Data cut-off – 05-Oct-2021

[1] RECIST1.1 response at the timepoint of maximum change of target lesions (week 12): PD due to new lesions (leptomeningeal disease) at week 12
[2] Patients dosed with DL2, EC1 and EC2; * Confirmed at subsequent scan; ** Confirmation pending as of data cut-off

ACTengine® IMA203 – Response Over Time

Objective Responses across Multiple Tumor Types at Doses below 1 billion Transduced Cells



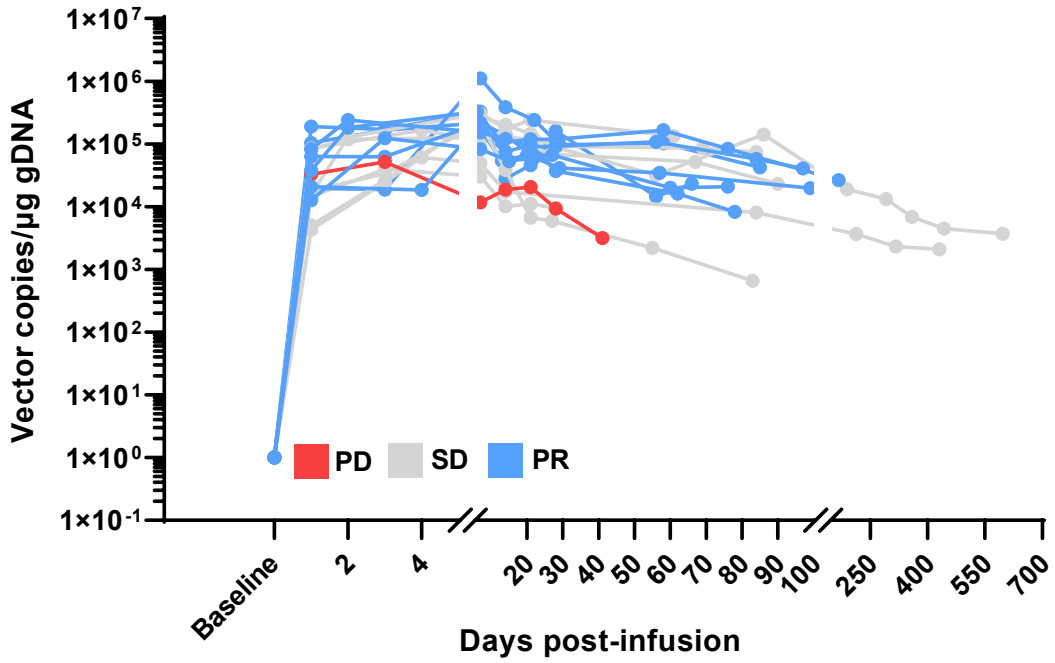
According to RECIST1.1

Data cut-off – 05-Oct-2021

ACTengine® IMA203 – Engraftment, Persistence & Tumor Infiltration

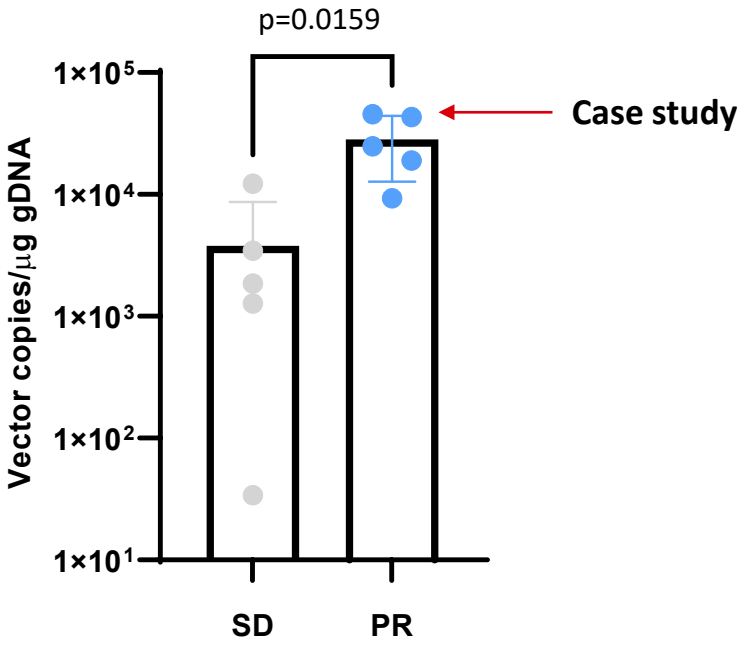
Clinical Responses Consistent with Biological Data

T cell Engraftment & Persistence



High T cell engraftment and persistence with trend for association of peak vector copies with clinical response[1]

Tumor Infiltration post Infusion[2]



High T cell infiltration observed through serial biopsies associated with clinical response[3]

Data cut-off – 05-Oct-2021

[1] Mann-Whitney U test, p=0.065; [2] Post infusion biopsies at week 6 (except one patient with SD at week 3); [3] Mann-Whitney U test, p=0.0159

