UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 6-K

REPORT OF FOREIGN PRIVATE ISSUER PURSUANT TO RULE 13a-16 OR 15d-16 UNDER THE SECURITIES EXCHANGE ACT OF 1934

October 10, 2024
Commission File Number: 001-39363

IMMATICS N.V.

Paul-Ehrlich-Straße 15
72076 Tübingen, Federal Republic of Germany
(Address of principal executive office)

Indicate by check mark whether the registrant files or will file annual reports under cover of Form 20-F or Form 40-F:

Form 20-F ☒ Form 40-F ☐

INFORMATION CONTAINED IN THIS REPORT ON FORM 6-K

On October 10, 2024, Immatics N.V. (the "Company" or "Immatics") provided updated Phase 1b clinical data on ACTengine® IMA203 TCR-T targeting PRAME in melanoma patients and provided an update on SUPRAME, the upcoming Phase 3 trial to evaluate IMA203 in metastatic melanoma patients. IMA203 is Immatics' most advanced TCR-based autologous cell therapy that is directed against an HLA-A*02-presented (human leukocyte antigen) peptide derived from preferentially expressed antigen in melanoma (PRAME), a protein frequently expressed in a large variety of solid cancers. The data cutoff was August 23, 2024.

Patient Baseline Characteristics. As of data cutoff, 28 heavily pretreated patients with metastatic melanoma were treated with IMA203 at the recommended Phase 2 dose ("RP2D") of 1 to 10 billion total TCR-T cells during the Phase 1b dose expansion part of the clinical trial. The treated patient population is composed of patients with a median of 2 lines of prior systemic treatments, consisting of cutaneous melanoma patients (N=13), uveal melanoma patients (N=12), mucosal melanoma patients (N=2) and a patient with melanoma of unknown primary (N=1).

Safety Data. The safety population includes 70[1] patients in the Phase 1a dose escalation and Phase 1b dose expansion parts of the trial across all dose levels and all tumor types. Grade ≥3 treatment-emergent adverse events ("TEAEs") were observed in all patients. As shown in the table below, the most frequent adverse events were expected cytopenias (Grade 1-4) associated with lymphodepletion as well as mostly mild to moderate cytokine release syndrome ("CRS"). Some patients infrequently experienced immune effector cell-associated neurotoxicity syndrome ("ICANS') (Grade 1: 6% of patients, Grade 2: 4% of patients, Grade 3: 4% of patients). No Grade 5 treatment-related adverse events were observed in the safety population, even at doses up to ~$10x10^9$ TCR-T cells. The tolerability profile in the Phase 1b melanoma subset is generally consistent with the full IMA203 monotherapy tolerability profile.

[1] All patients who started lymphodepletion. Includes one patient who started lymphodepletion but did not receive IMA203 TCR-T cells and one patient who started lymphodepletion with T cell infusion scheduled after the data cutoff.

Treatment-Emergent Adverse Events in the Safety Population (N=70[1])

Adverse event (System organ class, Preferred term)	≥ Grade 3 No.	≥ Grade 3 %
table continued...		
Metabolism and nutrition disorders	**7**	**10.0**
Hypokalaemia	3	4.3
Hyponatraemia	3	4.3
Hypophosphataemia	2	2.9
Dehydration	1	1.4
Failure to thrive	1	1.4
Vascular disorders	**7**	**10.0**
Hypertension	6	8.6
Hypotension	1	1.4
Renal and urinary disorders	**6**	**8.6**
Acute kidney injury	4	5.7
Nephritis	1	1.4
Proteinuria	1	1.4
Gastrointestinal disorders	**5**	**7.1**
Abdominal pain	3	4.3
Diarrhoea	1	1.4
Ileus	1	1.4
Vomiting	1	1.4
General disorders and administration site conditions	**4**	**5.7**
Fatigue	1	1.4
General physical health deterioration[3]	1	1.4
Pyrexia	1	1.4
Swelling face	1	1.4
Skin and subcutaneous tissue disorders	**4**	**5.7**
Rash maculo-papular	3	4.3
Eczema	1	1.4
Cardiac disorders	**3**	**4.3**
Atrial fibrillation[5]	3	4.3
Eye disorders	**2**	**2.9**
Periorbital oedema	1	1.4
Ulcerative keratitis	1	1.4
Injury, poisoning and procedural complications	**2**	**2.9**
Humerus fracture	1	1.4
Infusion related reaction	1	1.4
Musculoskeletal and connective tissue disorders	**2**	**2.9**
Back pain	1	1.4
Muscle spasms	1	1.4

Adverse event (System organ class, Preferred term)	≥ Grade 3 No.	≥ Grade 3 %
table continued...		
Nervous system disorders	**2**	**2.9**
Headache	1	1.4
Posterior reversible encephalopathy syndrome	1	1.4
Endocrine disorders	**1**	**1.4**
Inappropriate antidiuretic hormone secretion	1	1.4
Hepatobiliary disorders	**1**	**1.4**
Cholangitis	1	1.4
Immune system disorders	**1**	**1.4**
Haemophagocytic lymphohistiocytosis	1	1.4
Reproductive system and breast disorders	**1**	**1.4**
Vaginal haemorrhage	1	1.4

Adverse event (System organ class, Preferred term)	≥ Grade 3 No.	≥ Grade 3 %
Patients with any adverse event	70	100.0
Adverse Events of Special Interest	**9**	**12.9**
Cytokine release syndrome	8	11.4
ICANS[2]	3	4.3
Blood and lymphatic system disorders	**70**	**100.0**
Neutropenia	62	88.6
Lymphopenia	39	55.7
Leukopenia	38	54.3
Anaemia	36	51.4
Thrombocytopenia	24	34.3
Febrile neutropenia	2	2.9
Cytopenia	1	1.4
Leukocytosis	1	1.4
Infections and infestations	**10**	**14.3**
Urinary tract infection	2	2.9
Appendicitis	1	1.4
COVID-19	1	1.4
Cytomegalovirus infection reactivation	1	1.4
Enterococcal infection	1	1.4
Human herpesvirus 6 encephalitis	1	1.4
Infection	1	1.4
Orchitis	1	1.4
Sepsis[3,4]	1	1.4
Septic shock[3]	1	1.4
Investigations	**10**	**14.3**
Alanine aminotransferase increased	6	8.6
Aspartate aminotransferase increased	5	7.1
Blood creatinine increased	2	2.9
Blood alkaline phosphatase increased	1	1.4
Blood bilirubin increased	1	1.4
Blood fibrinogen decreased	1	1.4
Lymphocyte count increased	1	1.4
Respiratory, thoracic and mediastinal disorders	**10**	**14.3**
Hypoxia	4	5.7
Pleural effusion	2	2.9
Bronchial obstruction	1	1.4
Dyspnoea	1	1.4
Epistaxis	1	1.4
Laryngeal inflammation	1	1.4
Respiratory failure	1	1.4

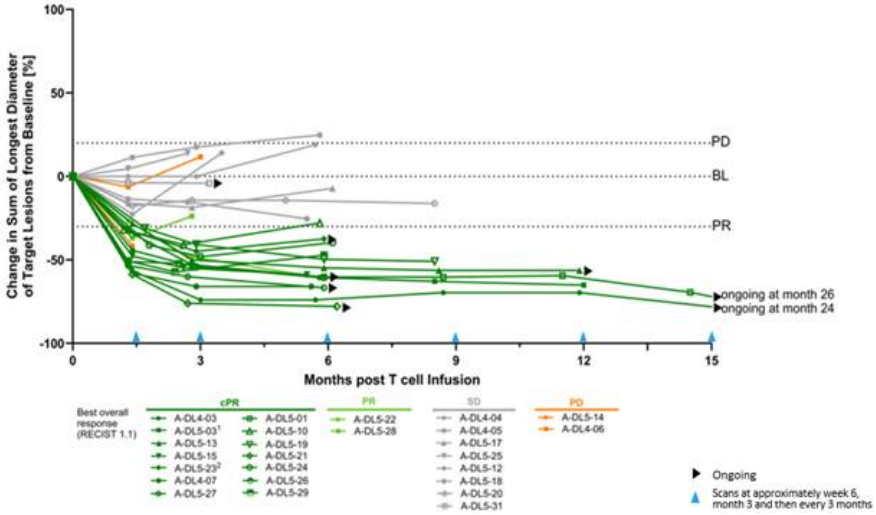
All TEAEs with ≥ Grade 3 regardless of relatedness to study treatment. Adverse events were coded using the Medical Dictionary for Regulatory Activities. Grades were determined according to National Cancer Institute Common Terminology Criteria of Adverse Events, version 5.0. Grades for CRS and ICANS were determined according to CARTOX criteria (Neelapu et al., 2019). Patients are counted only once per adverse event and severity classification. Based on interim data extracted from open clinical database (23-Aug-2024);
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 Fatal Adverse events were not considered related to any study drug; 4 Patient died from sepsis of unknown origin and did not receive IMA203 TCR-T cells; 5 DLT: Dose limiting toxicity in phase 1a at DL2 reported on March 17, 2021.

Anti-tumor Activity and Durability. The table below sets forth the observed anti-tumor activity of IMA203 and durability of responses in all melanoma patients in the Phase 1b clinical trial and in cutaneous melanoma patients in the Phase 1b clinical trial. In the melanoma patient population, 7 of the 14 confirmed responses were ongoing as of

data cutoff. For this analysis, the median follow-up for the median duration of response was 9.3 months compared to 3.5 months from the most recent data update in May 2024.

	All melanoma patients in Phase 1b (N=28[2,3])	Cutaneous melanoma patients in Phase 1b (N=13 [3])
Confirmed Objective Response Rate	54% (14/26)	54% (7/13)
Objective Response Rate	62% (16/26)	62% (8/13)
Disease Control Rate	92% (24/26)	92% (12/13)
Tumor Shrinkage	88% (23/26)	85% (11/13)
Median Duration of Response	12.1 months	12.1 months
Median Progression-Free Survival	6.0 months	6.1 months
Median Overall Survival	Not reached	15.9 months

Response Over Time of IMA203 in Melanoma (N=28 [2, 3])



Progression-Free Survival ("PFS") and Overall Survival ("OS"). Manufacturing improvements were implemented prior to the Phase 1b part of the trial to enhance key features of IMA203. As a result, all patients in dose expansion were treated with an updated version of IMA203 that includes a T cell enrichment process using monocyte depletion (negative selection) or CD8/CD4 positive selection. The updated data demonstrate a significant positive shift in median PFS and median OS between melanoma patients treated during Phase 1a and patients treated in Phase 1b, which is shown in the table below.

	Phase 1b dose expansion melanoma patients (N=28)	Phase 1a dose escalation melanoma patients (N=11)
Median Progression-Free Survival	6.0 months	2.6 months
Median Overall Survival	Not reached	6.3 months

In addition, approximately half of all patients in the Phase 1b trial have a deep response (>50% tumor reduction). This subgroup of patients was observed to have a median PFS of more than 1 year, while patients with <50% tumor

[2] First tumor assessment post infusion pending for additional two melanoma patients at data cutoff.

[3] Melanoma efficacy population excludes 5 patients treated at DL4 in Phase 1a of the trial as reported in the May 2024 update, based on different manufacturing version used that affects the T cell product.

reduction (including patients with tumor size increase) were still observed with a more than 2 times longer median PFS compared to patients treated in dose escalation with suboptimal doses.

Translational Data. Translational data from patients across Phase 1a and Phase 1b indicate that IMA203 T cells rapidly engrafted in all patients after a single dose and show a persistence of more than two years. Three associations/correlations were observed demonstrating high consistency of dose exposure, biological data and clinical outcome in all patients treated with IMA203 for which samples were available (N=65): First, IMA203 T cell dose is significantly associated with confirmed clinical responses (p=0.02). Second, IMA203 T cell dose is correlated with T cell peak level (c_{max}, r=0.84, p=1.6x10^{-18}). Third, IMA203 T cell peak level (c_{max}, p=0.05) and T cell exposure (AUC_{0-28d}, p=0.05) are associated with confirmed clinical responses.

Development Path and Manufacturing for IMA203 Monotherapy. On September 24, 2024, Immatics completed a Type D meeting with the U.S. Food and Drug Administration ("FDA") to confirm RP2D and the chemistry, manufacturing and controls ("CMC") package as well as discuss the trial design for SUPRAME, the planned registration-enabling Phase 3 randomized-controlled clinical trial for IMA203. Written post-meeting minutes from the FDA have been received.

SUPRAME will evaluate IMA203 targeting PRAME in 360 HLA-A*02:01-positive patients with second-line or later (2L+) unresectable or metastatic melanoma who have received prior treatment with a checkpoint inhibitor. Patients will be randomized 1:1 for IMA203 or investigator's choice of selected approved treatments in the 2L+ setting. Based on the Company's discussions with the FDA, the primary endpoint for full approval will be median PFS. Given the expected PFS of 2-3 months in this patient population, as well as the PFS of 6 months observed in the data from the IMA203 Phase 1b trial, the Company has determined that utilizing median PFS as the primary endpoint is the fastest pathway to seeking full approval and presents a more attractive commercial positioning as compared to objective response rate ("ORR"). Secondary endpoints for the trial will include ORR, safety, duration of response, no overall survival detriment and patient-reported outcomes. A pre-specified interim analysis is planned for early 2026.

