2026 ASCO® ANNUAL MEETING

Phase 1 Trial Results with PRAME-targeted T-cell Receptor (TCR) T-cell Therapies in Synovial Sarcoma

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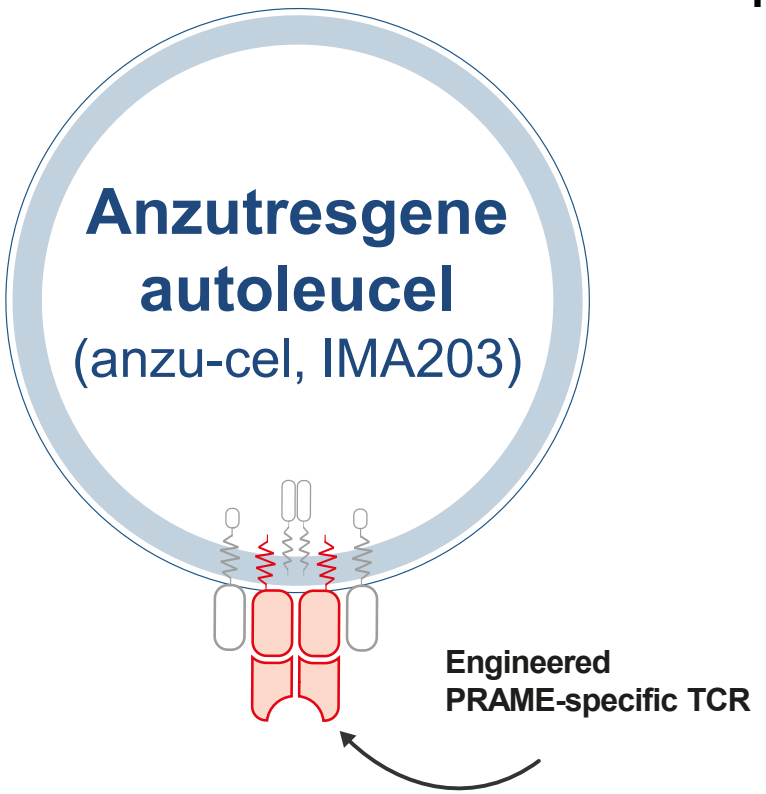
Key Takeaways

- TCR-based therapies enable immune recognition of intracellular tumor antigens presented by cell-surface HLA, expanding the therapeutic landscape beyond targets accessible to conventional immunotherapies
- Anzutresgene autoleucel (anzu-cel, IMA203) and IMA203CD8 are distinct investigational one-time autologous TCR T-cell therapies targeting the cancer-associated antigen PRAME, a novel target for synovial sarcoma
- PRAME-targeted TCR T-cell therapies demonstrate an expected and manageable tolerability profile and durable antitumor activity in patients with metastatic synovial sarcoma
- The potentially transformative clinical activity of PRAME-targeted TCR T-cell therapy in metastatic synovial sarcoma supports further development

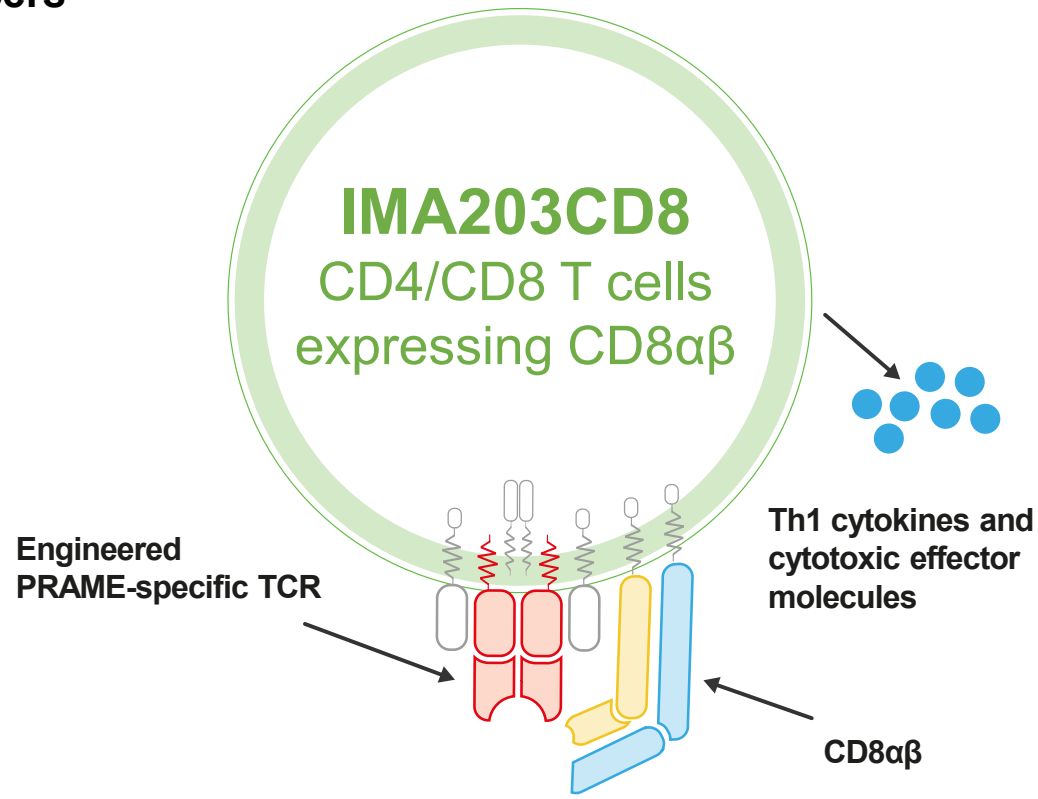
HLA, human leukocyte antigen; PRAME, preferentially expressed antigen in melanoma; TCR, T-cell receptor

Two Distinct Systemic TCR T-cell Therapies Designed to Target the Intracellular Tumor Antigen PRAME



PRAME is expressed in >50 cancers

Indication	% PRAME+ patients[a]
Cutaneous Melanoma	95%
Synovial Sarcoma	**95%**
Uterine Carcinoma	95%
Uterine Carcinosarcoma	95%
Mucosal Melanoma	90%
Uveal Melanoma	90%
Ovarian Carcinoma Subtypes	85%
Squamous Cell NSCLC	70%
Triple-negative Breast Carcinoma	65%
Esophageal Carcinoma Subtype	45%
Small Cell Lung Cancer	45%
Kidney Carcinoma Subtype	40%
Cholangiocarcinoma	35%
HER2-Enriched Breast Carcinoma	30%
Adenocarcinoma NSCLC	25%
Head & Neck Squamous Cell Carcinoma	25%
Bladder Carcinoma	20%
Hepatocellular Carcinoma	20%



Anzutresgene autoleucel and IMA203CD8 are distinct investigational therapies, and their use has not been proven to be safe or effective. These investigational therapies have not been approved by the United States FDA or any other regulatory agency outside of the US. [a] Data on file: PRAME target prevalence is based on a proprietary mass spec-guided expression threshold applied to RNAseq data (approximate values; values between 95-100% shown as 95%).
NSCLC, non-small cell lung cancer; PRAME, preferentially expressed antigen in melanoma; TCR, T-cell receptor.