ACTengine® IMA203 – Case Study Patient IMA203-DL3-01

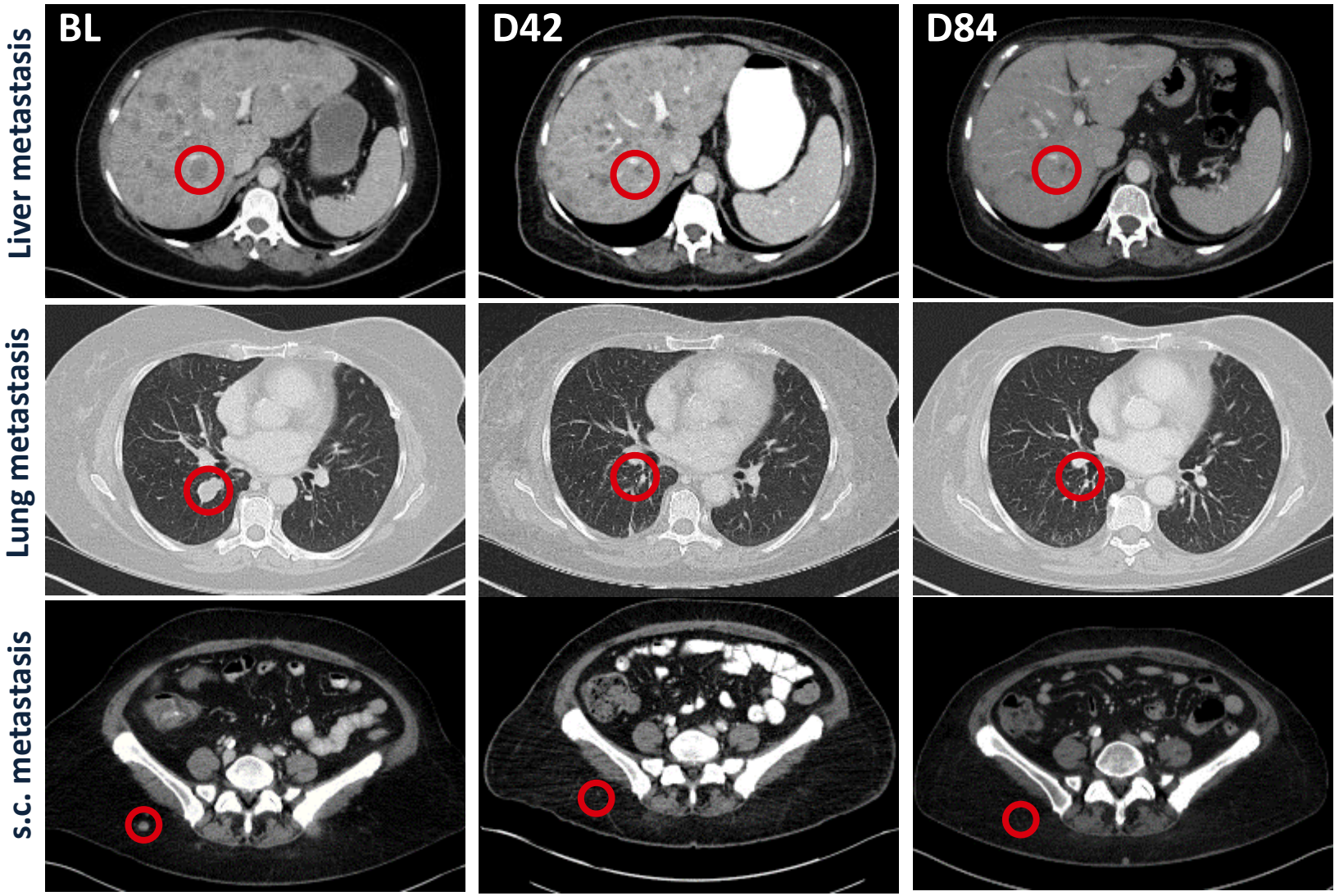
Confirmed Partial Response with Deepening Tumor Regression in Multiple Lesions

62-year-old female patient

Metastatic uveal melanoma with high tumor burden in multiple organs

Infused at refractory disease after failing 4 prior lines of therapy incl. 2 lines of checkpoint inhibitors

Received **total dose of 0.59 bn** (0.36 bn/m^2) transduced cells directed against PRAME target peptide/HLA



Tumor Response

Best response (RECIST1.1):
PR (confirmed; ongoing as of data cut-off)

Target Lesions decreased at week 6 post treatment to -40%, response deepened at week 12 to -63%

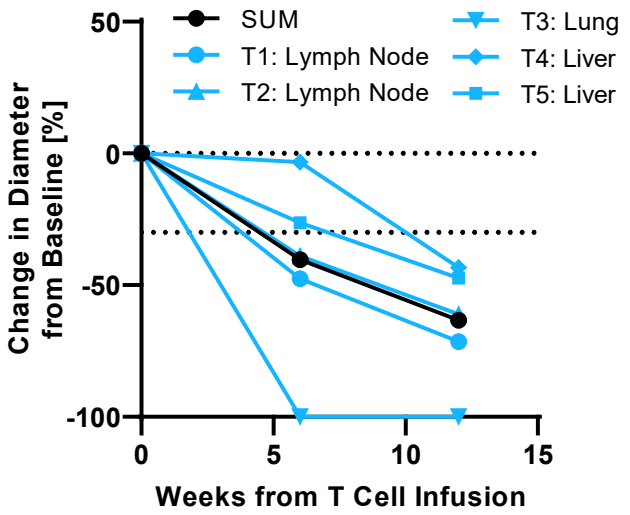
Data cut-off – 05-Oct-2021

CT scans courtesy of Dr. Wermke

ACTengine® IMA203 – Case Study Patient IMA203-DL3-01

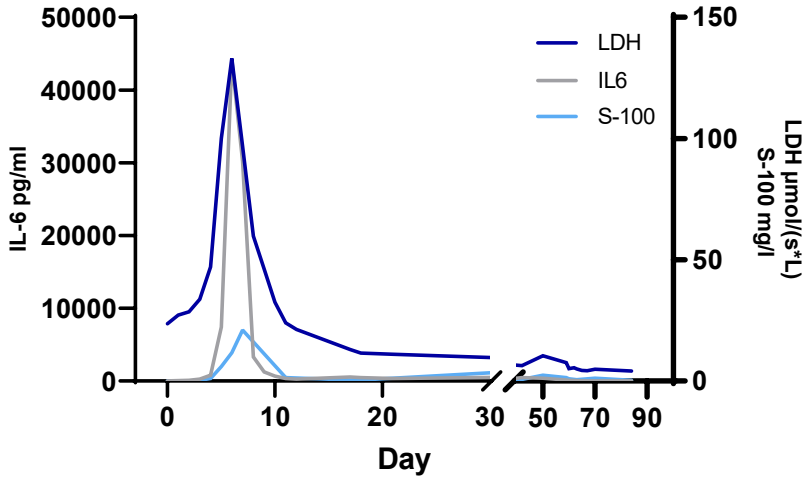
Partial Response Consistent with Biological Data