The SUPRAME Phase 3 trial is planned to run globally with sites in the United States and Europe with the initial goal of seeking Biologics License Application ("BLA") approval in the United States. On October 2, 2024, Immatics also completed a meeting with the Paul Ehrlich Institute (PEI), the German regulatory authority, and determined the same trial design for conducting the clinical trial in Germany.

The SUPRAME Phase 3 trial is on track to commence in December 2024 and patient enrolment is forecasted to be completed in 2026. The Company aims to submit a BLA in early 2027 for full approval.

Immatics' late-stage clinical cell therapy development is supported by its differentiated manufacturing related to timeline, capabilities and facilities. IMA203 cell therapy products are manufactured within 7 days, followed by a 7-day QC release testing at a success rate of >95% to reach the target dose. The Company has also completed construction of a ~100,000 square foot research and development and good manufacturing practices ("GMP") manufacturing facility with a modular design for efficient and cost-effective scalability intended to serve early-stage and registration-enabling trials, as well as commercial supply. The new site is expected to start GMP manufacturing of cell therapy products in early 2025. Meanwhile, the existing GMP facility, which is run in collaboration with UT Health, will remain active until the end of 2025.

* * *

In connection with the foregoing, the Company issued a press release, a copy of which is attached hereto as Exhibit 99.1, and provided a presentation, a copy of which is attached hereto as Exhibit 99.2, and made available an updated corporate presentation, a copy of which is attached hereto as Exhibit 99.3.

Certain statements in this report may be considered forward-looking statements. Forward-looking statements generally relate to future events or the Company's future financial or operating performance. For example, statements concerning timing of data read-outs for product candidates, the timing, outcome and design of clinical trials, the nature of clinical trials (including whether such clinical trials will be registration-enabling), the timing of IND or CTA filing for pre-clinical stage product candidates, the timing of BLA filings for clinical stage product candidates, estimated market opportunities of product candidates, manufacturing timetables, capacity and success

rates, the Company's focus on partnerships to advance its strategy, and other metrics are forward-looking statements. In some cases, you can identify forward-looking statements by terminology such as "may", "should", "expect", "plan", "target", "intend", "will", "estimate", "anticipate", "believe", "predict", "potential" or "continue", or the negatives of these terms or variations of them or similar terminology. Such forward-looking statements are subject to risks, uncertainties, and other factors which could cause actual results to differ materially from those expressed or implied by such forward-looking statements. These forward-looking statements are based upon estimates and assumptions that, while considered reasonable by Immatics and its management, are inherently uncertain. New risks and uncertainties may emerge from time to time, and it is not possible to predict all risks and uncertainties. Factors that may cause actual results to differ materially from current expectations include, but are not limited to, various factors beyond management's control including general economic conditions and other risks, uncertainties and factors set forth in the Company's Annual Report on Form 20-F and other filings with the Securities and Exchange Commission (SEC). Nothing in this report should be regarded as a representation by any person that the forward-looking statements set forth herein will be achieved or that any of the contemplated results of such forward-looking statements will be achieved. You should not place undue reliance on forward-looking statements, which speak only as of the date they are made. The Company undertakes no duty to update these forward-looking statements. All the scientific and clinical data presented within this report are – by definition prior to completion of the clinical trial and a clinical study report – preliminary in nature and subject to further quality checks including customary source data verification.

INCORPORATION BY REFERENCE

This Report on Form 6-K (other than Exhibits 99.1, 99.2 and 99.3 hereto) shall be deemed to be incorporated by reference into the registration statements on Form F-3 (Registration Nos. 333-240260 and 333-274218) of Immatics N.V. and to be a part thereof from the date on which this report is filed, to the extent not superseded by documents or reports subsequently filed or furnished.

EXHIBIT INDEX

Exhibit No.	Description
99.1	Press release dated October 10, 2024
99.2	Presentation dated October 10, 2024
99.3	Corporate presentation dated October 10, 2024

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

IMMATICS N.V.

Date: October 10, 2024

By: /s/ Harpreet Singh
Name: Harpreet Singh
Title: Chief Executive Officer

PRESS RELEASE

Immatics Announces Updated Phase 1b Clinical Data on ACTengine® IMA203 TCR-T Targeting PRAME in Melanoma Patients and Provides Update on Upcoming SUPRAME Phase 3 Trial

Company to host conference call and webcast today, October 10, at 9:00 am EDT/3:00 pm CEST

- Company announces updated Phase 1b clinical data on ACTengine® IMA203 targeting PRAME in 28 heavily pretreated metastatic melanoma patients with substantially enhanced maturity compared to the last data update in May 2024 and provides the first report on progression-free survival (PFS) and overall survival (OS)
- Based on the Phase 1b data, the Company will proceed directly to a registration-enabling Phase 3 trial
- Regulatory pathway and clinical trial design for IMA203 finalized following FDA Type D meetings and meeting with the Paul Ehrlich Institute (PEI); RP2D and CMC package confirmed
- IMA203 continues to maintain a favorable tolerability profile in patients in Phase 1a and Phase 1b treated across all dose levels
- IMA203 demonstrates a confirmed objective response rate of 54% with median duration of response of 12.1 months in Phase 1b
- Median PFS is 6 months, comparing favorably to the IMA203 Phase 1a dose escalation median PFS of 2.6 months; patients with deep responses show median PFS of more than one year; median OS not reached
- Phase 3 trial, “SUPRAME,” will enroll 360 patients with unresectable or metastatic melanoma post treatment with a checkpoint inhibitor (2L+) and will randomize patients 1:1 for treatment with IMA203 or investigator’s choice
- Primary endpoint for full approval will be median PFS, which constitutes the fastest pathway to registration in this patient population

- SUPRAME Phase 3 trial is on track to commence in December 2024; enrollment forecasted to be completed in 2026 with a pre-specified interim analysis planned for early 2026
- Conference call and webcast can be accessed here

Houston, Texas and Tuebingen, Germany, October 10, 2024 – Immatics N.V. (NASDAQ: IMTX, "Immatics" or the "Company"), a clinical-stage biopharmaceutical company active in the discovery and development of T cell-redirecting cancer immunotherapies, today announced updated Phase 1b clinical data on ACTengine® IMA203 TCR-T targeting PRAME in melanoma patients and provided an update on SUPRAME, the upcoming Phase 3 trial to evaluate IMA203 in metastatic melanoma patients.

The data from the ongoing Phase 1b trial will be presented on Friday, October 11, 2024, by Martin Wermke, M.D., during Plenary Session 1, Developmental Immunotherapy (Cellular Immunotherapy, Vaccines, & New Checkpoints) at the Society for Melanoma Research Congress 2024. The IMA203 data slides are accessible in the 'Events & Presentations' section of the Investor & Media section of the Company's website. The conference presentation will include additional patient cases.

"Observing significant tumor shrinkage and durable responses combined with meaningful progression-free survival and overall survival outcomes after a single treatment with ACTengine® IMA203 in this patient population that have all exhausted multiple lines of systemic treatments illustrates the impact IMA203 can have on metastatic melanoma patients," said Martin Wermke, M.D., Coordinating Investigator of the ACTengine® IMA203 TCR-T trial. "These results now affirm the therapeutic potential of IMA203 and provide a strong rationale for the expedited late-stage clinical development of this product candidate."

"We are enthusiastic about the clinical data as they confirm our conviction in the durability and long-term efficacy of ACTengine® IMA203, demonstrated by the favorable median progression-free survival for patients in the dose expansion cohort. I would like to highlight that a subgroup of 12 out of 26 patients showed more than 50% reduction of tumor lesions and a median PFS of 13.4 months," said Cedrik Britten, M.D., Chief Medical Officer at Immatics. "We believe the presentation of this data set in conjunction with our recent meeting with the FDA, which has resulted in a pivotal trial design with progression-free survival as the primary endpoint for full approval, positions us to advance the development of IMA203 in the second-line or later metastatic melanoma setting."

Patient Population and Clinical Data Summary - ACTengine® IMA203 Monotherapy Phase 1b Trial

Patient population: *Heavily pretreated metastatic melanoma patients*

As of August 23, 2024, 28 heavily pretreated patients with metastatic melanoma were treated at the recommended Phase 2 dose (RP2D, 1 to 10 billion total TCR-T cells) with IMA203 during the Phase 1b dose expansion part of the clinical trial. The treated patient population is composed of patients with a median of 2 lines of prior systemic treatments, consisting of cutaneous melanoma patients (N=13), uveal melanoma patients (N=12), mucosal melanoma patients (N=2) and a patient with melanoma of unknown primary (N=1).

Safety: *Favorable tolerability profile demonstrated across all dose levels in Phase 1a and Phase 1b*

IMA203 monotherapy has maintained a favorable tolerability profile with no treatment-related Grade 5 adverse events in the safety population (N=70[1] Phase 1a and Phase 1b patients across all dose levels and all tumor types), even at doses up to ~$10x10^9$ TCR-T cells.

The most frequent adverse events were expected cytopenias (Grade 1 – 4) associated with lymphodepletion as well as mostly mild to moderate cytokine release syndrome (CRS). Some patients infrequently experienced ICANS (Grade 1: 6%, Grade 2: 4%, Grade 3: 4%).

The full IMA203 monotherapy tolerability profile is also generally consistent with that observed in the Phase 1b melanoma subset.

Anti-tumor activity and durability: *Durable objective responses in melanoma patients at RP2D*[3]

This data update adds substantial maturity to the most recent data update from May 2024 (data cut-off on April 25, 2024). The median follow-up for the median duration of response for this analysis was 9.3 months compared to 3.5 months in May 2024.

[1] All patients who started lymphodepletion. Includes one patient who started lymphodepletion but did not receive IMA203 TCR-T cells and one patient who started lymphodepletion with T cell infusion scheduled after data-cut.

	All melanoma patients in Phase 1b (N=28[2,3])	Cutaneous melanoma patients in Phase 1b (N=13[3])
Confirmed Objective Response Rate	**54%** (14/26)	**54%** (7/13)
Objective Response Rate	**62%** (16/26)	**62%** (8/13)
Disease Control Rate	**92%** (24/26)	**92%** (12/13)
Tumor Shrinkage	**88%** (23/26)	**85%** (11/13)
Median Duration of Response	**12.1** months	**12.1** months
Median Progression-Free Survival	**6.0** months	**6.1** months
Median Overall Survival	**Not reached**	**15.9** months

Progression-free survival (PFS) and overall survival (OS): *Significant shift in PFS and OS between Phase 1a dose escalation to Phase 1b dose expansion in melanoma patients*
Manufacturing improvements were implemented prior to the Phase 1b part of the trial to enhance key features of IMA203. As a result, all patients in dose expansion were treated with an updated version of IMA203 that includes a T cell enrichment process using monocyte depletion (negative selection) or CD8/CD4 positive selection.

The data presented today demonstrate a significant positive shift in median PFS and median OS between melanoma patients treated during Phase 1a and patients treated in Phase 1b.

	Phase 1b dose expansion melanoma patients (N=28)	Phase 1a dose escalation melanoma patients (N=11)
Median Progression-free Survival	**6.0** months	**2.6** months
Median Overall Survival	**Not reached**	**6.3** months

[2] First tumor assessment post infusion pending for additional two melanoma patients at data-cut.
[3] Melanoma efficacy population excludes 5 patients treated at DL4 in Phase 1a of the trial as reported in the May 2024 update, based on different manufacturing version used that affects the T cell product. See the IMA203 data presentation slides available on the Immatics website for more detailed information and a patient population flow chart.

In addition, approximately half of all patients in the Phase 1b trial have a deep response (>50% tumor reduction). This subgroup of patients was observed to have a median PFS of more than one year, while patients with <50% tumor reduction (including patients with tumor size increase) were still observed with a more than 2 times longer median PFS compared to patients treated in dose escalation with suboptimal doses.

Translational data: *IMA203 T cell dose and T cell exposure are associated with clinical responses*

Translational data from patients across Phase 1a and Phase 1b indicate that IMA203 T cells rapidly engrafted in all patients after a single dose and show a persistence of more than two years. Three associations/correlations were observed demonstrating high consistency of dose exposure, biological data and clinical outcome in all patients treated with IMA203 for which samples were available (N=65):

1. IMA203 T cell dose is significantly associated with confirmed clinical responses (p=0.02),
2. IMA203 T cell dose is correlated with T cell peak level (c_{max}, r=0.84, $p=1.6x10^{-18}$),
3. IMA203 T cell peak level (c_{max}, p=0.05) and T cell exposure (AUC_{0-28d}, p=0.05) are associated with confirmed clinical responses.

Development Path and Manufacturing for ACTengine® IMA203 Monotherapy

On September 24, 2024, Immatics completed a Type D meeting with the U.S. Food and Drug Administration (FDA) to confirm RP2D and the CMC package as well as discuss the trial design for SUPRAME, the planned registration-enabling Phase 3 randomized-controlled clinical trial for IMA203. Written post-meeting minutes from the FDA have been received.

The Phase 3 trial will evaluate IMA203 targeting PRAME in 360 HLA-A*02:01-positive patients with second-line or later (2L+) unresectable or metastatic melanoma who have received prior treatment with a checkpoint inhibitor. Patients will be randomized 1:1 for IMA203 or investigator's choice of selected approved treatments in the 2L+ setting.