Phase 1 Multicenter Trial of Anzu-cel or IMA203CD8 in PRAME+ Solid Tumors

Key Objectives

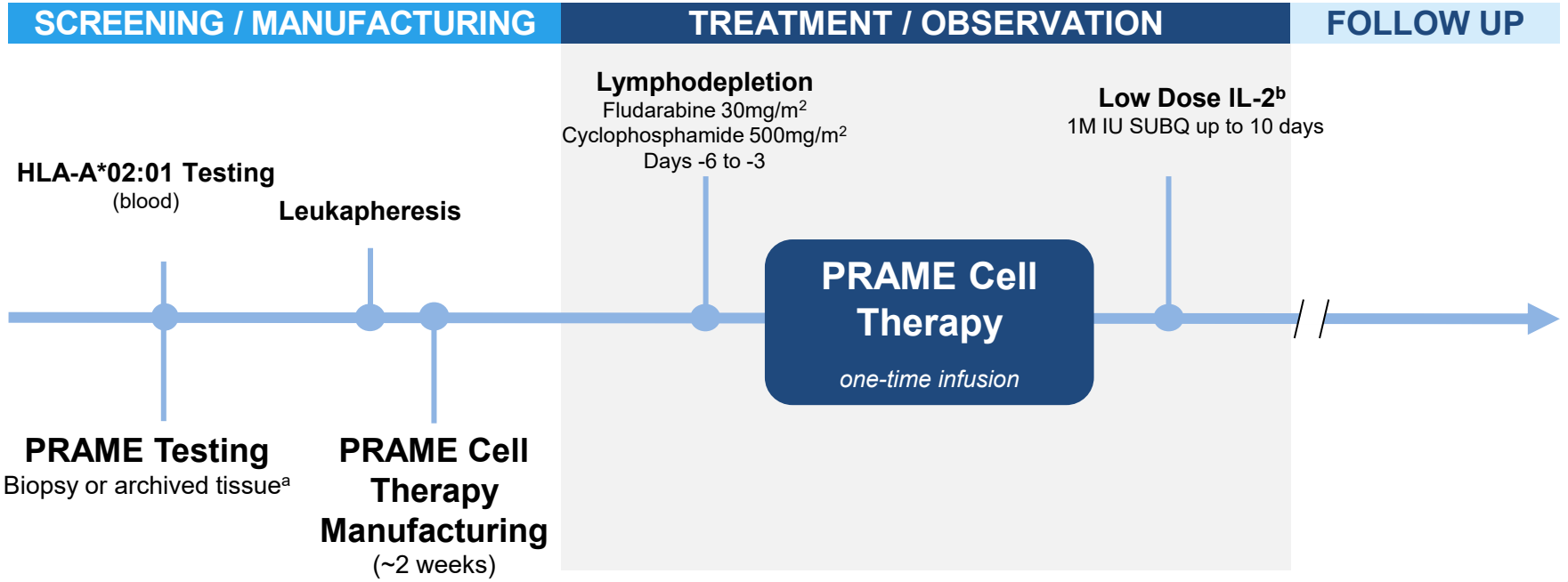
Primary:
- Tolerability
- Determination of RP2D

Secondary:
- Efficacy
- Pharmacokinetics

Key Eligibility Criteria

- Advanced or metastatic solid tumors
- Age ≥ 18 years
- ECOG PS 0-1
- HLA-A*02:01 positive
- PRAME positive
- No available SOC treatment options
- Measurable disease (RECIST 1.1)
- Adequate organ function

Patient Journey



Patients enrolled to PRAME cell therapy:
- Anzu-cel (IMA203): n=9
- IMA203CD8: n=12

IMA203-101: NCT03686124; [a] PRAME testing no longer required for indications with high PRAME prevalence, including synovial sarcoma; [b] outpatient IL-2 administration at investigator's discretion. ECOG PS, Eastern Cooperative Oncology Group Performance Status; IL, interleukin; IU, international unit; HLA, human leukocyte antigen; PRAME, preferentially expressed in melanoma; RECIST, Response Evaluation Criteria in Solid Tumors; SOC, Standard of Care; SUBQ, subcutaneous

All Patients Had Metastatic Synovial Sarcoma

Baseline Characteristics

	Anzu-cel (IMA203)	IMA203CD8
	n=9	n=12
Age, median (range)	49 (20, 63)	46 (20, 66)
Female, n (%)	3 (33)	4 (33)
ECOG PS 1, n (%)	2 (22)	2 (17)
LDH ≥1 x ULN, n (%)	5 (56)	4 (33)
Tumor burden Target lesion SLD [cm], median (range)	10.9 (3.8, 14.8)	8.1 (1.2, 41.1)
Target lesions, n, median (range)	2 (2, 4)	2 (1, 5)
Lung metastasis, n (%)	5 (56)	11 (92)
Bone metastasis, n (%)	1 (11)	2 (17)

Treatment Experience

	Anzu-cel (IMA203)	IMA203CD8
	n=9	n=12
Prior treatment, n (%)		
Radiation	7 (78)	9 (75)
Chemotherapy, n (%)	9 (100)	12 (100)
Targeted therapies, n (%)	5 (56)	5 (42)
Pazopanib	4 (44)	5 (42)
TCR T-cell therapy, n (%)	3 (33)	1 (8)
Prior lines of systemic treatment		
Median, (range)	3 (1, 6)	2 (1, 5)
≥3, n (%)	5 (56)	5 (42)

Dose	n=9	n=12
Total TCR T cells [x10^9], median (range)	0.63 (0.35, 9.36)	1.59 (0.89, 10.00)

Includes 1 patient treated with anzu-cel and post-PD with IMA203CD8;
ECOG, Eastern Cooperative Oncology Group Performance Status; LDH, lactate dehydrogenase; SLD, sum of longest diameter(s); TCR, T-cell receptor; ULN, upper limit of normal.