Change in Size of Target Lesions



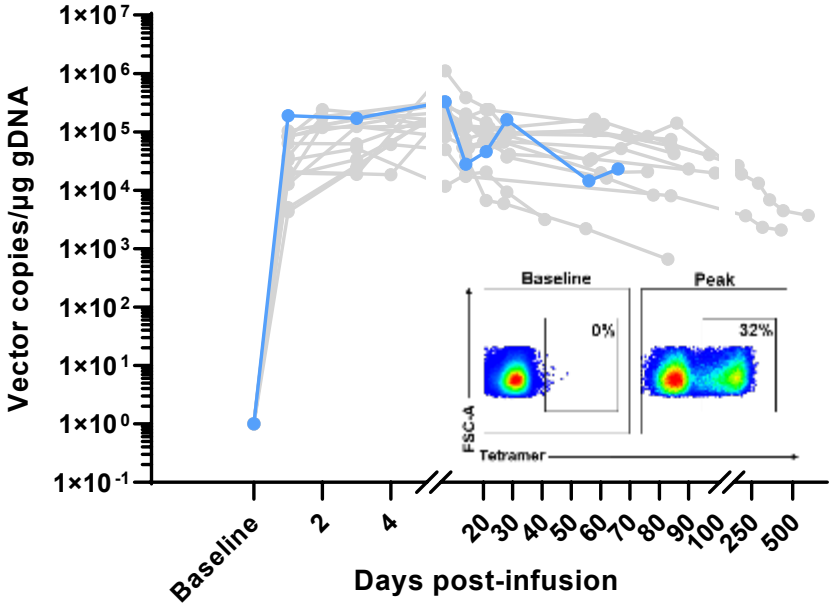
- Target Lesions decreased at week 6 post treatment to -40%
- Response deepened at week 12 to -63% (RECIST1.1)

Serum Biomarkers in Blood[1]



- Initial LDH level reflecting high tumor burden prior to infusion
- Steep increase in IL-6, LDH and increase in S-100 indicative of tumor cell killing

T cell Engraftment, Persistence & Tumor Infiltration



- High T cell engraftment and persistence until end of observation.
- At peak 32% of CD8 T cells express IMA203 TCR
- High T cell infiltration into tumor at week 6 post treatment (data on slide 16)

Data cut-off – 05-Oct-2021

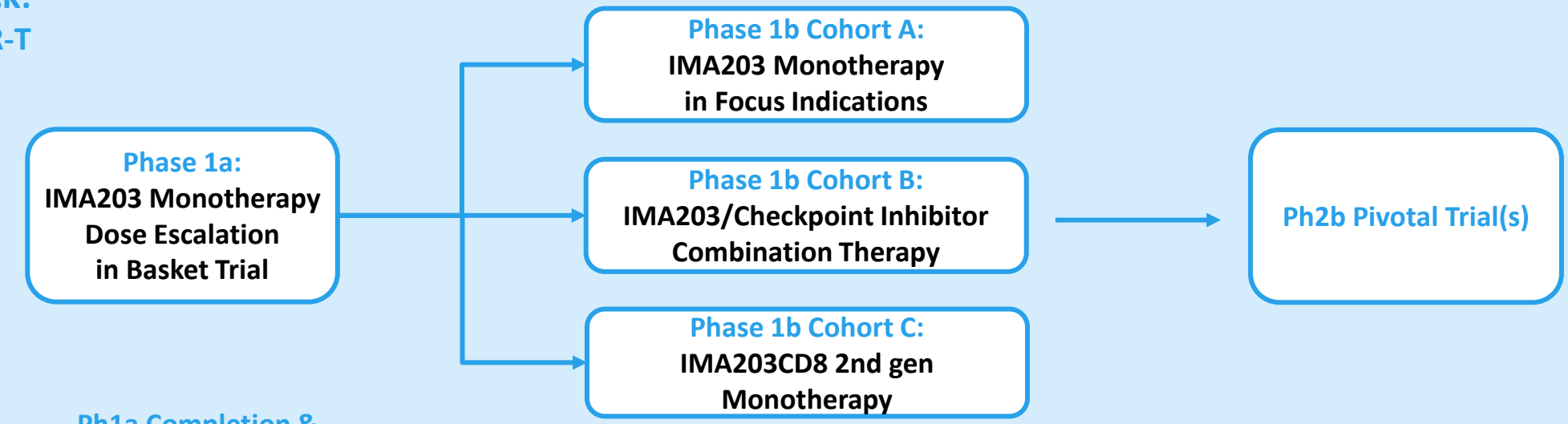
[1] Serum biomarker data courtesy of Dr. Wermke