Based on the Company's discussions with the FDA, the primary endpoint for full approval will be median PFS. Given the expected PFS of 2-3 months[4] in this patient population, as well as the PFS of 6 months observed in the data from the IMA203 Phase 1b trial, the Company has determined that utilizing median PFS as the primary endpoint is the fastest pathway to seeking full approval and presents a more attractive commercial positioning as

[4] See the IMA203 data presentation slides available on the Immatics website for more detailed information and an overview of studies.

compared to objective response rate (ORR). Secondary endpoints for the trial will include ORR, safety, duration of response, no overall survival detriment and patient-reported outcomes. A pre-specified interim analysis is planned for early 2026.

The SUPRAME Phase 3 trial is planned to run globally with sites in the United States and Europe with the initial goal of seeking Biologics License Application (BLA) approval in the United States. On October 2, 2024, Immatics also completed a meeting with the Paul Ehrlich Institute (PEI), the German regulatory authority, and determined the same trial design for conducting the clinical trial in Germany.

The Phase 3 trial is on track to commence in December 2024 and patient enrollment is forecasted to be completed in 2026. The Company aims to submit a BLA in early 2027 for full approval.

Immatics' late-stage clinical cell therapy development is supported by its differentiated manufacturing related to timeline, capabilities and facilities. ACTengine® IMA203 cell therapy products are manufactured within 7 days, followed by a 7-day QC release testing at a success rate of >95% to reach the target dose. The Company has also completed construction of a ~100,000 square foot R&D and GMP manufacturing facility with a modular design for efficient and cost-effective scalability intended to serve early-stage and registration-enabling trials, as well as commercial supply. The new site is expected to start GMP manufacturing of cell therapy products in early 2025. Meanwhile, the existing GMP facility, which is run in collaboration with UT Health, will remain active until YE 2025

Immatics Conference Call and Webcast

Immatics will host a conference call and webcast today, October 10, 2024, at 9:00 am EDT/3:00 pm CEST to discuss the clinical data.

A replay of the webcast will be made available shortly after the conclusion of the call and archived on the Immatics website for at least 90 days.

About ACTengine® IMA203 and Target PRAME

ACTengine® IMA203 is Immatics' most advanced TCR-based autologous cell therapy that is directed against an HLA-A*02-presented (human leukocyte antigen) peptide derived from preferentially expressed antigen in melanoma (PRAME), a protein frequently expressed in a large variety of solid cancers. PRAME is homogeneously and specifically expressed in tumor tissue and Immatics' PRAME peptide is present at a high copy number per tumor cell. The peptide has been identified and characterized by Immatics' proprietary mass spectrometry-based target discovery platform, XPRESIDENT®. Through its proprietary TCR discovery and engineering platform

XCEPTOR®, Immatics has generated a highly specific T cell receptor (TCR) against this target for ACTengine® IMA203.

ACTengine® IMA203 TCR-T is currently being evaluated as a monotherapy in a Phase 1 clinical trial in patients with solid tumors expressing PRAME, such as cutaneous melanoma. An IMA203 registration-enabling randomized controlled Phase 3 trial, "SUPRAME," is planned to commence in December 2024.

ACTengine® IMA203 TCR-T is also currently being evaluated in Phase 1 IMA203CD8 (GEN2) monotherapy, where IMA203 engineered T cells are co-transduced with a CD8αβ co-receptor.

- END -

About Immatics
Immatics combines the discovery of true targets for cancer immunotherapies with the development of the right T cell receptors with the goal of enabling a robust and specific T cell response against these targets. This deep know-how is the foundation for our pipeline of Adoptive Cell Therapies and TCR Bispecifics as well as our partnerships with global leaders in the pharmaceutical industry. We are committed to delivering the power of T cells and to unlocking new avenues for patients in their fight against cancer.

Immatics intends to use its website www.immatics.com as a means of disclosing material non-public information. For regular updates you can also follow us on X, Instagram and LinkedIn.

Forward-Looking Statements
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ACTengine® IMA203 TCR-T Targeting PRAME in PD1 Refractory Metastatic Melanoma

- Phase 1b Dose Expansion Clinical Data Update

October 10, 2024

Oral presentation by Martin Wermke at the Society of Melanoma Research Congress on October 11, 2024

Data cut-off Aug 23, 2024

Delivering the Power of T cells to Cancer Patients

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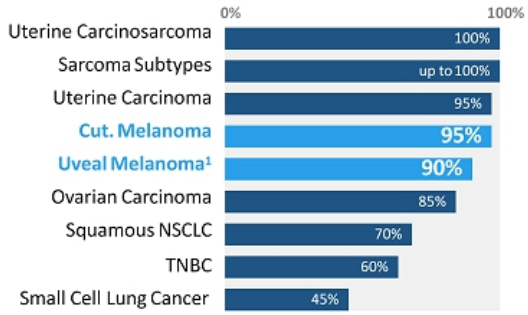
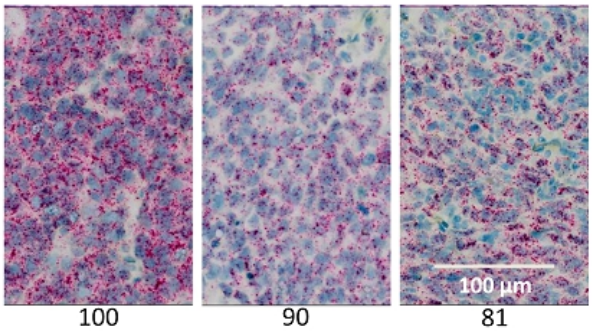
PRAME – A Widely Expressed Cancer Testis Antigen

% PRAME Positive Patients in Selected Indications



Target prevalence based on TCGA (SCLC: in-house) RNAseq data combined with proprietary mass spec-guided RNA expression threshold;
[1] Uveal melanoma target prevalence based on IMADetect qPCR testing of screening biopsies from 61 trial patients.

PRAME RNA Detection in Melanoma Samples (ISH)



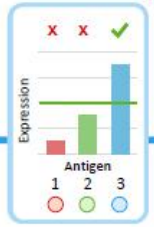
ACTengine® IMA203 TCR-T Monotherapy – Patient Flow

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

Target Profiling
IMADetect® mRNA assay using
Immatics' MS-guided threshold;
Biopsy or archived tissue



Leukapheresis

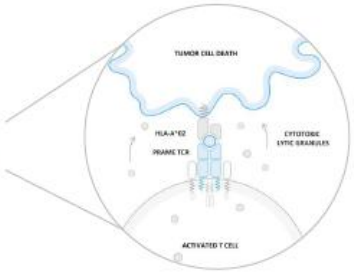
Manufacturing
by Immatics

Short process time of 14 days
7-day manufacturing process
applying CD8/CD4 T cell selection
7-day QC release testing

Lymphodepletion*

Low dose IL-2**

**Infusion of ACTengine®
IMA203 TCR-T Product**



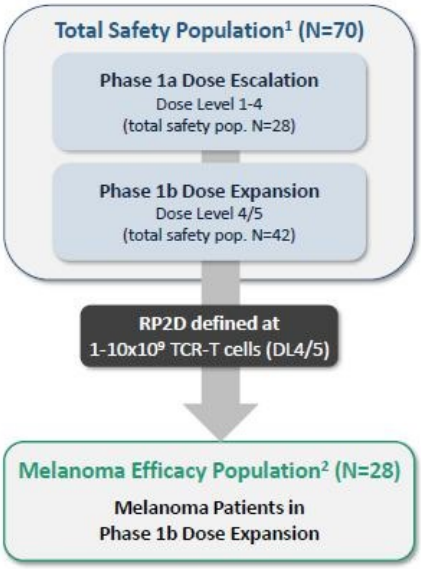
Patient screening data from Immatics' clinical trials:

Cut. Melanoma	95% (138/146)
Uveal Melanoma	89% (54/61)
Uterine Carcinoma	93% (14/15)
Ovarian Carcinoma	81% (48/59)

*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 Trial in Melanoma

Heavily Pretreated Patient Population



	Total Safety Population[1]	Melanoma Dose Escalation Population	Melanoma Efficacy Population[2]
	All Comers (Phase 1a and Phase 1b)	Melanoma (Phase 1a)	Melanoma (Phase 1b, at RP2D)
Number of patients	Total N=70 Melanoma N=41 Other N=29	Total N=11 Cutaneous melanoma N=8 Uveal melanoma N=2 Mucosal melanoma N=1	Total N=28 Cutaneous melanoma N=13 Uveal melanoma N=12 Melanoma of unknown primary N=1 Mucosal melanoma N=2
Prior lines of systemic treatment (median, min, max)	3 (0, 9)	4 (2, 7)	2 (0, 6)
Thereof CPI (melanoma only) (median, min, max)	2 (0, 4)	2 (1, 4)	1* (0, 4)
LDH at baseline >1 x ULN [% of patients]	64.3	81.8	60.7
Baseline tumor burden Median Target lesion sum of diameter [mm] (min, max)	117.8 (15.0, 309.8)	117.5 (37.0, 211.0)	107.5 (15.0, 309.8)
Liver/brain lesions at baseline [% of patients]	65.7	63.6	82.1
Dose level	DL1-5	EC1/DL3/4	DL4/5
Total infused dose TCR-T cells [x10⁹]	2.09 (0.08, 10.2)	0.586 (0.10, 2.09)	4.1 (1.3, 10.2)

[1] See patient flow in appendix. [2] All infused patients; *Cutaneous melanoma patients had a median of 2 prior lines of checkpoints, see appendix; RP2D: recommended phase 2 dose; CPI: Checkpoint inhibitors; EC1: 0.06-0.12x10⁹TCR-T cells/m² BSA; DL3: 0.2-0.48x10⁹ TCR-T cells/m² BSA, DL4: 0.2-1.2x10⁹TCR-T cells/m² BSA, DL5: 1.201 - 4.7x10⁹ TCR-T cells/m² BSA

Most Frequent Adverse Events of IMA203 Across All Dose Levels in Phase 1a/b

N=70 Patients in Total Safety Population[1]

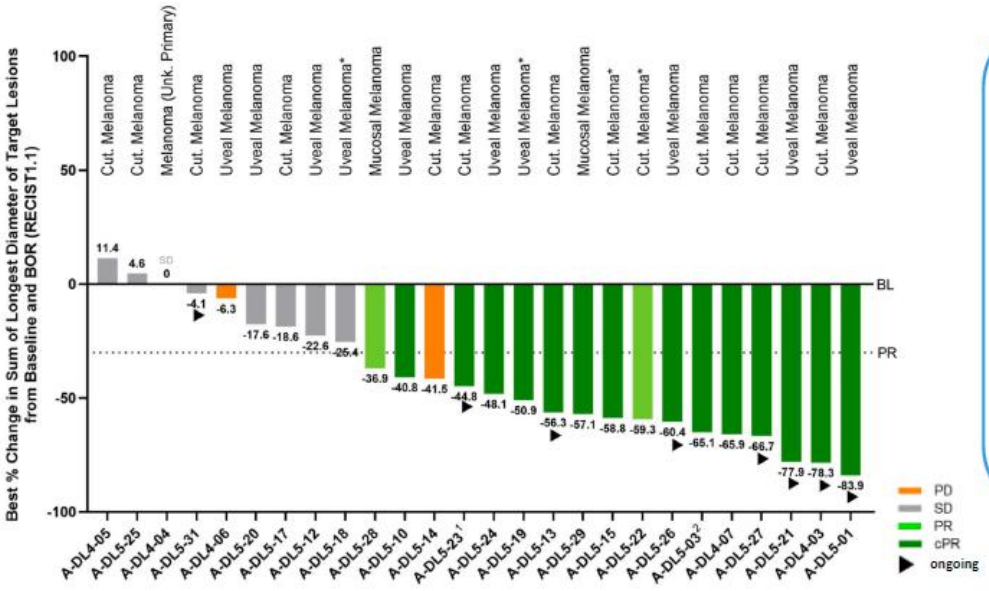
- Most frequent adverse events were **expected cytopenias (Grade 1-4)** associated with lymphodepletion in all patients
- **Mostly mild to moderate cytokine release syndrome (CRS)**
  - 37% (26/70) Grade 1
  - 46% (32/70) Grade 2
  - 11% (8/70) Grade 3[2]
- **Infrequent ICANS (6% Grade 1, 4% Grade 2, 4% Grade 3)**
- **No IMA203-related deaths**
- Full IMA203 monotherapy tolerability profile is available in appendix
- Tolerability in the melanoma subset is generally consistent with the full IMA203 monotherapy tolerability profile

Favorable tolerability profile for IMA203 monotherapy at recommended phase 2 dose ($1x10^9$ to $10x10^9$ TCR-T cells)

[1] See patient flow in appendix; [2] One grade 3 CRS only after exploratory second infusion; CRS and ICANS graded by CARTOX criteria (Neelapu *et al.*, 2019); ICANS: Immune Effector Cell-Associated Neurotoxicity Syndrome.