Anzu-cel (IMA203): Tolerability in Synovial Sarcoma

TEAEs in ≥25% of patients (N=9)

	Any Grade	Grade ≥3
Neutropenia	9 (100)	8 (89)
Leukopenia	8 (89)	8 (89)
Anemia	7 (78)	5 (56)
Lymphopenia	7 (78)	7 (78)
Thrombocytopenia	7 (78)	4 (44)
Fatigue	6 (67)	0
Nausea	6 (67)	0
Vomiting	5 (56)	0
Constipation	4 (44)	0
Diarrhea	4 (44)	0
Rash	4 (44)	0
Alkaline phosphatase elevation	3 (33)	0
Creatinine elevation	3 (33)	0
Hypocalcemia	3 (33)	0
Hypokalemia	3 (33)	0
Hyponatremia	3 (33)	0
Hypophosphatemia	3 (33)	0
Insomnia	3 (33)	0
Proteinuria	3 (33)	0
Pyrexia	3 (33)	0
Sinus tachycardia	3 (33)	0
Transaminase elevation	3 (33)	0

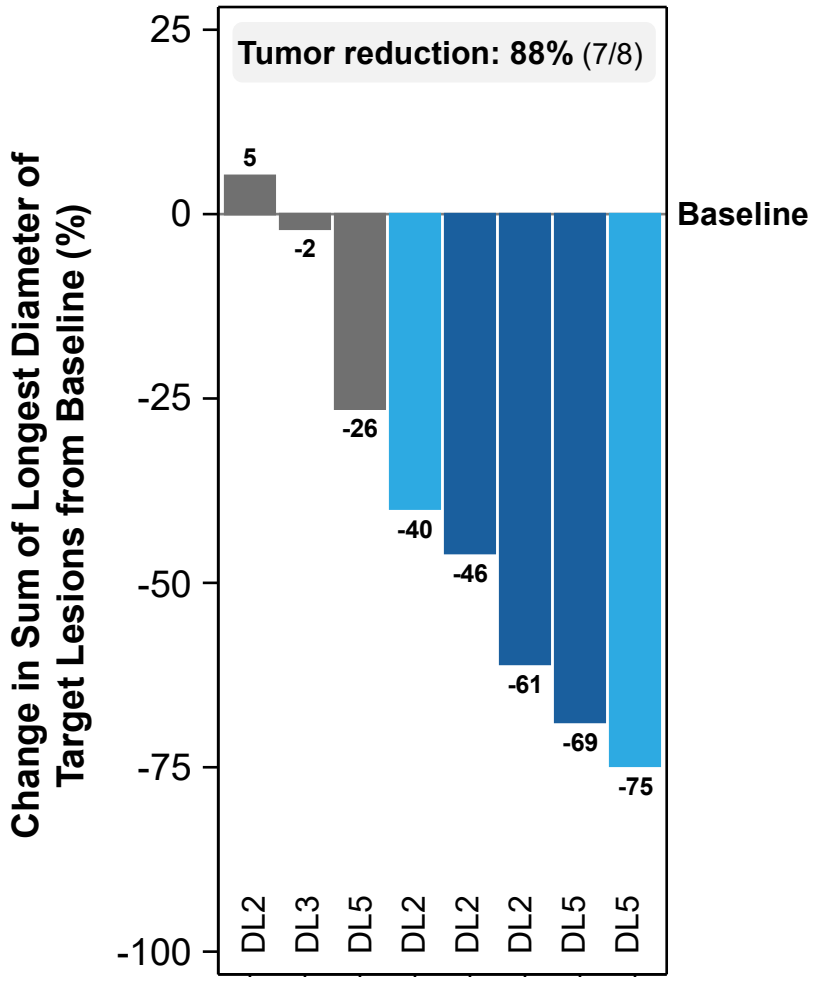
Adverse events of special interest (AESI)

	N=9
CRS, any grade, n (%)	**6 (67)**
Grade 1	3 (33)
Grade 2	3 (33)
HLH, any grade, n (%)	**0**
ICANS, any grade, n (%)	**1 (11)**
Grade 1	1 (11)

- Most frequent TEAEs were anticipated cytopenias associated with LD
- No late onset or prolonged (Day ≥90[a]) grade ≥3 events observed, except for leukopenia and/or neutropenia in 2 patients
- AESIs were low-grade (1-2), occurred by Day 30[b], and were transient
  - CRS was low-grade (1-2), expected and manageable, and resolved within 2 weeks
  - No HLH
  - 1 case of ICANS grade 1; onset Day 5, resolved in 2 days