Comprehensive Strategy to Target PRAME

Comprehensive Strategy to Target PRAME

Maximizing PRAME Mediated Clinical Benefit Through ACT and TCR Bispecifics

TCR-T Track:
PRAME TCR-T



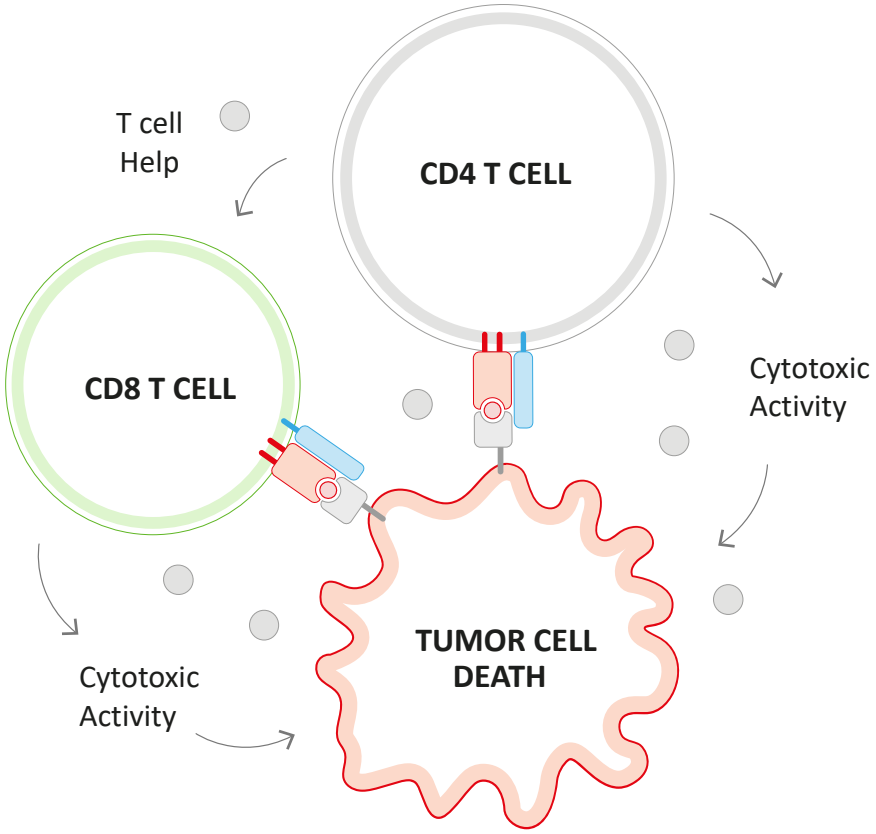
Ph1a Completion &
Determination RP2D early 2022

Ph1b Expansion starting 2022

Bispecifics Track:
PRAME TCR Bispecific

ACTengine® IMA203CD8 – Second-generation TCR-T

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



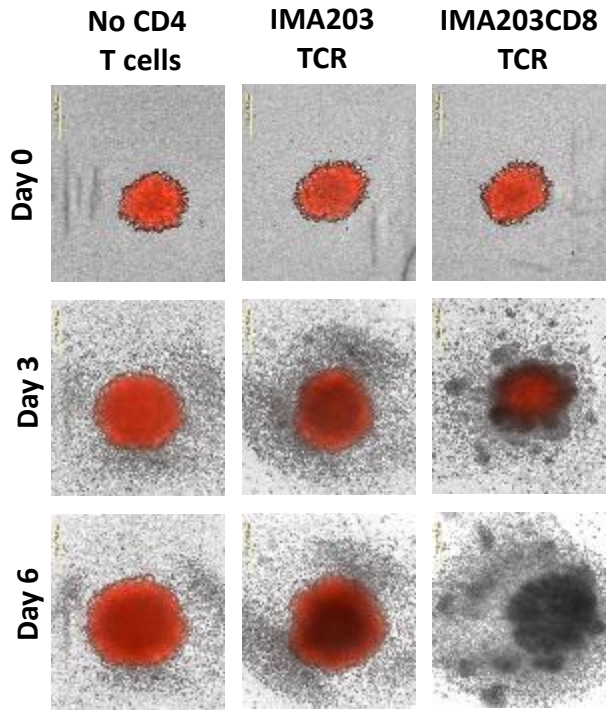
- Engagement of CD4 T cells by CD8 co-transduction reported to boost anti-tumor activity in TCR-T trials
- Functional superiority of a **CD8αβ IMA203** construct (IMA203CD8) over multiple other CD8 constructs in preclinical experiments
  - Poster presentation at SITC, Nov 12, 2021

- **Secured access to CD8αβ technology through exclusive license from Baylor College of Medicine**
- **IND filing for IMA203CD8 lead candidate targeted in 1H2022**

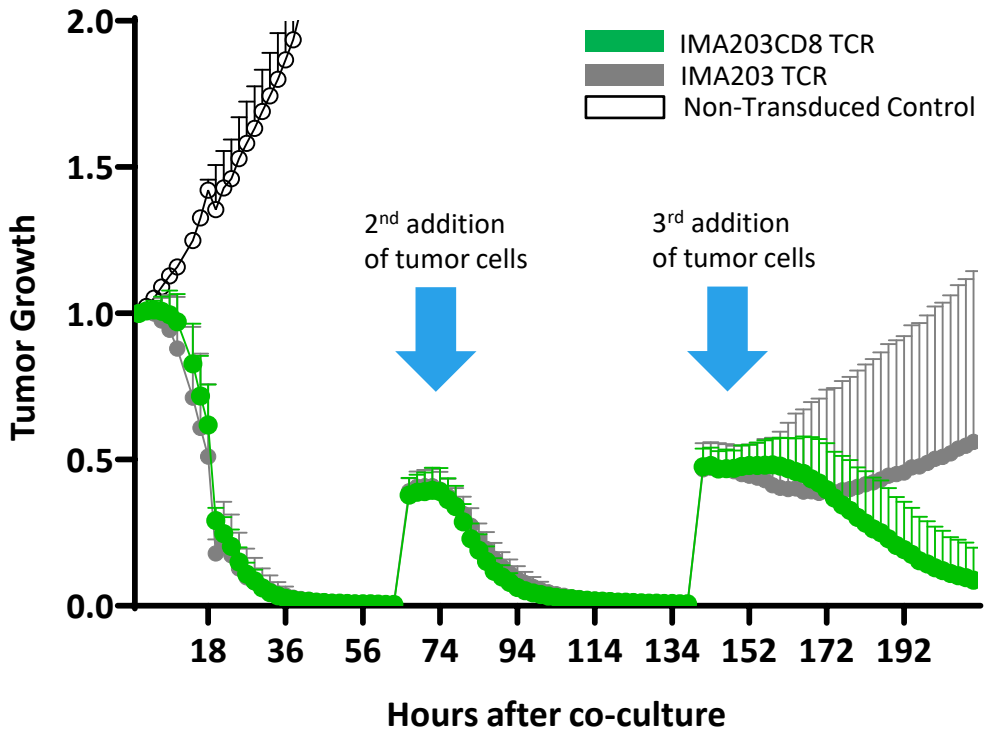
ACTengine® IMA203CD8 – Preclinical Assessment of Anti-Tumor Efficacy