Best Overall Response for IMA203 in Melanoma

Objective Responses in Heavily Pretreated Patients in Phase 1b (N=28#)

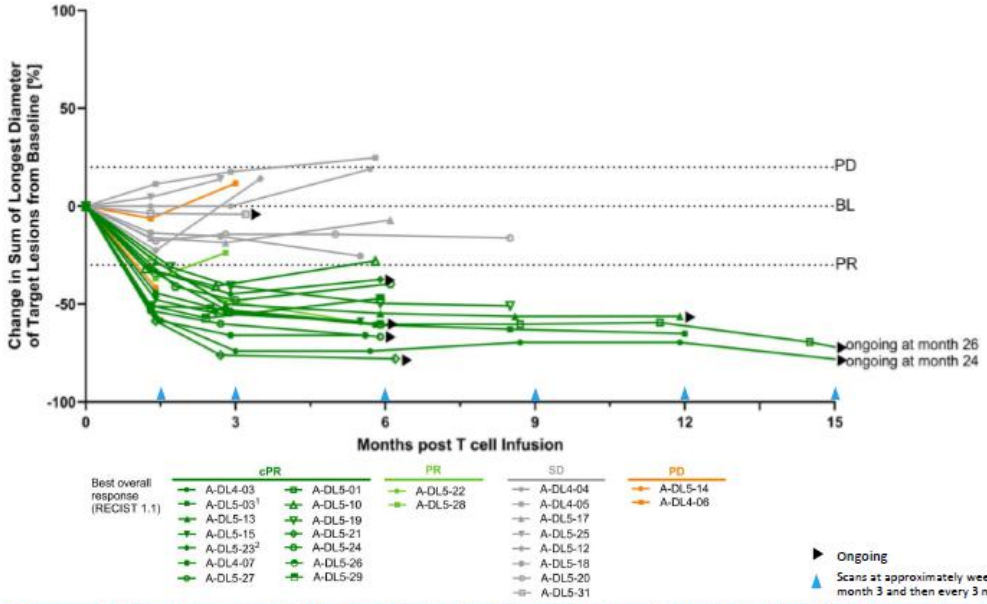


cORR	**54% (14/26)**
median DOR	**12.1 months**
(min, max)	(4.2, 25.5+ months)
mFU	9.3 months
7/14 confirmed responses ongoing	
median PFS	**6.0 months**
(min, max)	(0.3+, 26.8+ months)
median OS	**Not reached**
(min, max)	(0.3+, 26.8+ months)
mFU	8.6 months
ORR	62% (16/26)
Tumor shrinkage**	88% (23/26)
DCR (at week 6)	92% (24/26)

[1]First tumor assessment post infusion pending for two melanoma patients at data-cut; [2]Maximum change of target lesions and RECIST1.1 response at different timepoints. **Tumor shrinkage of target lesions; [1]Patient A-DL5-23 is off study at data cut-off; [2]Patient out of study due to PD (external assessment); Initial ORR: Objective response rate according to RECIST 1.1 at any post infusion scan; Confirmed ORR (cORR): Confirmed objective response rate according to RECIST 1.1 for patients with at least two available post infusion scans or patients with PD at any prior timepoint, patients with ongoing unconfirmed PR not included in cORR calculation; 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; Overall survival (OS) and progression-free survival (PFS) assessed at data-cut; BL: Baseline; PD: Progressive Disease; SD: Stable Disease; PR: Partial Response; cPR: Confirmed Partial Response; DCR: Disease control rate; mFU: median follow-up

Response Over Time of IMA203 in Melanoma

Durable Responses 2 Years+ after Treatment in Heavily Pretreated Patients in Phase 1b (N=28[#])



Best overall response (RECIST 1.1)

cPR		PR	SD	PD
A-DL4-03	A-DL5-01	A-DL5-22	A-DL4-04	A-DL5-14
A-DL5-03[1]	A-DL5-10	A-DL5-28	A-DL4-05	A-DL4-06
A-DL5-13	A-DL5-19		A-DL5-17	
A-DL5-15	A-DL5-21		A-DL5-25	
A-DL5-23[2]	A-DL5-24		A-DL5-12	
A-DL4-07	A-DL5-26		A-DL5-18	
A-DL5-27	A-DL5-29		A-DL5-20	
			A-DL5-31	

▶ Ongoing

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

cORR	**54% (14/26)**
median DOR	**12.1 months**
(min, max)	(4.2, 25.5+ months)
mFU	9.3 months
7/14 confirmed responses ongoing	
median PFS	**6.0 months**
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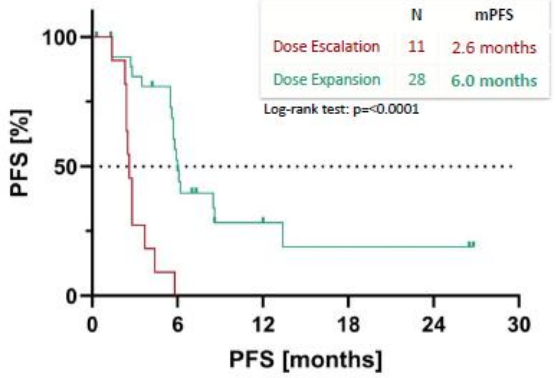
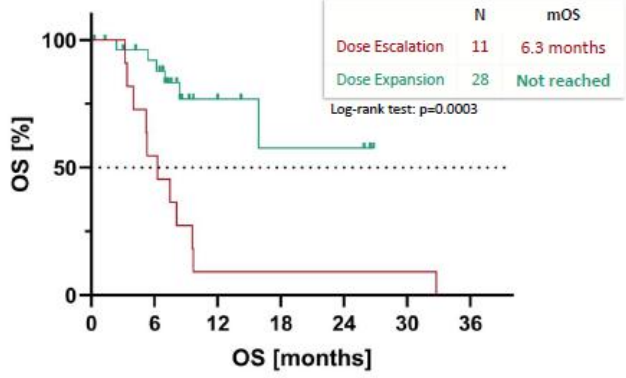
Significant Shift in PFS and OS Between Dose Escalation & Dose Expansion

PFS of 6 Months and OS Not Reached in Melanoma Efficacy Population

Progression Free Survival



Overall Survival



- Significant shift in PFS and OS between melanoma patients treated during the dose escalation and dose expansion phase
- PFS in dose escalation is comparable to reported data in 2L+ cut. melanoma population*
- OS in dose escalation is shorter than reported OS for 2L+ cut. melanoma population*
- All patients in the dose escalation group died and 20/28 patients are alive in dose expansion

Overall survival (OS) and progression-free survival (PFS) censored at data-cut; * These data are derived from different clinical trials at different points in time with differences in trial design and patient populations. As a result, cross-trial comparisons cannot be made, and no head-to-head clinical trials have been conducted.

IMA203 Phase 1b in Melanoma: Overview of Studies

PFS and OS Data in 2L+ Melanoma Cohorts

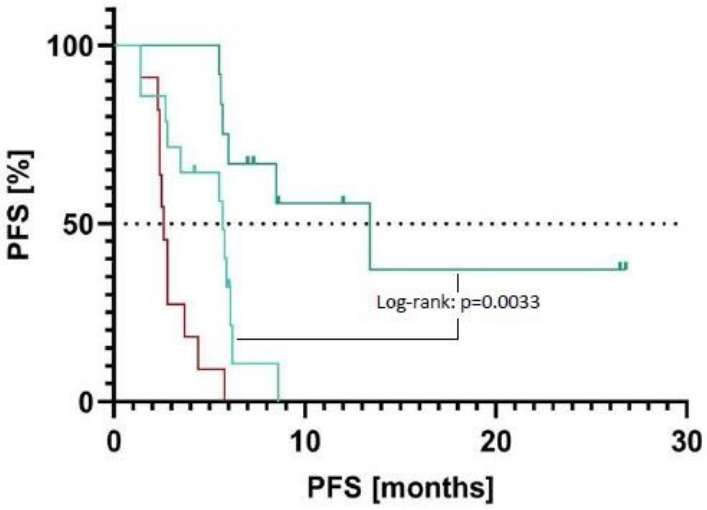
Drug Product	Phase	N	2L+ melanoma patient population	Prior lines of therapies	mPFS (months)	mOS (months)
IMA203 in Melanoma	1b (Dose Expansion)	28	46% cutaneous 43% uveal 11% other	4% n=0, 18% n=1, 32% n=2, 29% n=3:, 4% n=4, 11% n=5, 4% n=6 86% received prior CPI (median of 1 prior line of CPI in overall population, median of 2 prior lines of CPI in cut. melanoma) Median of 2 prior lines, median of 2 prior lines in cut. melanoma	6.0	not reached
IMA203 in Melanoma	1a (Dose Escalation)	11	73% cutaneous 18% uveal 9% other	0% n=1, 27% n=2, 73% n>2 prior lines 100% received prior CPI (median of 2 prior lines of CPI, median of 2.5 prior lines of CPI in cut. melanoma) Median of 4 prior lines, median of 4.5 prior lines in cut. melanoma	2.6	6.3
IMA201/202/203 combined in Melanoma	1a (Dose Escalation)	19	63% cutaneous 11% uveal 26% other	0% n=1, 16% n=2, 84% n>2 prior lines 100% received prior CPI (median 3 prior lines of CPI) Median of 4 prior lines, median of 4.5 prior lines in cut. melanoma	2.5	5.3
Lifileucel (C-144-01, Cohort 2+4)[1]	2	153	54% cutaneous 0% uveal 45% other	median of 3 prior lines (min/max: 1/9) 100% received prior CPI	4.1	13.9
Tilsotolimod + Ipilimumab (ILLUMINATE-301)[2]	3	238	85% cutaneous 0% uveal 15% other	57% n=1, 27% n=2, 12% n>2 prior lines 99% received prior CPI	2.9	11.6
Nivolumab + Relatlimab (RELATIVITY-020, D1 Cohort)[3]	1/2	354	68% cutaneous 0% uveal 32% other	46% n=1, 35% n=2, 19% n≥3 prior lines 99% received prior CPI	2.1	14.7

These data are derived from different clinical trials at different points in time with differences in trial design and patient populations. As a result, cross-trial comparisons cannot be made, and no head-to-head clinical trials have been conducted.

[1] Chesney et al., 2022; [2] Diab et al., 2024; [3] Ascierto et al., 2023.

Enhanced PFS in Phase 1b Melanoma Patients with Deep Responses

N=26#



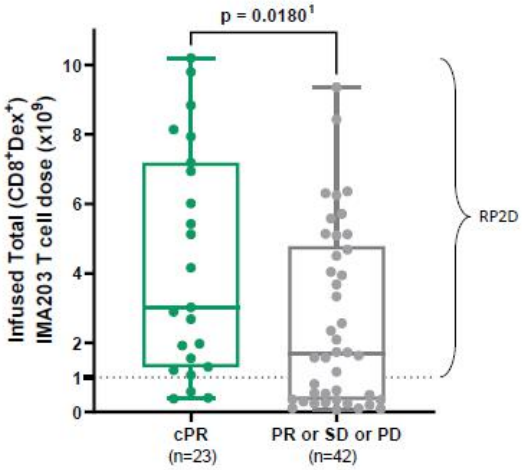
	N	mPFS
Dose Escalation IMA203	11	2.6 months
Dose Expansion IMA203 <50% tumor size reduction (including tumor size increase)	14*	5.7 months
Dose Expansion IMA203 ≥50% tumor size reduction	12	13.4 months

- Approx. half of all patients have a deep response (>50% tumor reduction)
- This subgroup of patients has highly medically meaningful mPFS of more than 1 year
- Patients with <50% tumor reduction (including tumor size increase) still observe a more than 2x longer mPFS as compared to patients treated in dose escalation with suboptimal doses

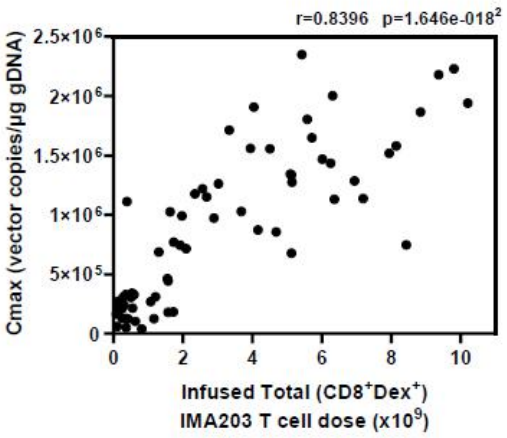
#Excluding two patients that were infused but did not have their first tumor assessment post baseline at data-cut;
*Includes one patient with ongoing SD 4.4 months after infusion with tumor reduction <50%

Dose Response Relationship

IMA203 T Cell Dose is Associated with Clinical Activity and IMA203 T Cell Exposure (N=65 out of 68*)



IMA203 T Cell Dose is Associated with Clinical Activity

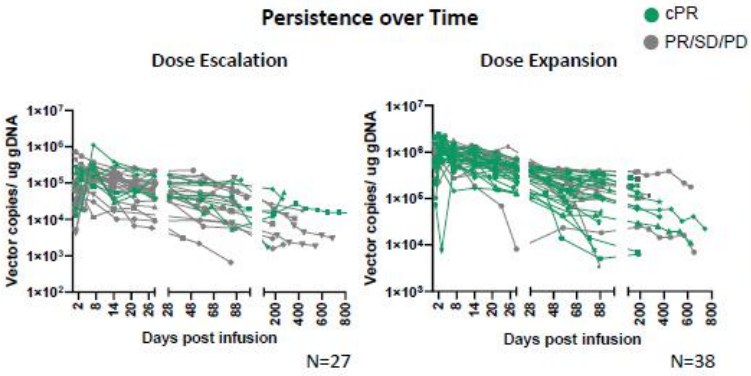


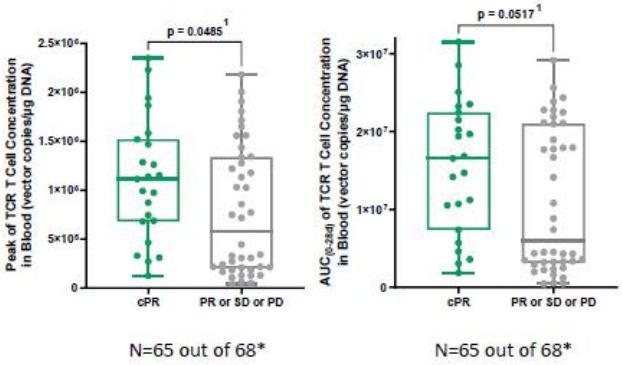
IMA203 T Cell Dose Correlates with T Cell Exposure