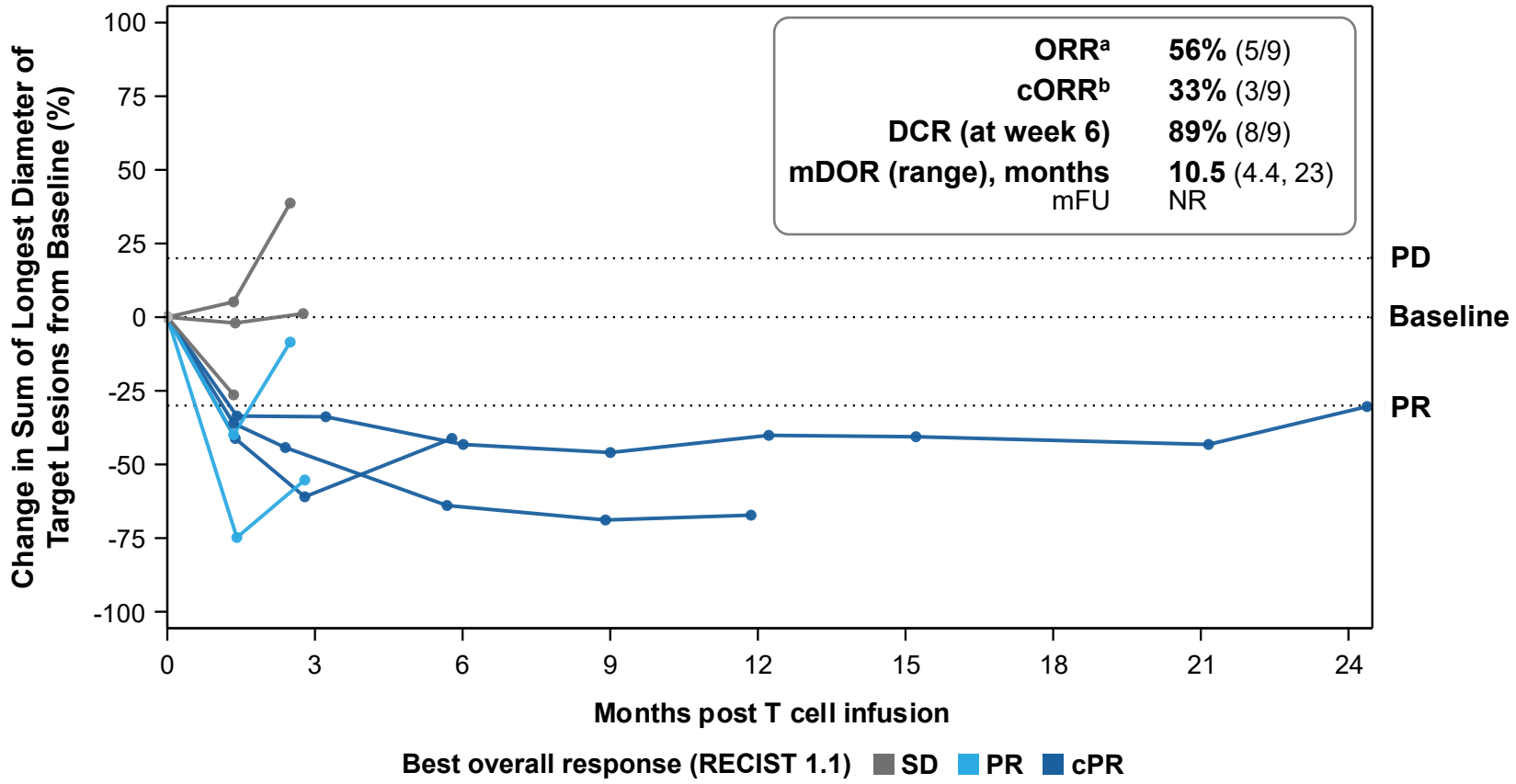
[a] From start of LD-chemotherapy [b] From anzu-cel (IMA203) infusion.
CRS, cytokine release syndrome; HLH, hemophagocytic lymphohistiocytosis; ICANS, immune effector cell-associated neurotoxicity syndrome; LD, lymphodepletion; TEAE, treatment-emergent adverse event.

Anzu-cel (IMA203): BOR in Patients with Synovial Sarcoma (n=9)



Clinical activity including durable responses observed at all dose levels

Median dose: 0.63 x10^9 total TCR T cells



[a] One patient with non-evaluable post-BL scan non included in assessment of tumor reduction and not depicted in plot but assessed for ORR calculation. ORR: according to RECIST 1.1 at any post-BL scan, PD or death at any prior timepoint;
[b] Confirmed ORR for patients with ≥2 post-BL scans per RECIST 1.1, PD or death at any prior timepoint, those with ongoing unconfirmed PR/CR were excluded. BL, baseline; (c)ORR, (confirmed) objective response rate; (c)PR, (confirmed) partial response; DCR, disease control rate; mDOR, median duration of response; mFU, median follow-up; NR, not reached; PD, progressive disease; SD, stable disease; TCR, T-cell receptor.

IMA203CD8: Tolerability in Synovial Sarcoma

TEAEs in ≥25% of patients (N=12)

	Any Grade	Grade ≥3
Neutropenia	12 (100)	12 (100)
Anemia	11 (92)	6 (50)
Thrombocytopenia	11 (92)	4 (33)
Transaminase elevation	11 (92)	1 (8)
Lymphopenia	9 (75)	9 (75)
Nausea	8 (67)	0
Fatigue	6 (50)	0
Rash	5 (42)	0
Creatinine elevation	4 (33)	1 (8)
Constipation	4 (33)	0
Headache	4 (33)	0
Hyponatremia	4 (33)	0
Hypophosphatemia	4 (33)	1 (8)
Pyrexia	4 (33)	0
Testicular/scrotal disorders[a]	4 (33)	0
Back pain	3 (25)	0
Dyspnoea	3 (25)	0
Hypertension	3 (25)	2 (17)
Insomnia	3 (25)	0
Edema peripheral	3 (25)	0

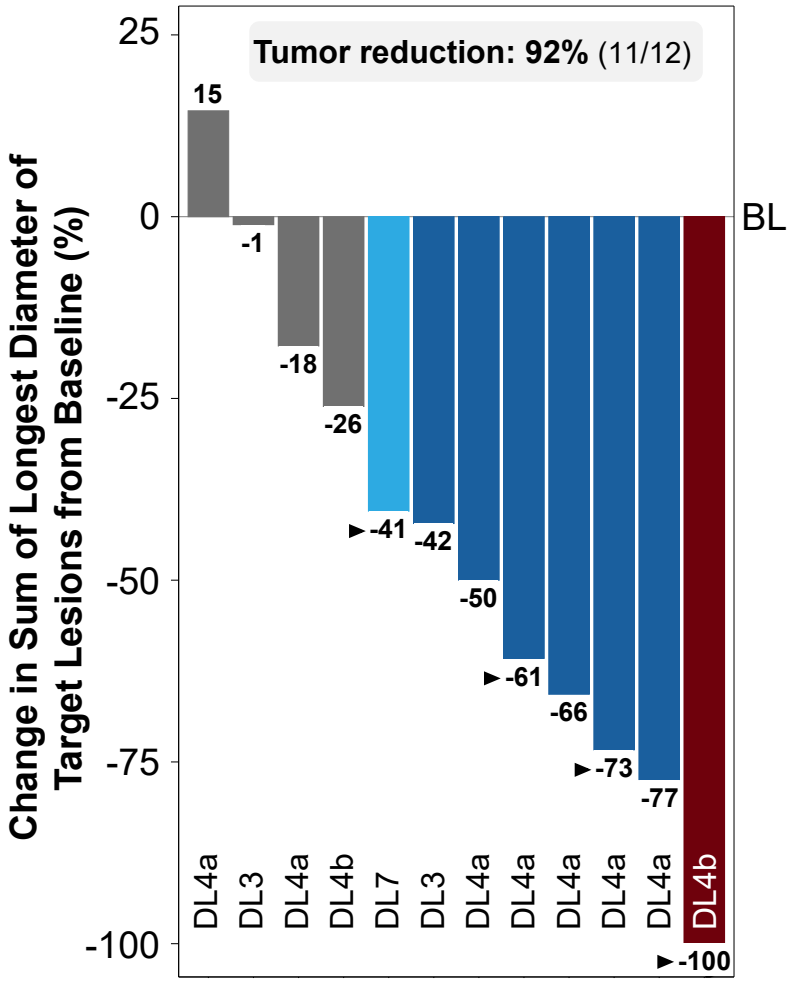
Adverse events of special interest (AESI)