Co-Transduction of CD8αβ Enhances Anti-Tumor Activity *in Vitro*

3D Spheroid Killing – CD4 T cells



Serial Killing Assay – CD8 & CD4 T cells



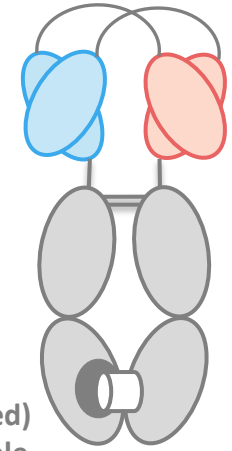
Engagement of CD4 T cells may enhance depth and durability of anti-tumor response and clinical outcome of TCR-T in solid cancer patients

TCER® IMA402 – A Novel Half-Life Extended Bispecific for PRAME

Optimized Design of TCR and T cell Recruiter for Maximizing Efficacy while Minimizing Toxicities

T cell recruiting antibody

- ✓ **Low-affinity** T cell recruiter against both **TCR & CD3**
- ✓ **Optimized biodistribution** aiming for enrichment at tumor site and **prevention of CRS**[1]
- ✓ **Superior anti-tumor activity** in mouse models as compared to widely used CD3 recruiters



Fc domain (silenced) with knob-into-hole technology

pHLA targeting TCR

- ✓ **High-affinity TCR** with broad therapeutic window through **XPRESIDENT®-guided** affinity maturation (>1000x)[2]
- ✓ Targets HLA-A*02-restricted PRAME peptide with **unusually high target density**[3]
- ✓ **Complete tumor eradication** in mouse xenograft models at low doses

Next-generation TCER® format

- ✓ Off-the-shelf biologic with antibody-like manufacturability[4] and low cost of goods
- ✓ Superior anti-tumor activity[5] compared to six alternative bispecific formats
- ✓ Half-life of several days expected in humans

[1] Based on literature data for other low-affinity recruiters (e.g. Harber *et al.*, 2021, Nature); [2] As compared to natural TCR; [3] Compared to other HLA-restricted epitopes; [4] Production in mammalian cells (CHO cells); [5] Based on preclinical testing

ACTengine® IMA200 TCR-T Programs Update

ACTengine® Programs – Key Features

	IMA201	IMA202	IMA203	IMA204
Cancer Target Peptide	HLA-A*02-presented peptide derived from			
	MAGEA4/8	**MAGEA1**	**PRAME**	**COL6A3 exon 6**
	shown to be naturally and specifically presented on native tumor tissues at differentiated high peptide target density[1]			
	100-1,000 copies/cell	50-900 copies/cell	100-1,000 copies/cell	100-700 copies/cell
T cell Receptor (TCR)	High-affinity specific TCRs with high functional avidity[2]			
	Natural TCR ~10 ng/ml	Natural TCR ~15 ng/ml	Pairing-enhanced TCR ~5 ng/ml	Affinity-maturated, CD8-independent TCR ~0.01ng/ml
T cell Product	Autologous T cells gene-engineered with lentiviral vector expressing TCR and applying proprietary short-term manufacturing process designed to achieve better T cell engraftment and persistence			
	7-10 days	7-10 days	7 days	7 days

[1] Applying XPRESIDENT® quantitative mass spectrometry platform; target density: peptide copy number per tumor cell, approximate range representing the majority of tumor samples analyzed;
[2] Applying XCEPTOR® TCR discovery and engineering platform incl. XPRESIDENT®-guided off-target toxicity and similar peptide screening to minimize off-target reactivity; functional avidity: EC50 half maximal effective concentration

ACTengine® Programs – Status Update

	IMA201	IMA202	IMA203	IMA204
	MAGEA4/8	**MAGEA1**	**PRAME**	**COL6A3 exon 6**
Status	Dose escalation ongoing	Enrollment at target dose level (DL3) ongoing	Enrollment at target dose level (DL4) ongoing	IND-enabling studies close to completion
Recruitment	DL2 commenced N=2 pts treated	DL3 commenced N=10 pts treated	DL4 commenced N=18 pts treated	NA
Safety	Too early	Manageable safety profile; no DLTs or CRS/ICANS ≥ grade 3	Manageable safety profile; no additional DLTs[1] & no CRS/ICANS ≥ grade 3	NA
Clinical Activity	Too early	Disease control in 7/10 patients (9 pts in DL1 & 2), no objective responses	Objective responses in 8/16 patients, thereof 8/13 responses above DL1	NA
Next milestone	**Complete Ph1a dose escalation including target dose (DL3)**		**Complete Ph1a dose escalation incl. target dose (DL4). Initiate expansion cohorts incl. monotherapy, checkpoint inhibitor combination & IMA203CD8 2nd gen**	**IND in 2022 due to acceleration of PRAME expansion cohorts**

[1] One DLT in DL2 previously reported in March 2021, fully resolved

ACTengine® Programs – Target Prevalence

	IMA201	IMA202	IMA203	IMA204
	MAGEA4/8	**MAGEA1**	**PRAME**	**COL6A3 exon 6**
Selected solid cancer indications with significant target prevalence[1]	Sarcoma Subtypes – up to 80% Squamous NSCLC – 50% HNSCC – 35% Bladder Carcinoma – 30% Esophageal Carcinoma – 25% Uterine Carcinosarcoma – 25% Ovarian Carcinoma – 20% Melanoma – 20%	HCC– 40% Squamous NSCLC – 35% Sarcoma Subtypes – up to 30% Melanoma – 30% Bladder Carcinoma – 20% Esophageal Carcinoma – 20%	Uterine Carcinoma – 100% Sarcoma Subtypes – up to 100% Melanoma – 95% Uveal Melanoma – 80%[2] Ovarian Carcinoma – 80% Squamous NSCLC – 65% Kidney Carcinoma – up to 45% Cholangiocarcinoma – 35% Adeno NSCLC – 25% Breast Carcinoma– 25% HNSCC – 25% Esophageal Carcinoma – 20% HCC– 20% Bladder Carcinoma – 20%	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%