[1]Mann-Whitney U test; [2]Spearman Correlation; * no data available yet for patients recently treated;
PD: Progressive Disease; SD: Stable Disease; PR: Partial Response; cPR: Confirmed Partial Response; , RP2D: recommended phase 2 dose

Exposure Response Relationship

IMA203 T Cell Persistence Over Time and T Cell Exposure is Associated with Clinical Response





Rapid T cell engraftment (C_{max}) in all patients with over two years of persistence

Higher C_{max} and persistence in patients treated at higher doses in dose expansion versus dose escalation

IMA203 T cell exposure (C_{max} & $AUC_{(0\text{-}28d)}$) is associated with clinical responses

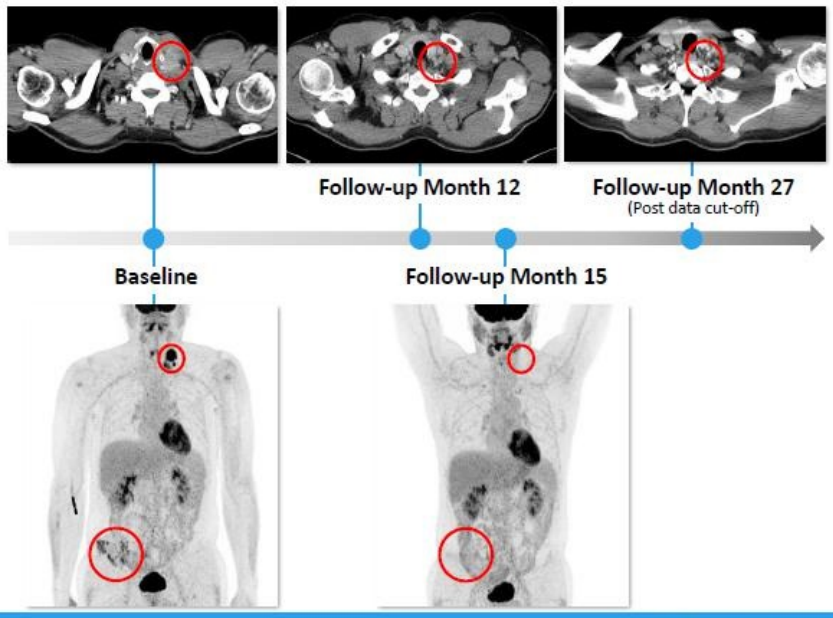
[1] Mann-Whitney U test; * no data available yet for patients recently treated;
PD: Progressive Disease; SD: Stable Disease; PR: Partial Response; cPR: Confirmed Partial Response, AUC: Area under curve

Patient Case A-DL4-03 : Cutaneous Melanoma

PET-based Complete Response 15 Months Post Infusion and Ongoing Response at 24 Months

51-year-old male patient with complete remission according to PET imaging after 15 months and ongoing beyond two years post infusion at data cut

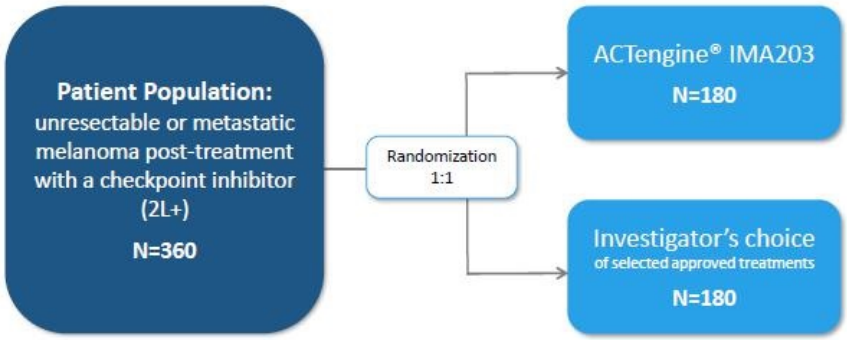
- 5 prior systemic treatment lines:
  - Dabrafenib + Trametinib
  - Pembrolizumab
  - Dabrafenib + Trametinib + Vemurafenib + Cobimetinib
  - Tebentafusp
  - Encorafenib + Binimetinib
- 13 years of cancer history
- 23 mm target lesion in cervical lymph node and non-target lesions in pelvic bone and lung
- Patient received ~1.3×10^9 IMA203 TCR-T cells
- Ongoing PR at 24 months post infusion with -78.3% reduction according to RECIST1.1
- Metabolic complete response reported based on investigator-initiated PET imaging at baseline and month 15 post infusion



Images courtesy of treating physician (Dr. Martin Wermke, University of Dresden)

SUPRAME: Registration-enabling Randomized Phase 3 Trial

Trial Design Following Recent Type D Meeting with FDA and SA Meeting with PEI[1]



Endpoints

- **Primary Endpoint**
  - **PFS**
- **Secondary Endpoints**
  - Safety
  - ORR + DOR
  - No OS detriment
  - Patient-reported outcomes (EORTC QLQ-C30, EQ-5D-5L)

Next Steps

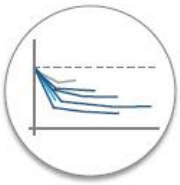
- SUPRAME Phase 3 trial is projected to commence in **December 2024**
- Pre-specified interim analysis planned after approx. 200 patients enrolled
- Full enrollment anticipated by late **2026**

ACTengine® IMA203 TCR-T Monotherapy Targeting PRAME in Melanoma

Summary of Clinical Data

Tolerability

Favorable tolerability profile: mostly mild to moderate CRS; infrequent ICANS (5.7% Gr1, 4.3% Gr2, 4.3% Gr3); no treatment related deaths



Anti-Tumor Activity & Durability

54% (14/26) cORR and 92% (24/26) DCR; 12.1 months mDOR and ongoing responses for over two years

PFS & OS

PFS of 6 months and OS not reached (mFU 8.6 months)

Biological Data

T cell dose and exposure are significantly associated with clinical response

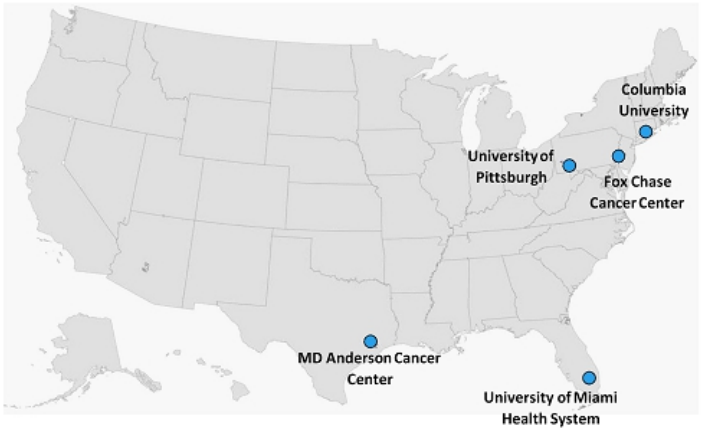
Broad Reach

FDA RMAT designation received in multiple PRAME expressing cancers including cutaneous and uveal melanoma

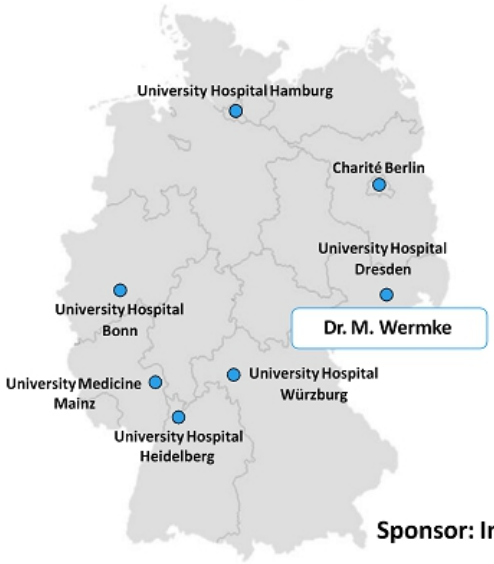
SUPRAME Phase 3 trial is projected to commence in **December 2024**

We are Immensely Grateful to the Patients, Their Families …

United States



Germany



… and the Investigators at the Clinical Sites

Sponsor: Immatics

Appendix

Tolerability Profile of IMA203 Across All Dose Levels in Phase 1a/b

All ≥Grade 3 Adverse Events (N=70[1])

TEAEs by maximum severity for all patients in Phase 1a and Phase 1b (N=70[1])

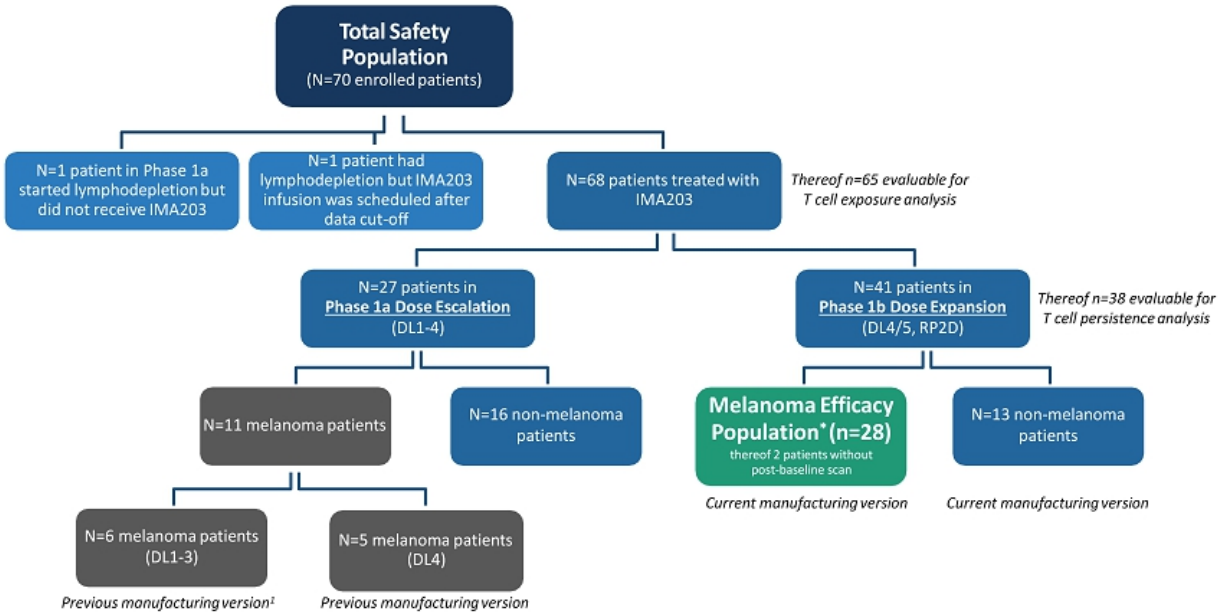
Adverse event (System organ class, Preferred term)	≥ Grade 3 No.	%
Patients with any adverse event	70	100.0
Adverse Events of Special Interest	9	12.9
Cytokine release syndrome	8	11.4
ICANS[2]	3	4.3
Blood and lymphatic system disorders	70	100.0
Neutropenia	62	88.6
Lymphopenia	39	55.7
Leukopenia	38	54.3
Anaemia	36	51.4
Thrombocytopenia	24	34.3
Febrile neutropenia	2	2.9
Cytopenia	1	1.4
Leukocytosis	1	1.4
Infections and infestations	10	14.3
Urinary tract infection	2	2.9
Appendicitis	1	1.4
COVID-19	1	1.4
Cytomegalovirus infection reactivation	1	1.4
Enterococcal infection	1	1.4
Human herpesvirus 6 encephalitis	1	1.4
Infection	1	1.4
Orchitis	1	1.4
Sepsis[3,4]	1	1.4
Septic shock[3]	1	1.4
Investigations	10	14.3
Alanine aminotransferase increased	6	8.6
Aspartate aminotransferase increased	5	7.1
Blood creatinine increased	2	2.9
Blood alkaline phosphatase increased	1	1.4
Blood bilirubin increased	1	1.4
Blood fibrinogen decreased	1	1.4
Lymphocyte count increased	1	1.4
Respiratory, thoracic and mediastinal disorders	10	14.3
Hypoxia	4	5.7
Pleural effusion	2	2.9
Bronchial obstruction	1	1.4
Dyspnoea	1	1.4
Epistaxis	1	1.4
Laryngeal inflammation	1	1.4
Respiratory failure	1	1.4

Adverse event (System organ class, Preferred term)	≥ Grade 3 No.	%
table continued...		
Metabolism and nutrition disorders	7	10.0
Hypokalaemia	3	4.3
Hyponatraemia	3	4.3
Hypophosphataemia	2	2.9
Dehydration	1	1.4
Failure to thrive	1	1.4
Vascular disorders	7	10.0
Hypertension	6	8.6
Hypotension	1	1.4
Renal and urinary disorders	6	8.6
Acute kidney injury	4	5.7
Nephritis	1	1.4
Proteinuria	1	1.4
Gastrointestinal disorders	5	7.1
Abdominal pain	3	4.3
Diarrhoea	1	1.4
Ileus	1	1.4
Vomiting	1	1.4
General disorders and administration site conditions	4	5.7
Fatigue	1	1.4
General physical health deterioration[3]	1	1.4
Pyrexia	1	1.4
Swelling face	1	1.4
Skin and subcutaneous tissue disorders	4	5.7
Rash maculo-papular	3	4.3
Eczema	1	1.4
Cardiac disorders	3	4.3
Atrial fibrillation[5]	3	4.3
Eye disorders	2	2.9
Periorbital oedema	1	1.4
Ulcerative keratitis	1	1.4
Injury, poisoning and procedural complications	2	2.9
Humerus fracture	1	1.4
Infusion related reaction	1	1.4
Musculoskeletal and connective tissue disorders	2	2.9
Back pain	1	1.4
Muscle spasms	1	1.4

Adverse event (System organ class, Preferred term)	≥ Grade 3 No.	%
table continued...		
Nervous system disorders	2	2.9
Headache	1	1.4
Posterior reversible encephalopathy syndrome	1	1.4
Endocrine disorders	1	1.4
Inappropriate antidiuretic hormone secretion	1	1.4
Hepatobiliary disorders	1	1.4
Cholangitis	1	1.4
Immune system disorders	1	1.4
Haemophagocytic lymphohistiocytosis	1	1.4
Reproductive system and breast disorders	1	1.4
Vaginal haemorrhage	1	1.4

All treatment-emergent adverse events (TEAEs) with ≥ Grade 3 regardless of relatedness to study treatment. 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 Cytokine release syndrome and ICANS were determined according to CARTOX criteria (Neelapu et al., 2019). Patients are counted only once per adverse event and severity classification. Based on interim data extracted from open clinical database (23-Aug-2024); [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] Fatal Adverse events were not considered related to any study drug; [4] Patient died from sepsis of unknown origin and did not receive IMA203 TCR-T cells; [5] DLT: Dose limiting toxicity in phase 1a at DL2 reported on March 17, 2021.