	N=12
CRS, any grade, n (%)	**12 (100)**
Grade 1	5 (42)
Grade 2	5 (42)
Grade 3	2 (17)
HLH, any grade, n (%)	**0**
ICANS, any grade, n (%)	**0**

- Most frequent TEAEs were anticipated cytopenias associated with lymphodepletion
- Infrequent long-term (Day ≥ 90) grade ≥3 TEAEs included cytopenias (n=6) and/or hypertension (n=2)
- AESIs were low-grade (1-2), occurred early, and were transient
  - CRS was mostly low-grade (1-2), expected and manageable
  - No HLH or ICANS
- 1 DLT[b] at DL4b (MTD not reached[c])

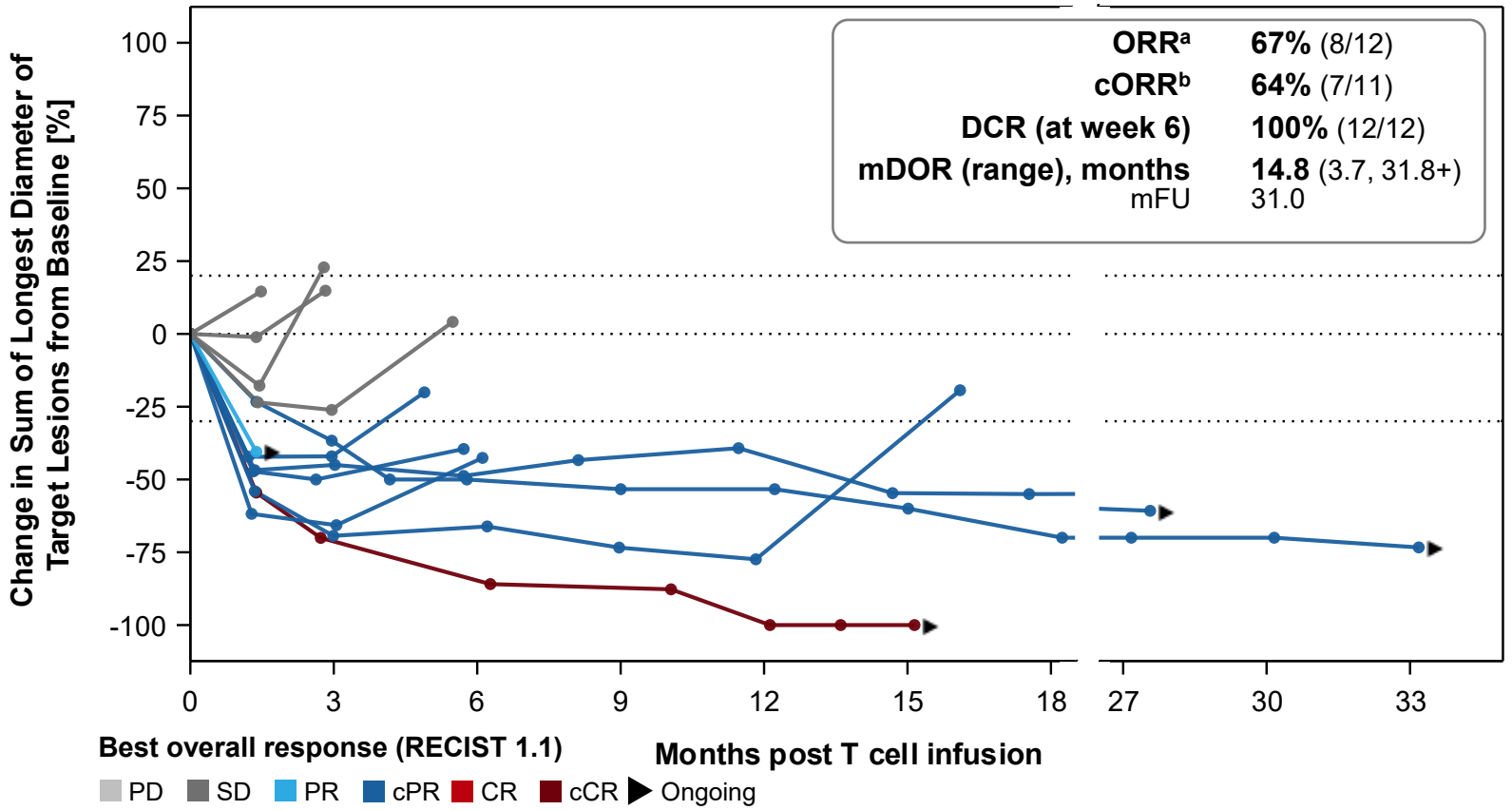
[a] Testicular/scrotal disorders includes grouped terms; [b] Grade 3 CRS with transient Grade 3 hepatotoxicity improved to Grade 2 within 10 days; CRS resolved completely without need for vasopressors/ventilator support; [c] Further modification of the inclusion/exclusion criteria and IL-2 scheme allowed continuation of dose escalation from DL4c up to present DL7; CRS, cytokine release syndrome; HLH, hemophagocytic lymphohistiocytosis; ICANS, immune effector cell-associated neurotoxicity syndrome; LD, lymphodepletion; MTD, maximum tolerated dose; TEAE, treatment-emergent adverse event.