IMA200 targets show relevant expression in multiple solid cancers

[1] Solid cancer indications with 20% or more target expression, Target prevalence for selected cancer indications based on mRNA expression (TCGA and Immatics inhouse data);
[2] Based on metastatic uveal melanoma patients screened in IMA203 study (N=12)

ACTengine® IMA201 & IMA202 – Patient Characteristics

Heavily Pre-Treated Patients Were Infused during Dose Escalation

Patient Distribution	Number
Patients in Safety Population[1]	**12**
Patients in Efficacy Population[2]	**12**
Thereof IMA201 infused	2
Thereof at target dose	0
Thereof IMA202 infused	10
Thereof at target dose	1

Characteristics in Efficacy Population	Median (range)
Age [years]	60 (27 – 68)
Prior lines of systemic therapies	5 (3-7)
Years from diagnosis	4 (1-8)
Transduced T cells infused [x10^9]	0.46 (0.09 - 1.90)

IMA201 study currently enrolls patients at dose level 2 (0.3 x $10^9/m^2$)

IMA202 study is infusing patients at target dose (1 x $10^9/m^2$)

Data cut-off – 17-Sep-2021

[1] Patients that started lymphodepletion; [2] Patients with at least one tumor assessment post treatment

ACTengine® IMA201 & IMA202 – Safety Profile

Treatment-emergent Adverse Events Are Manageable, Transient and Expected for Cell Therapies

CRS/ICANS: No ≥ Grade 3 CRS or ICANS observed so far

Most Adverse Events were associated with lymphodepletion

TEAEs by maximum severity (N=12)[1]

Adverse event	All grades No.	All grades %	≥ Grade 3 No.	≥ Grade 3 %
Patients with any adverse event	12	100.0	12	100.0
Adverse Events of Special interest				
Cytokine release syndrome	11	91.7	0	0.0
ICANS[2]	1	8.3	0	0.0
Blood and lymphatic system disorders				
Lymphopenia*	10	83.3	10	83.3
Neutropenia**	10	83.3	10	83.3
Anaemia	8	66.7	6	50.0
Thrombocytopenia	8	66.7	6	50.0
Leukopenia*	6	50.0	5	41.7
Febrile Neutropenia	1	8.3	1	8.3
Infections and infestations				
Candida infection	1	8.3	1	8.3
Infection	1	8.3	1	8.3
Pneumonia[3]	1	8.3	1	8.3
Urinary tract infection	1	8.3	1	8.3
Respiratory, thoracic and mediastinal disorders				
Hypoxia	2	16.7	0	0.0
Dyspnoea[3]	1	8.3	1	8.3
Metabolism and nutrition disorders				
Hypocalcaemia	3	25.0	0	0.0
Decreased appetite	2	16.7	1	8.3

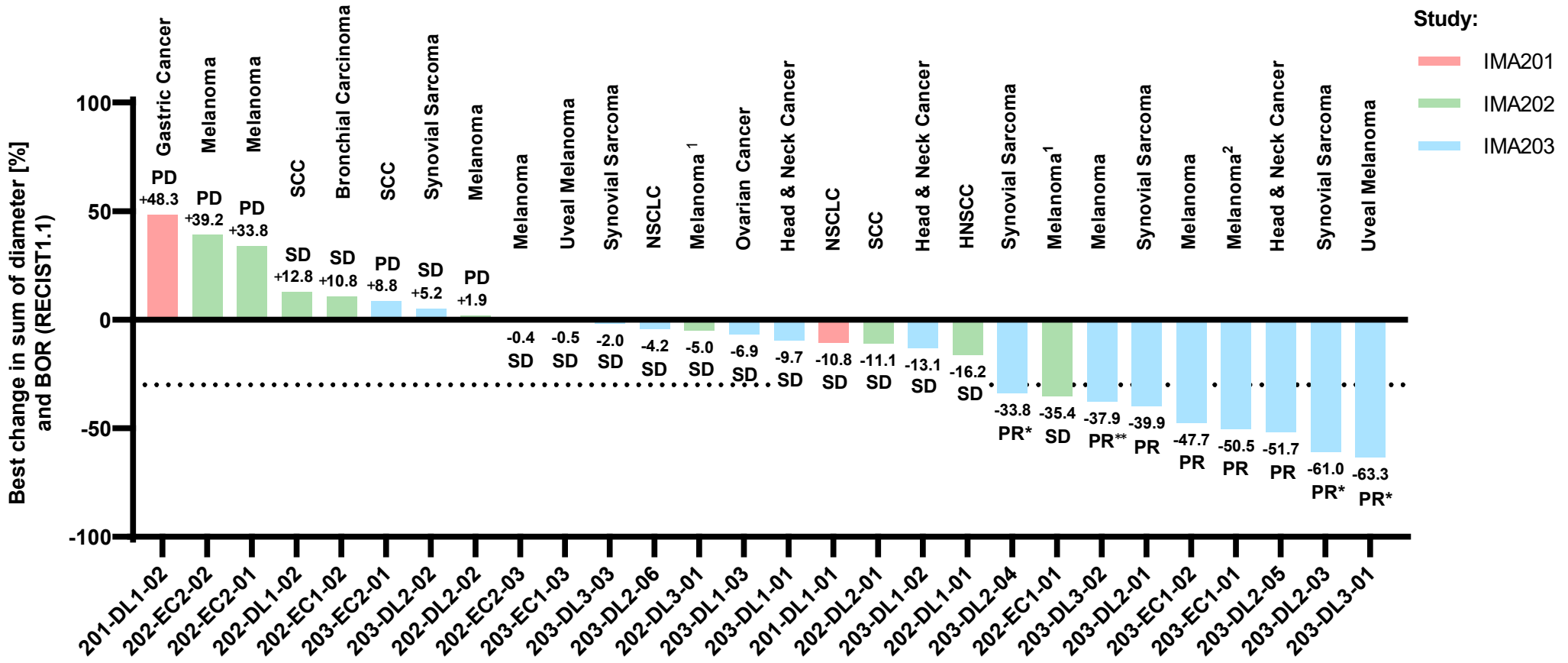
Adverse event	All grades No.	All grades %	≥ Grade 3 No.	≥ Grade 3 %
table continued…				
Cardiac or vascular disorders				
Hypotension	4	33.3	0	0.0
Hypertension	1	8.3	1	8.3
General disorders and administration site conditions				
Pyrexia	6	50.0	0	0.0
Chills	4	33.3	0	0.0
Fatigue	3	25.0	1	8.3
Oedema peripheral	2	16.7	0	0.0
Gastrointestinal disorders				
Nausea	5	41.7	0	0.0
Vomiting	2	16.7	0	0.0
Constipation	2	16.7	0	0.0
Diarrhoea	2	16.7	0	0.0
Investigations				
Alanine aminotransferase increased	2	16.7	0	0.0
International normalised ratio increased	2	16.7	0	0.0
Aspartate aminotransferase increased	2	16.7	0	0.0
Blood alkaline phosphatase increased	1	8.3	1	8.3
Other				
Rash	3	25	0	0.0
Insomnia	2	16.7	0	0.0
Muscular weakness	1	8.3	1	8.3
Tumour pain	1	8.3	1	8.3