IMA203 Phase 1 Patient Population Flow Chart



* Melanoma efficacy population excludes 5 patients treated at DL4 in Phase 1a of the trial as reported in the May 2024 update, based on different manufacturing version used that affects the T cell product (see slide 22); Current manufacturing version: T cell enrichment process using monocyte depletion (negative selection) or CD8/CD4 positive selection; prior manufacturing version: manufacturing process without specific T cell enrichment; [1] Except one DL3 patient with current manufacturing version.

Baseline Characteristics of Melanoma Patients in Phase 1a and Phase 1b

Focus on Cutaneous and Uveal Melanoma

	Melanoma Dose Escalation Population		Melanoma Efficacy Population[1]	
Indication	**Cutaneous Melanoma (N=8)**	**Uveal Melanoma (N=2)**	**Cutaneous Melanoma (N=13)**	**Uveal Melanoma (N=12)**
Prior lines of systemic treatment (median, min, max)	4.5 (2, 7)	2 (2, 2)	2 (1, 5)	2.5 (0, 6)
Thereof CPI (melanoma only) (median, min, max)	2.5 (2,4)	1 (1,1)	2 (1, 3)	1 (0, 4)
LDH at baseline >1 x ULN [% of patients]	75.0	100.0	69.2	58.3
Baseline tumor burden Median Target lesion sum of diameter [mm] (min, max)	106.3 (37.0, 211.0)	153,5 (109.9, 198.0)	123.0 (15.0, 309.8)	107.5 (38.6, 210.0)
Liver/brain lesions at baseline [% of patients]	50.0	100.0	69.2	91.7
Dose level	EC1/DL4	EC1, DL3	DL4/DL5	DL4/DL5
Total infused dose TCR-T cells [$x10^9$]	1.115 (0.099, 2.09)	0.417 (0.248, 0.586)	4.04 (1.3, 10.2)	4.33 (1.62, 8.43)

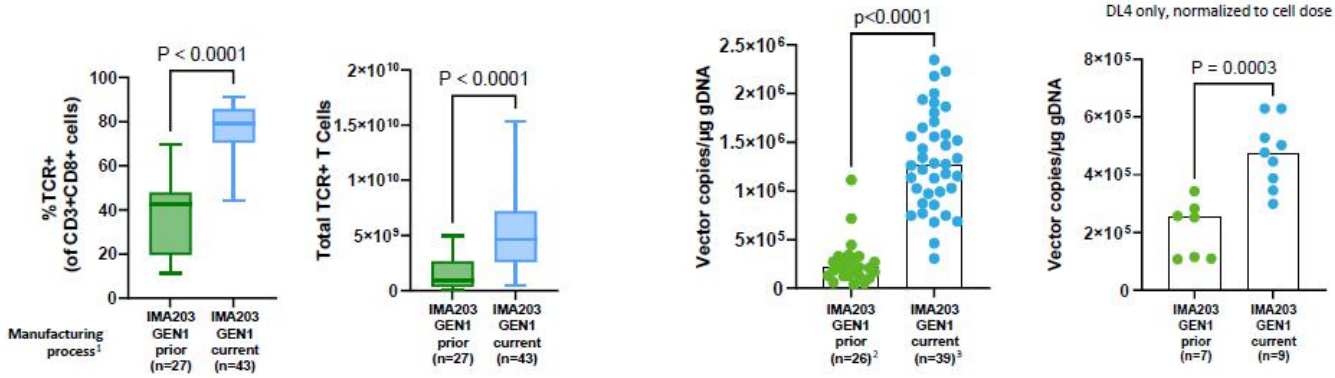
Cutaneous melanoma patients in Phase 1b had similar prior CPI exposure, higher tumor burden and higher incidence of liver/brain lesions compared to Phase 1a

[1] All infused melanoma patients in Ph1b dose expansion; CPI: Checkpoint inhibitors;
EC1: 0.06-0.12x10^9 TCR-T cells/m^2 BSA; DL3: 0.2-0.48x10^9 TCR-T cells/m^2 BSA ; DL4: 0.2-1.2x10^9 TCR-T cells/m^2 BSA, DL5: 1.201 - 4.7x10^9 TCR-T cells/m^2 BSA

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

Robust TCR-T product features → **Increased peak IMA203 T cell levels in patients**

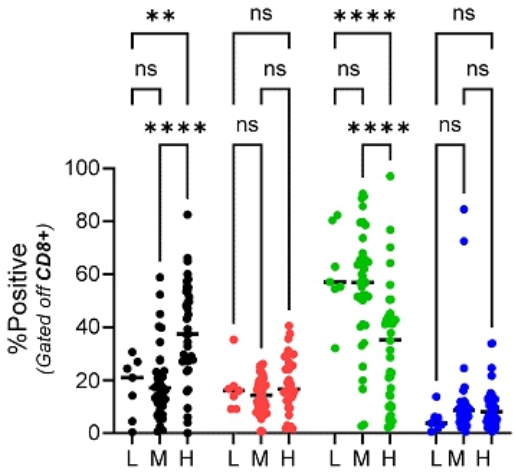


- Manufacturing improvements including T cell enrichment process (i.e. removal of monocyte fraction or CD4/CD8 selection) implemented in Phase 1b lead to improved TCR-T product features and increased TCR-T levels in patients
- The efficacy-evaluable population in this analysis (data cut-off Aug 23, 2024) focuses on this patient population only and reflects the expected population and product to be evaluated in the pivotal trial

[1] Current: T cell enrichment process using monocyte depletion (negative selection) or CD8/CD4 positive selection; prior: manufacturing process without specific T cell enrichment;
[2] one patient started lymphodepletion but did not receive IMA203 T cells; [3] no data available yet for patients recently treated

T Cell Selection Results in 'Younger' Phenotype of the TCR-T Product

Consequently, Terminally Differentiated T Cells are also Decreased



L = Low enrichment (n=7, prior manufacturing version)
M = Medium enrichment (n=37, current manufacturing version)
H = High enrichment (n=38, current manufacturing version)

Presented at the Process Development Summit 2024; L: No specific T cell enrichment; M: monocyte depletion (negative selection); H: CD4/CD8 T cell selection (positive selection);
Results are represented as separated scatter with median; *p<0.05, **p<0.01, ***p<0.001, ****p<0.0001, ns = not significant by a two-way ANOVA with Tukey's Multiple Comparisons.

Melanoma Patients Treated with IMA203 in Phase 1b Dose Expansion

Efficacy-evaluable Population (n=28*)

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	Reason for Progression
A-DL5-01	Uveal Melanoma	1	ARRY614 + Nivolumab	4.16	cPR	-83.9	Ongoing response at 26.8 months PFS	
A-DL4-03	Cut. Melanoma	5	Dabrafenib + Trametinib Pembrolizumab Dabrafenib + Trametinib + Vemurafenib + Cobimetinib Tebentafusp Encorafenib + Binimetinib	1.30	cPR	-78.3	Ongoing response at 26.5 months PFS	
A-DL5-13	Cut. Melanoma	3	Nivolumab Pembrolizumab Ipilimumab + Nivolumab	9.80	cPR	-56.3	Ongoing response at 12.0 months PFS	
A-DL5-21	Uveal Melanoma	2	Valproic acid + Sunitinib Tebentafusp	7.19	cPR	-77.9	Ongoing response at 8.6 months PFS	
A-DL5-26	Uveal Melanoma	2	Melphalan Tebentafusp	8.14	cPR	-60.4	Ongoing response at 7.3 months PFS	
A-DL5-27	Cut. Melanoma	1	Relatlimab + Nivolumab	10.20	cPR	-66.7	Ongoing response at 7.0 months PFS	
A-DL5-31	Cut. Melanoma	3	Ipilimumab + Nivolumab AB122 + AB154 Encorafenib + Binimetinib	3.68	SD	-4.1	Ongoing stable disease at 4.2 months PFS	
A-DL5-23	Cut. Melanoma	3	Ipilimumab + Nivolumab Encorafenib + Binimetinib Relatlimab + Nivolumab	6.94	cPR	-44.8	Ongoing response at 6 months PFS, patient off study at data-cut due to investigator decision (radiation of one target lesion)	
A-DL5-03	Cut. Melanoma	3	Interferon Pembrolizumab Ipilimumab + Nivolumab	5.12	cPR	-65.1	Response until 13.4 months PFS	Progression as determined by external assessment
A-DL5-19	Uveal Melanoma	6	Pembrolizumab Clinical trial intrahepatic PV10 Ipilimumab + Nivolumab Clinical trial Anti-CTLA-4 NF AB + XRT Clinical trial foghorn FHD-286 Pembrolizumab	5.42	cPR	-50.9	Response until 8.5 months PFS	Non-target lesion progression
A-DL5-24	Uveal Melanoma	3	NOX66-005 Idronoxil with radiotherapy IDE196 + Crizotinib LVGN3616 + LVGN6051 + LVGN7409+ Bevacizumab + Cyclophosphamide	2.89	cPR	-48.1	Response until 6.2 months PFS	Non-target lesion progression and new lesions
A-DL5-29	Mucosal Melanoma	2	Nivolumab Ipilimumab + Nivolumab	7.94	cPR	-57.1	Response until 6.0 months PFS	Target lesion and non-target lesion progression
A-DL5-10	Uveal Melanoma	1	SEAGEN CD40 Agonist	2.68	cPR	-40.8	Response until 5.8 months PFS	Target lesion progression
A-DL4-07	Cut. Melanoma	2	Nivolumab + Ipilimumab Brektovi + Mektovi + Nivolumab + Relatlimab	1.55	cPR	-65.9	Response until 5.7 months PFS	New lesions
A-DL5-15	Cut. Melanoma	1	Pembrolizumab	3.02	cPR	-58.8	Response until 5.6 months PFS	New lesions

* First tumor assessment post infusion pending for two melanoma patients at data-cut; [1] Transduced viable CD8 T cells;
BOR: Best overall response; DL: Dose level; PD: Progressive Disease; SD: Stable Disease; PR: Partial Response; cPR: Confirmed Partial Response; PFS: Progression-free survival (censored at data-cut)

Melanoma Patients Treated with IMA203 in Phase 1b Dose Expansion (cont.)