IMA203CD8: BOR in Patients with Synovial Sarcoma (n=12)



Clinical activity including durable responses observed at all dose levels

Median dose: 1.59 x10^9 total TCR T cells



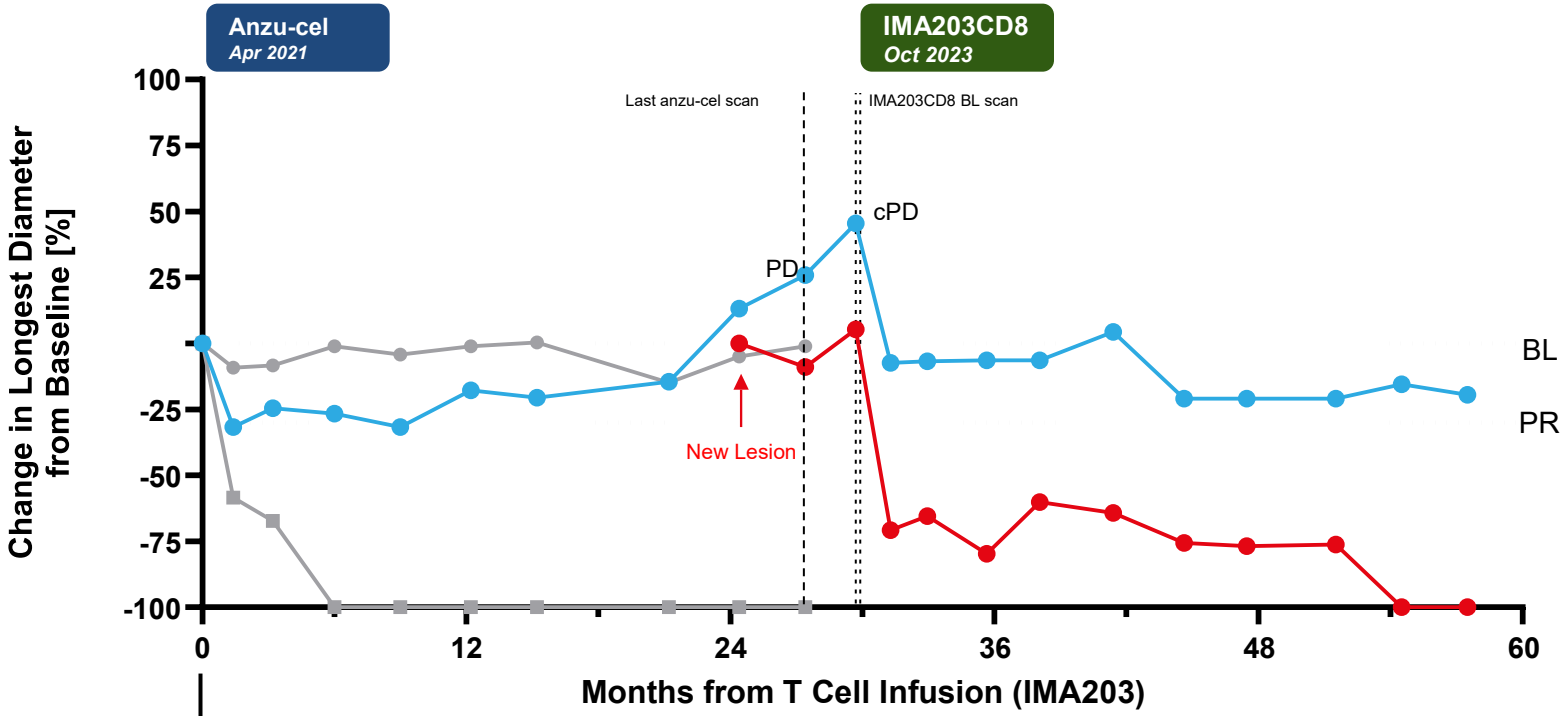
[a] ORR: according to RECIST 1.1 at any post-BL scan, PD or death at any prior timepoint; cORR: according to RECIST 1.1 for patients with ≥2 post-BL scans, PD or death at any prior timepoint; [b] Confirmed ORR for patients with ≥2 post-BL scans per RECIST 1.1, PD or death at any prior timepoint, those with ongoing unconfirmed PR/CR were excluded. BL, baseline; BOR, best overall response; (c)CR, (confirmed) complete response; (c)ORR, (confirmed) objective response rate; (c)PR, (confirmed) partial response; DCR, disease control rate; mDOR, median duration of response; mFU, median follow-up; NR, not reached; PD, progressive disease; SD, stable disease; TCR, T-cell receptor.

Patient Case: Long-Term Disease Control of >4 Years After Prior TCR T-cell Therapies

Male, 49 y/o at first trial enrollment

Analysis of single lesions over time

Target lesion site	Status at the time of PD with anzu-cel (IMA203)
Right pulmonary hilum metastasis	PD
Right infrahilar lymph node (lymphadenopathy)	New lesion
Right pleura metastasis	No evidence of disease
Right pleura metastasis[a]	Suspected fibrosis - touch preps were acellular; not selected as target lesion for IMA203CD8[a]



Initial Diagnosis
Sep 2011

Soft tissue sarcoma
Subtype: synovial sarcoma

Prior Systemic Treatments
Oct 2011 – Sep 2019

2011-2012:	Chemotherapy	BOR: CR
2018:	TKI (Pazopanib)	BOR: SD
2019:	MAGE-A4-directed TCR T-cell therapy	BOR: SD

Anzu-cel (IMA203)
Apr 2021

Dose:	0.4 x 10^9 total TCR T cells
BL tumor burden:	8.4 cm
No of lesions:	3
BOR:	cPR (-46%)
PFS:	24.4 months

IMA203CD8
Oct 2023

Dose:	1.8 x 10^9 total TCR T cells
BL tumor burden:	6.1 cm
No of lesions:	2
BOR:	**ongoing cPR (-48%)**
PFS:	**ongoing at 29.4 months**

[a] At time of IMA203CD8 infusion, right pleura metastasis not selected as a target lesion; subsequent PET-CT on April 2025 demonstrated no evidence of FDG-avid malignancy
BL, baseline; BOR, best overall response; CR, complete response; cPR, confirmed partial response; DL, dose level; PD, progressive disease; PFS, progression-free survival; SD, stable disease; TKI, Tyrosine Kinase Inhibitor.