[1] All treatment-emergent adverse events (TEAEs) with grade 1-2 occurring in at least 2 patients (incidence ≥16.7%) and additionally all events with grade 3-5 regardless of relatedness to study treatment are presented. Data source: clinical database. 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 (CTCAE), version 5.0. Grades for Cytokine release syndrome and ICANS were determined according to CARTOX criteria (Neelapu *et al.*, 2018). Patients are counted only once per adverse event and severity classification.; [2] ICANS: Immune effector cell-associated neurotoxicity syndrome; [3] Patient died from tumor progression and pneumonia 69 days after IMA202 T cell infusion (determined not related to any study medication); *100% of patients experienced transient lymphopenia and leukopenia ≥ Grade 3 (CTCAE v5.0); **91.7% of patients experienced transient neutropenia ≥ Grade 3 (CTCAE v5.0)

Data cut-off – 17-Sep-2021

ACTengine® IMA201, IMA202, IMA203 – Change in Target Lesions

Disease Control in 23 of 28 Patients Across 3 TCR-T Trials and Multiple Solid Cancers

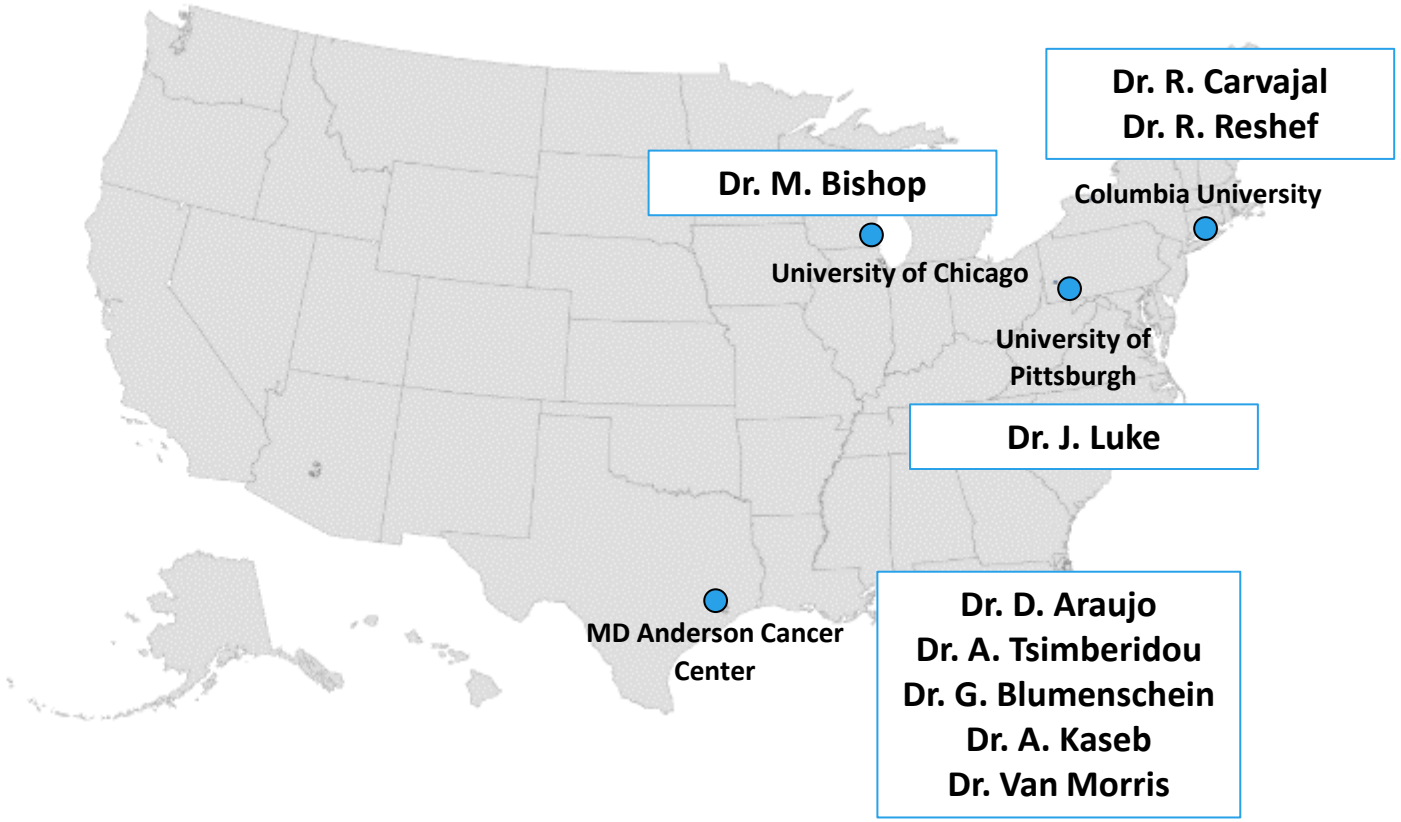


IMA201 & IMA202: Data cut-off – 17-Sep-2021 and IMA203: Data cut-off – 5 Oct-2021