Efficacy-evaluable Population (n=28*)

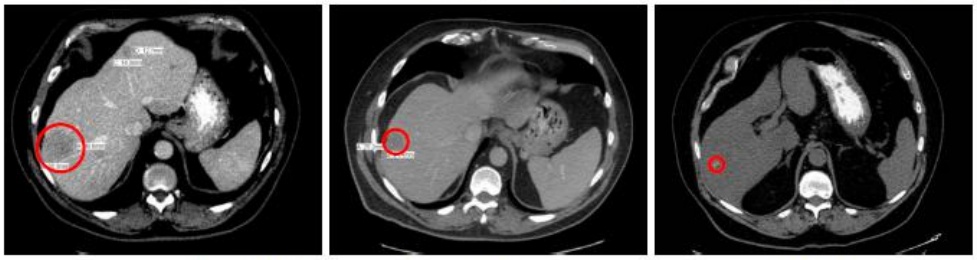
Patient ID	Indication	No of prior treatment lines	Prior treatments	Total infused dose TCR-T cells[1] [x10^9]	BOR	BOR (Max % change of target lesions)	Comment	Reason for Progression
A-DL5-22	Cut. Melanoma	2	Ipilimumab+Nivolumab Tafinlar + Mekinist	6.31	PR	-59.3	Disease stabilization until 2.7 months post infusion, unconfirmed response from 2.7 until 5.5 months PFS	New lesions
A-DL5-28	Mucosal Melanoma	3	Ipilimumab + Nivolumab Avapritinib Opdualag	3.33	PR	-36.9	Unconfirmed response until 2.8 months PFS	Target lesion progression
A-DL5-20	Uveal Melanoma	5	Ipilimumab + Pembrolizumab Tebentafusp Ipilimumab + Nivolumab IDE196 + Binimetinib FHD-286	8.43	SD	-17.6	Disease stabilization until 8.6 months PFS	Non-target lesion progression
A-DL5-17	Cut. Melanoma	2	Ipilimumab + Nivolumab+Tociliziumab Nivolumab + Relatlimab + Tocilizumab + Ipilimumab	4.04	SD	-18.6	Disease stabilization until 6.1 months PFS	New lesion
A-DL4-05	Cut. Melanoma	4	Nivolumab Nivolumab + Ipilimumab Dabrafenib + Trametinib Nivolumab	1.63	SD	11.4	Disease stabilization until 5.9 months PFS	New lesions, target lesion progression
A-DL4-04	Melanoma (Unk. Primary)	1	Ipilimumab + Nivolumab	1.73	SD	0.0	Disease stabilization until 5.7 months PFS	Non-target lesion progression and a new lesion
A-DL5-18	Uveal Melanoma	2	Tebentafusp Ipilimumab + Nivolumab	5.71	SD	-25.4	Disease stabilization until 5.5 months PFS	New lesion
A-DL5-12	Uveal Melanoma	3	Tyrosinase peptides Nivolumab + Ipilimumab + Denosumab Tebentafusp	4.50	SD	-22.6	Disease stabilization until 3.5 months PFS	Target and non-target lesion progression, new lesions
A-DL5-25	Cut. Melanoma	2	Ipilimumab + Nivolumab Axitinib + Nivolumab	5.14	SD	4.6	Disease stabilization until 2.7 months PFS	Non-target lesion progression, new lesions
A-DL4-06	Uveal Melanoma	0	NA	2.56	PD	-6.3	Progressive disease at 1.4 months PFS	New lesion
A-DL5-14	Cut. Melanoma	2	Nivolumab Encorafenib + Binimetinib	2.34	PD	-41.5	Progressive disease at 1.4 months PFS	New lesions
A-DL5-32	Uveal Melanoma	5	Ipilimumab + Nivolumab Tebentafusp Ipilimumab + Nivolumab DYP-688 Ipilimumab + Nivolumab	3.18	N/A	N/A	First scan post infusion pending at data cut-off	
AA-1	Uveal Melanoma	3	Ipilimumab + Nivolumab Darovasertib Tebentafusp	1.62	N/A	N/A	First scan post infusion pending at data cut-off	

*First tumor assessment post infusion pending for two melanoma patients at data-cut; [1] Transduced viable CD8 T cells;
BOR: Best overall response; DL: Dose level; PD: Progressive Disease; SD: Stable Disease; PR: Partial Response; cPR: Confirmed Partial Response; PFS: Progression-free survival (censored at data-cut)

Patient Case A-DL5-01: Uveal Melanoma

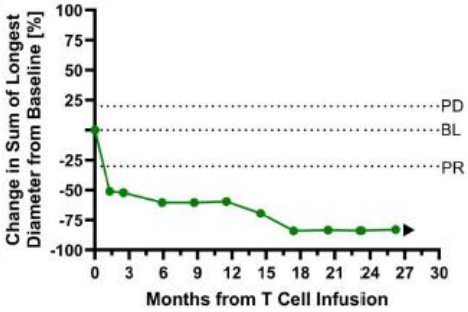
Long-term Responder Ongoing at 26+ Months

Baseline | Follow-up Month 1 | Follow-up Month 26



Overall RECIST1.1 assessment -51% PR -83% PR

RECIST Change from Baseline (%)



71-year-old male patient with ongoing shrinkage of liver lesion 26+ months post treatment

- 1 prior line of systemic treatment: ARRY614 + Nivolumab
- 6 years of cancer history
- 99.2 mm target lesion sum
- Patient received ~$4x10^9$ IMA203 TCR-T cells

CT scans courtesy of treating physician (Dr. Jason Luke, University of Pittsburgh)

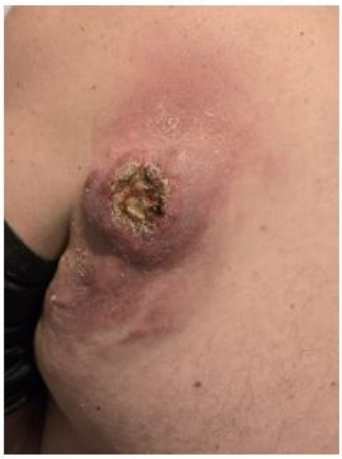
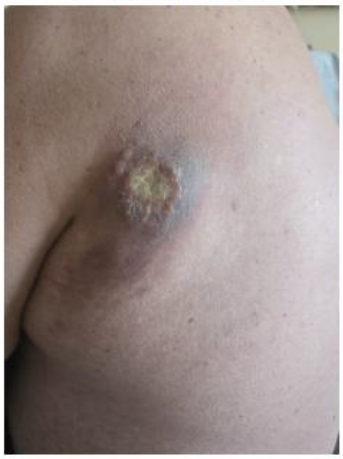
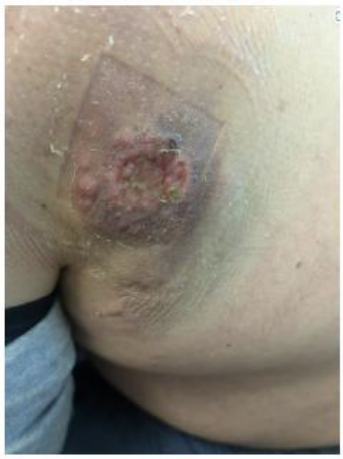
Data cut-off Aug 23, 2024

Patient Case A-DL5-033: Cutaneous Melanoma

Changes of a Melanoma Lesion of the Skin within 8 Days (Post Data Cut-off)

61-year-old male patient demonstrated changes of a melanoma lesion of the skin 8 days post IMA203 infusion

- 4 prior systemic treatment lines: 3 lines of CPI, 1 line of Brenetafusp (PRAME)
- 8 years of cancer history
- 118 mm target lesion sum
- Patient received ~$10x10^9$ IMA203 TCR-T cells

Baseline	Follow-up Day 8	Follow-up Day 15
		

Data cut Aug 23, 2024; Patient was treated post data cut-off date (Aug 26, 2024); Images courtesy of treating physician (Dr. Jason Luke, University of Pittsburgh)

Delivering

the Power of T cells to Cancer Patients

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Immatics Corporate Presentation

October 10, 2024

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

High confirmed objective response rate and durable responses in melanoma; registration-enabling Phase 3 trial to commence in December 2024

Differentiated Platforms

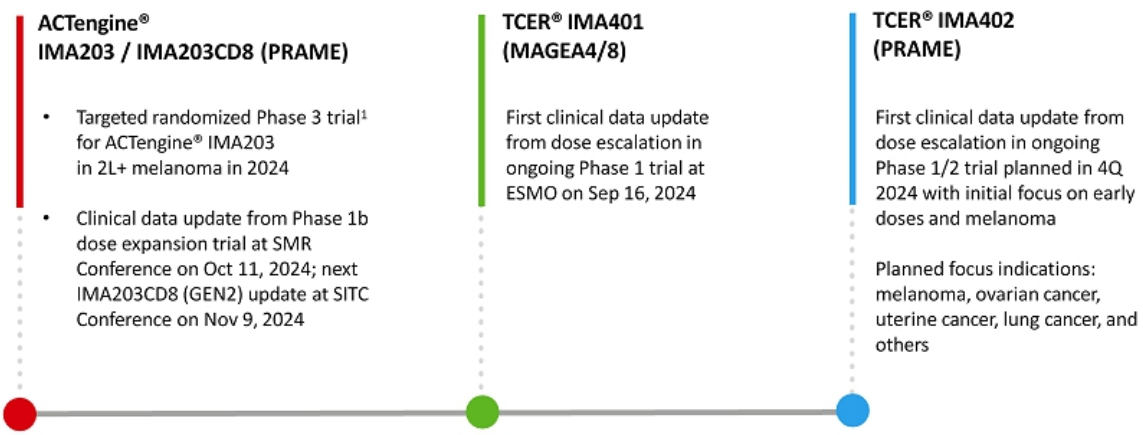
Unique technologies to identify true cancer targets and right TCRs

Therapeutic Opportunity

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

2H2024 Catalysts for ACTengine® and TCER® Clinical Lead Assets

Projected Cash Runway into 2027 to Reach Multiple Value Inflections Points

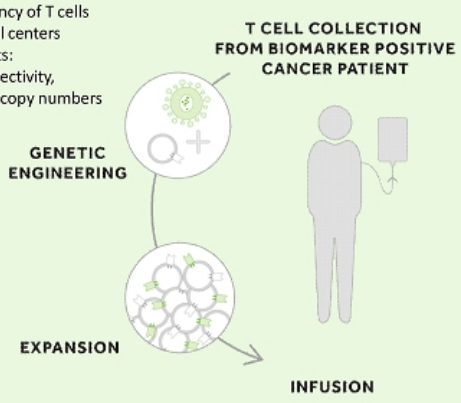


Updates planned across the entire clinical portfolio throughout 2024

Two Distinct TCR-based Therapeutic Modalities in Clinical Development

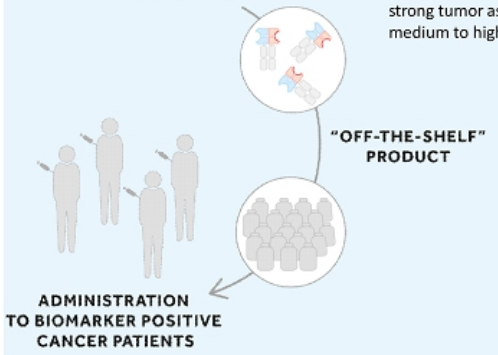
Autologous TCR-T (ACTengine®)

- Strong clinical activity in patients with high tumor burden[1]
- Single dose
- 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, medium 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 (published Oct 10, 2024) and IMA203CD8 monotherapies (published November 08, 2023)

Our Pipeline of TCR-based Adoptive Cell Therapies and Bispecifics

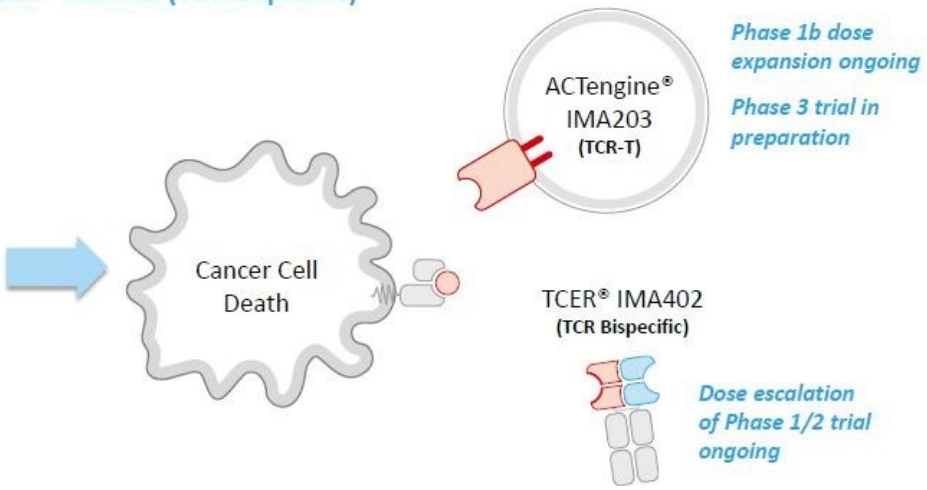
Modality	Product Candidate	Target		Preclinical	Phase 1a[1]	Phase 1b[1]	Phase 2	Phase 3
Autologous ACT	ACTengine® IMA203	PRAME	immatics					
	ACTengine® IMA203CD8	PRAME	immatics					
	ACTengine® IMA204	COL6A3	immatics					
	Multiple programs	Undisclosed	Bristol Myers Squibb					
Allogeneic ACT γδ T cells	ACTallo® IMA30x	Undisclosed	immatics editas					
	Multiple programs	Undisclosed	Bristol Myers Squibb					
Bispecifics	TCER® IMA401	MAGEA4/8	immatics					
	TCER® IMA402	PRAME	immatics					
	TCER® IMA40x	Undisclosed	immatics					
	Multiple programs[3]	Undisclosed	moderna					

[1] Phase 1a: Dose escalation, Phase 1b: Dose expansion; [2] Immatics' proprietary ACTallo® platform utilizing Editas' CRISPR gene editing technology;
[3] mRNA-enabled *in vivo* expressed TCER® molecules

Realizing the Full Multi-Cancer Opportunity of PRAME

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

Indication	% PRAME positive patients[1]
Uterine Carcinoma	97%
Uterine Carcinosarcoma	100%
Sarcoma Subtypes	up to 100%
Cut. Melanoma	95%
Uveal Melanoma[2]	89%
Ovarian Carcinoma	84%
Squamous NSCLC	68%
TNBC	63%
Small Cell Lung Cancer	45%
Kidney Carcinoma	up to 40%
Cholangiocarcinoma	33%
HNSCC	27%
Esophageal Carcinoma	27%
Breast Carcinoma	26%
Adeno NSCLC	25%
HCC	18%
Bladder Carcinoma	18%