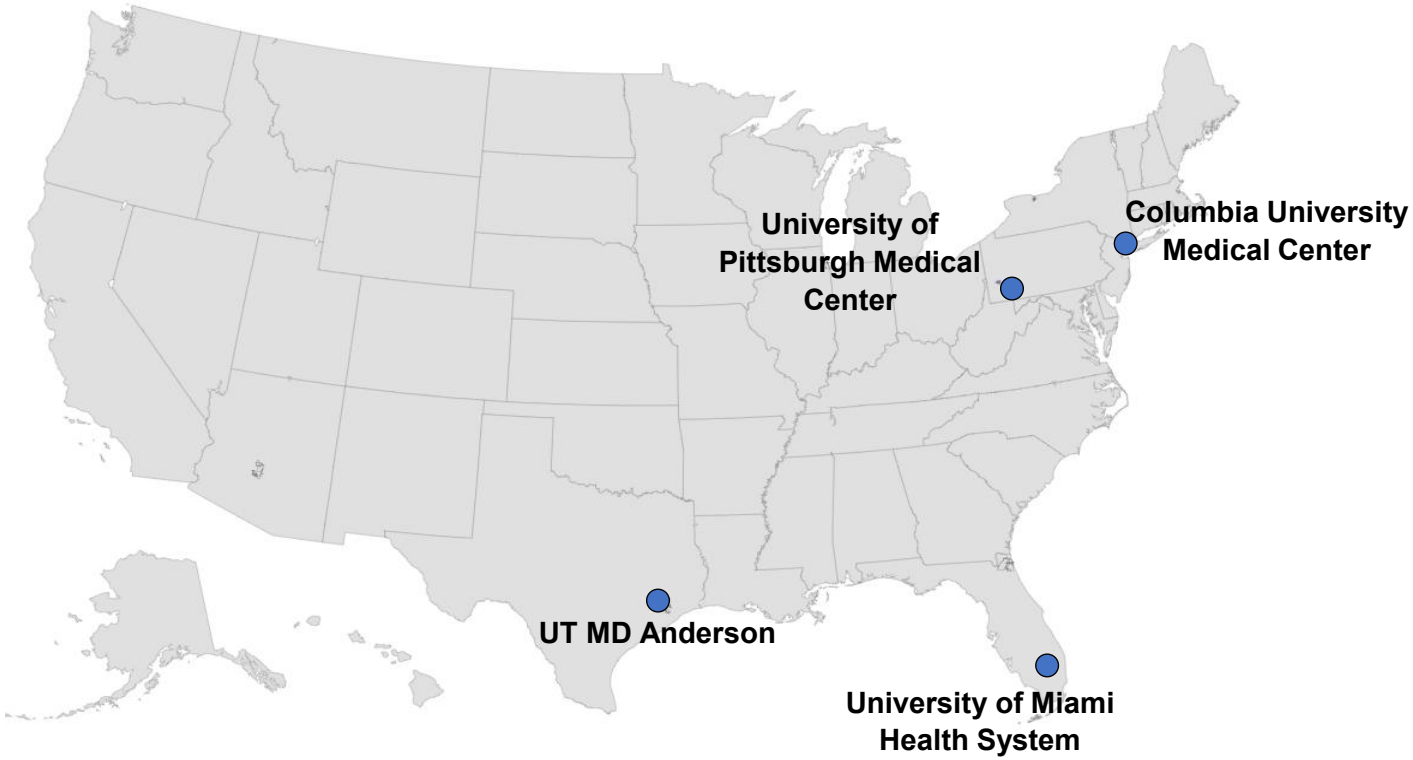
Key Takeaways

- TCR-based therapies enable immune recognition of intracellular tumor antigens presented by cell-surface HLA, expanding the therapeutic landscape beyond targets accessible to conventional immunotherapies
- Anzutresgene autoleucel (anzu-cel, IMA203) and IMA203CD8 are distinct investigational one-time autologous TCR T-cell therapies targeting the cancer-associated antigen PRAME, a novel target for synovial sarcoma
- PRAME-targeted TCR T-cell therapies demonstrate an expected and manageable tolerability profile and durable antitumor activity in patients with metastatic synovial sarcoma
- The potentially transformative clinical activity of PRAME-targeted TCR T-cell therapy in metastatic synovial sarcoma supports further development

HLA, human leukocyte antigen; PRAME, preferentially expressed antigen in melanoma; TCR, T-cell receptor.

Thank you – Trial Participants & Caregivers

United States



Germany

IMA203-101 Phase 1 Trial (patients with synovial sarcoma)
Sponsor: Immatics

Presentation Materials

Presentation Slides

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Plain Language Summary

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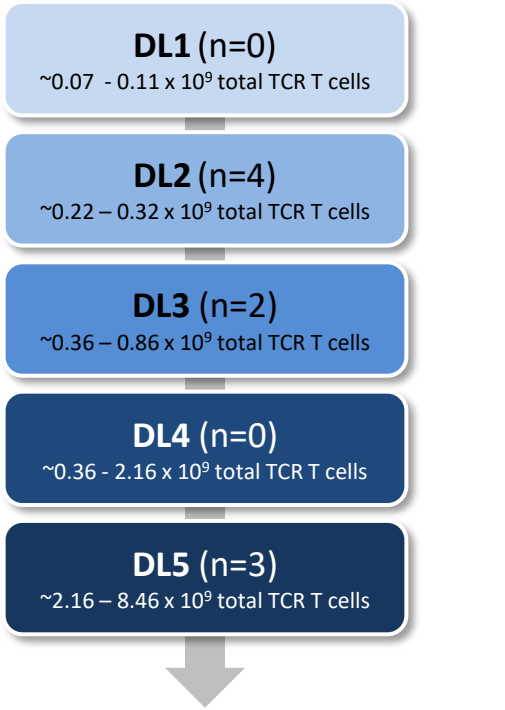
Appendix

Anzu-cel Phase 1 Study Design

Total n=9 patients with synovial sarcoma



Phase 1b Dose Expansion at RP2D
(1-10 billion total TCR T cells)

Data cutoff Mar 30, 2026
Total TCR T cells calculated from defined number of TCR T cells/m2 body surface area (BSA) per dose level x 1.8 m2 BSA (BSA of average patient).
BSA, body surface area; DL, dose level; DLT, dose-limiting toxicity; TCR, T-cell receptor.