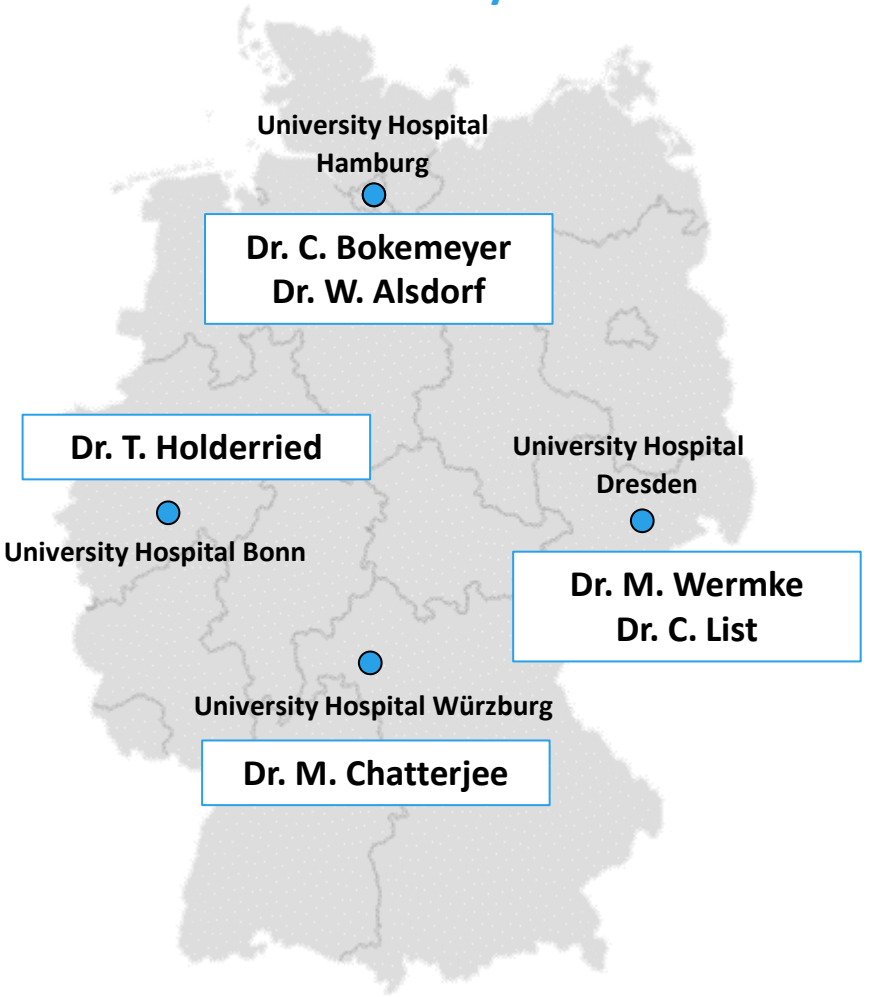
[1] RECIST1.1 response at the timepoint of maximum change of target lesions (week 12): PD due to growth of non-target lesion; [2] RECIST1.1 response at the timepoint of maximum change of target lesions (week 12): PD due to new lesions (leptomeningeal disease) at week 12; * Confirmed at subsequent scan; **Confirmation pending as of data cut-off

We are Immensely Grateful to the Patients, Their Families …

United States



Germany



… and the Investigators at the Clinical Sites

Summary

Unlocking Immunotherapies for Solid Cancer Patients

IMA201, IMA202, IMA203

Interim Data from ongoing Dose Escalation

82% Disease Control Rate

0 Grade ≥3 CRS or ICANS[1]

<1bn T cells infused in almost all patients

IMA203 - PRAME

Objective responses observed across multiple tumor types

50% ORR[2] across all doses and multiple solid cancers (8/16 patients)

62% ORR[2] at DL2[*]& DL3 (8/13 patients) – all still dosed below 1 bn cells

PRAME STRATEGY

Maximizing the therapeutic potential of targeting PRAME

TCR-T Multiple Ph1b cohorts

- Monotherapy at RP2D
- Checkpoint Inhibitor Combo
- 2nd gen IMA203CD8

TCER® Focused development of half-life-extended Bispecific (TCER® IMA402)

[1] CRS: cytokine release syndrome, ICANS: Immune effector cell-associated neurotoxicity syndrome, both graded by CARTOX criteria (Neelapu *et al*., 2018);
[2] Objective response rate according to RECIST 1.1 including confirmed and unconfirmed partial responses; [*] Includes patients treated at enrichment cohorts EC1 and EC2

Updated Immatics Pipeline

Modality	Product Candidate	Status	Preclinical	Phase 1a[1]	Phase 1b[1]	Phase 2/3	Next Milestone
ACTengine® Autologous ACT	IMA201 (MAGEA4/8)	Proprietary					Complete dose escalation 2022
	IMA202 (MAGEA1)	Proprietary					Complete dose escalation 1Q2022
	IMA203 (PRAME)	Proprietary					Complete dose escalation 1Q2022
	IMA203 (PRAME) + Checkpoint Inhibitor	Proprietary					Start Ph1 in 2022
	IMA203CD8 (PRAME)	Proprietary					IND 1H2022
	IMA204 (COL6A3)	Proprietary					IND 2022
Autologous ACT	3 ACT programs (Undisclosed)	Bristol Myers Squibb					
	2 ACT programs (Undisclosed)	gsk					
Allogeneic ACT	ACTallo® IMA30x (Undisclosed)	Proprietary					
TCER® Bispecifics	IMA401 (MAGEA4/8)	Proprietary					IND YE2021; Start Ph1 1H2022
	IMA402 (PRAME)	Proprietary					GMP run 2H2022, Start Ph1 2023
	IMA40x (Undisclosed)	Proprietary					
Bispecifics	3 Bispecific programs (Undisclosed)	Genmab					

[1] Phase 1a: Dose escalation, Phase 1b: Dose expansion

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