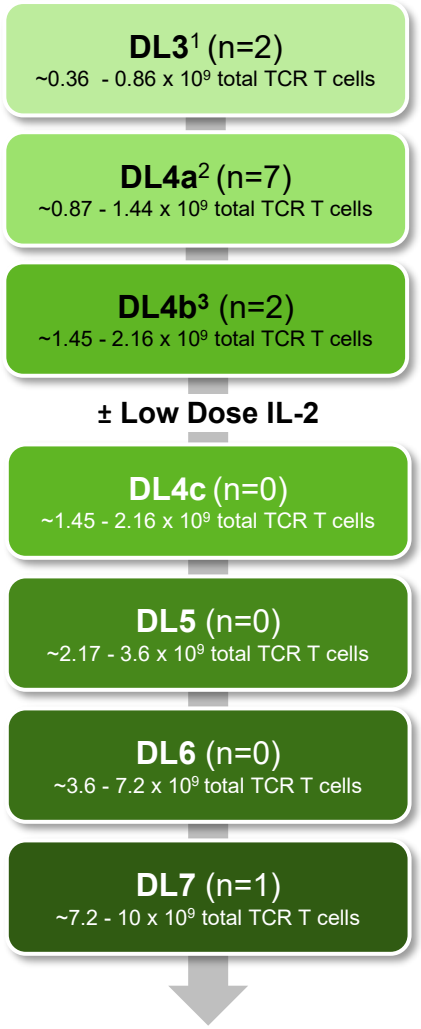
Patients with Synovial Sarcoma Treated with Anzu-cel (IMA203) in Phase 1

Indication	No of prior systemic treatment lines	Prior treatments	Total infused dose TCR-T cells[1] [x10^9]	DL	BOR	BOR (Max % change of target lesions)	Comment	Reason for Progression
Synovial Sarcoma	1	Chemotherapy	3.94	DL5	PR	-75	Unconfirmed response until 2.8 months PFS	Target and non-target progression
Synovial Sarcoma	2	TNFα + chemotherapy (melphalan) Chemotherapy	6.01	DL5	cPR	-69	Response until 11.9 months PFS	Target progression and new lesions
Synovial Sarcoma	2	Chemotherapy Chemotherapy	0.39	DL2	cPR	-61	Response until 5.8 months PFS	Target progression
Synovial Sarcoma	3	Chemotherapy Pazopanib MAGEA4 TCR T-cell therapy	0.41	DL2	cPR	-46	Response until 24.4 months PFS	Target progression
Synovial Sarcoma	2	Chemotherapy Chemotherapy	0.35	DL2	PR	-40	Unconfirmed response until 2.5 months PFS	Target and non-target progression
Synovial Sarcoma	5	Chemotherapy Pazopanib Exp. therapy (NY-ESO-1 TCR T cells) Pazopanib Exp. therapy (CFT8634)	9.36	DL5	SD	-26	Disease stabilization until 1.4 months PFS	Clinical PD
Synovial Sarcoma[a]	6	Chemotherapy Chemotherapy Chemotherapy Chemotherapy Pazopanib MAGEA4 TCR T-cell therapy	0.81	DL3	SD	-2	Disease stabilization until 2.8 months PFS	Clinical PD
Synovial Sarcoma	3	Chemotherapy Pazopanib Chemotherapy	0.37	DL2	SD	5	Disease stabilization until 2.5 months PFS	Target progression
Synovial Sarcoma	5	Chemotherapy Chemotherapy Chemotherapy Chemotherapy Pazopanib + chemotherapy	0.63	DL3	PD	n/a	Progressive disease at 1.4 months PFS	Non-target progression

[a] presented patient case; BOR, best overall response; DL, dose level; (c)PR, (confirmed) partial response; SD, stable disease; PD, progressive disease; PFS, progression free survival.

Phase 1a Dose Escalation Study Design

Total n=12 patients with synovial sarcoma



Median dose of 1.59 billion total IMA203CD8 TCR T cells

[1] Based on initial safety data observed with anzu-cel (IMA203), dose escalation for IMA203CD8 was initiated at DL3; [2] DL4a cleared in Dec 2023; [3] DLTs at DL4b triggered modifications of the eligibility criteria, adapted patient population is treated with DL4c. Each dose level ≥ DL4c is evaluated ±IL-2: start without IL-2; if considered tolerable, either add IL-2 at the same dose, or escalate to the next dose without IL-2; total TCR T cells calculated from defined number of TCR T cells/m^2 BSA per dose level x 1.8 m^2 BSA (BSA of average patient). BSA, body surface area; DL, dose level; DLT, dose-limiting toxicity; IL, interleukin; TCR, T-cell receptor.

Patients with Synovial Sarcoma Treated with IMA203CD8 in Phase 1

Indication	No of prior systemic treatment lines	Prior treatments	Total infused dose TCR-T cells[1] [x10^9]	DL	BOR	BOR (Max % change of target lesions)	Comment	Reason for Progression
Synovial Sarcoma	1	Chemotherapy	2.05	4b	cCR	-100	Ongoing response at 32.4 months PFS	
Synovial Sarcoma	1	Chemotherapy	1.15	4a	cPR	-77	Response until 16.1 months PFS	Target progression
Synovial Sarcoma	2	Chemotherapy Chemotherapy	1.56	4a	cPR	-73	Ongoing response at 34.7 months PFS	
Synovial Sarcoma	3	Chemotherapy Pazopanib Chemotherapy	1.61	4a	cPR	-66	Response until 6.1 months PFS	Target and non-target progression and news lesions
Synovial Sarcoma	3	Chemotherapy Pazopanib MAGEA4 TCR T-cell therapy	1.81	4a	cPR	-61	Ongoing response at 29.4 months PFS	
Synovial Sarcoma	1	Chemotherapy	1.53	4a	cPR	-50	Response until 5.7 months PFS	Target and non-target progression
Synovial Sarcoma	2	Pazopanib + chemotherapy Pazopanib	1.00	3	cPR	-42	Response until 4.9 months PFS	Target and non-target progression and new lesions
Synovial Sarcoma	1	Chemotherapy	10.00	7	PR	-41	Ongoing response at 6.7 months PFS (confirmatory scan results pending)	
Synovial Sarcoma	3	Chemotherapy Pazopanib Pazopanib	1.49	4b	SD	-26	Disease stabilization until 5.5. months PFS	Target progression and new lesions
Synovial Sarcoma	1	Chemotherapy	1.75	4a	SD	-18	Disease stabilization until 2.8 months PFS	Target progression
Synovial Sarcoma	5	Chemotherapy Chemotherapy Chemotherapy Chemotherapy Chemotherapy	0.89	3	SD	-1	Disease stabilization until 2.8 months PFS	Non-target progression and new lesions
Synovial Sarcoma	5	Chemotherapy Chemotherapy Chemotherapy Pazopanib Chemotherapy	1.68	4a	SD	15	Disease stabilization until 2.9 months PFS	Clinical PD

BOR, best overall response; DL, dose level; cCR, confirmed complete response; (c)PR, (confirmed) partial response; SD, stable disease. PFS, progression free survival.