Phase 1b dose expansion ongoing

Phase 3 trial in preparation

Dose escalation of Phase 1/2 trial ongoing

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

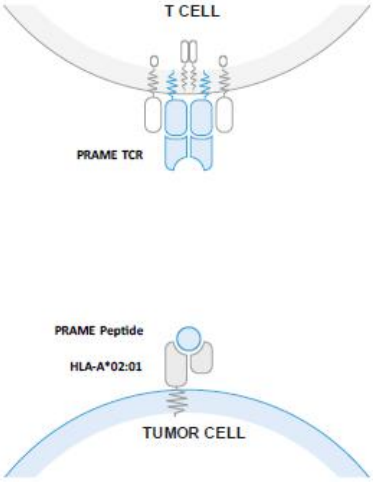
Leverage the full potential of targeting PRAME by continued evaluation of the best suited therapeutic modality (ACTengine® vs. TCER® or both) for each cancer type

[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=61); 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

The Multi-Cancer Opportunity of PRAME

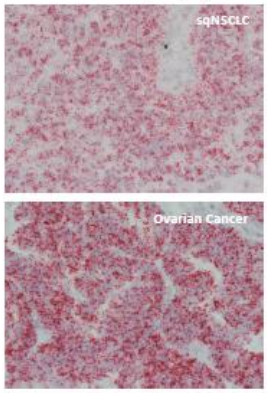
One of the Most Promising Solid Tumor Targets for TCR-based Therapies Known To Date



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)



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	89%	292
Ovarian Carcinoma	19,900	12,800	84%	4,408
Uterine Carcinoma	62,700	10,700	97%	4,255
Uterine Carcinosarcoma	3,300	1,900	100%	779
Squamous NSCLC	57,000	34,600	68%	9,646
Small Cell Lung Cancer	31,900	19,400	45%	3,579
Adeno NSCLC	91,200	55,300	25%	5,668
HNSCC	66,500	15,100	27%	1,672
Breast Carcinoma	290,600	43,800	26% TNBC: 63%	4,669
Synovial Sarcoma	1,000	400	100%	164
Cholangiocarcinoma	8,000	7,000	33%	947

TOTAL ~39,000 annually in the US

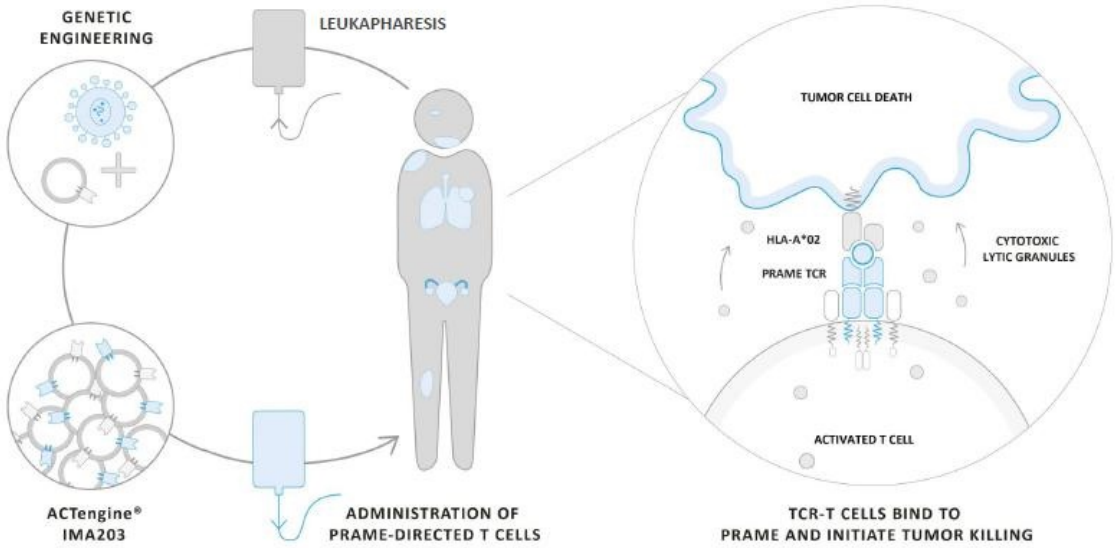
Multiple opportunities to broaden patient reach and patient benefit:

- 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=61)

ACTengine® IMA203 Targeting PRAME – Mechanism of Action

Immatics' Leading TCR-T Approach



ACTengine® IMA203 TCR-T Product Manufacturing

Differentiated Manufacturing Process and Setup

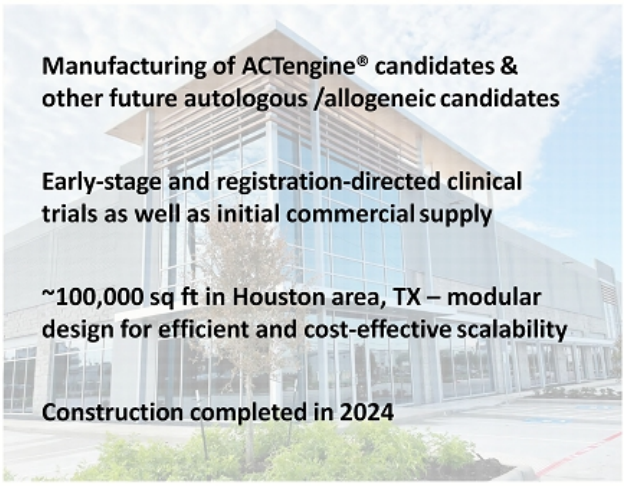
Proprietary Manufacturing Process

SHORT — 1-week manufacturing process followed by 1-week QC release testing

ROBUST — High manufacturing success rate of >95% to reach IMA203 targ t os

SIMPLE — Lean and cost-efficient process

State-of-the-art Research & GMP Manufacturing Facility



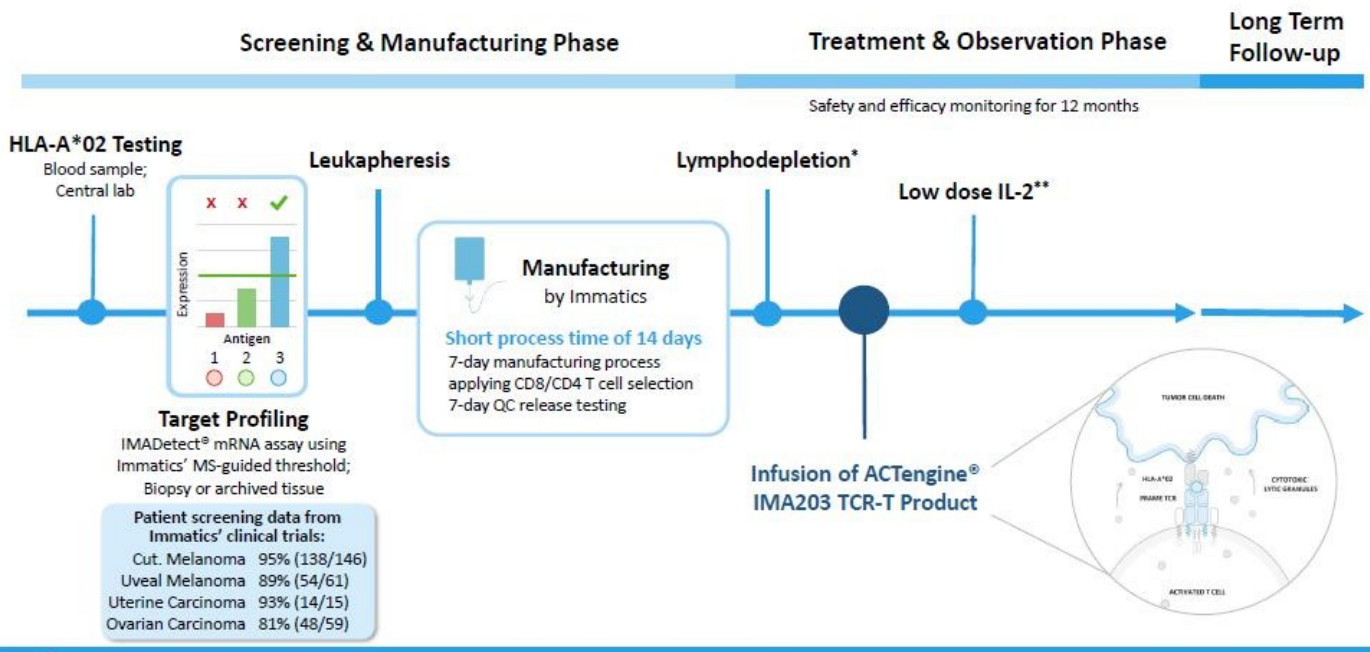
Manufacturing of ACTengine® candidates & other future autologous /allogeneic candidates

Early-stage and registration-directed clinical trials as well as initial commercial supply

~100,000 sq ft in Houston area, TX – modular design for efficient and cost-effective scalability

Construction completed in 2024

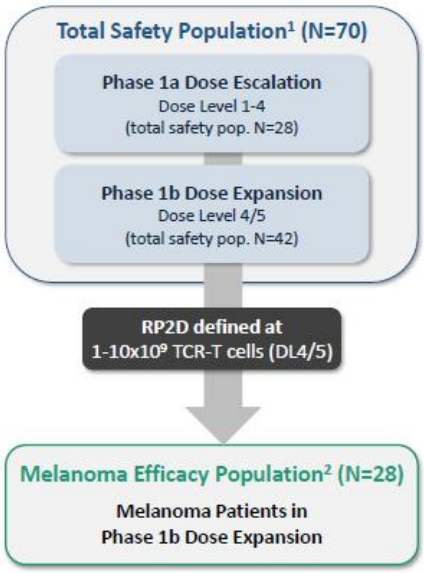
ACTengine® IMA203 TCR-T Monotherapy – Patient Flow



IMA203 *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 Trial in Melanoma

Heavily Pretreated Patient Population



	Total Safety Population[1]	Melanoma Dose Escalation Population	Melanoma Efficacy Population[2]
	All Comers (Phase 1a and Phase 1b)	Melanoma (Phase 1a)	Melanoma (Phase 1b, at RP2D)
Number of patients	Total N=70 Melanoma N=41 Other N=29	Total N=11 Cutaneous melanoma N=8 Uveal melanoma N=2 Mucosal melanoma N=1	Total N=28 Cutaneous melanoma N=13 Uveal melanoma N=12 Melanoma of unknown primary N=1 Mucosal melanoma N=2
Prior lines of systemic treatment (median, min, max)	3 (0, 9)	4 (2, 7)	2 (0, 6)
Thereof CPI (melanoma only) (median, min, max)	2 (0, 4)	2 (1, 4)	1* (0, 4)
LDH at baseline >1 x ULN [% of patients]	64.3	81.8	60.7
Baseline tumor burden Median Target lesion sum of diameter [mm] (min, max)	117.8 (15.0, 309.8)	117.5 (37.0, 211.0)	107.5 (15.0, 309.8)
Liver/brain lesions at baseline [% of patients]	65.7	63.6	82.1
Dose level	DL1-5	EC1/DL3/4	DL4/5
Total infused dose TCR-T cells [x10⁹]	2.09 (0.08, 10.2)	0.586 (0.10, 2.09)	4.1 (1.3, 10.2)

[1] See patient flow in appendix. [2] All infused patients; *Cutaneous melanoma patients had a median of 2 prior lines of checkpoints, see appendix; RP2D: recommended phase 2 dose; CPI: Checkpoint inhibitors; EC1: 0.06-0.12x10⁹TCR-T cells/m² BSA; DL3: 0.2-0.48x10⁹ TCR-T cells/m² BSA, DL4: 0.2-1.2x10⁹TCR-T cells/m² BSA, DL5: 1.201 - 4.7x10⁹ TCR-T cells/m² BSA

Most Frequent Adverse Events of IMA203 Across All Dose Levels in Phase 1a/b

N=70 Patients in Total Safety Population[1]

- Most frequent adverse events were **expected cytopenias (Grade 1-4)** associated with lymphodepletion in all patients
- **Mostly mild to moderate cytokine release syndrome (CRS)**
  - 37% (26/70) Grade 1
  - 46% (32/70) Grade 2
  - 11% (8/70) Grade 3[2]
- **Infrequent ICANS (6% Grade 1, 4% Grade 2, 4% Grade 3)**
- **No IMA203-related deaths**
- Full IMA203 monotherapy tolerability profile is available in appendix
- Tolerability in the melanoma subset is generally consistent with the full IMA203 monotherapy tolerability profile

Favorable tolerability profile for IMA203 monotherapy at recommended phase 2 dose ($1x10^9$ to $10x10^9$ TCR-T cells)

[1] See patient flow in appendix; [2] One grade 3 CRS only after exploratory second infusion; CRS and ICANS graded by CARTOX criteria (Neelapu *et al.*, 2019); ICANS: Immune Effector Cell-Associated Neurotoxicity Syndrome.

Tolerability Profile of IMA203 Across All Dose Levels in Phase 1a/b

All ≥Grade 3 Adverse Events (N=70[1])

TEAEs by maximum severity for all patients in Phase 1a and Phase 1b (N=70[1])

Adverse event (System organ class, Preferred term)	≥ Grade 3 No.	≥ Grade 3 %
Patients with any adverse event	70	100.0
Adverse Events of Special Interest	9	12.9
Cytokine release syndrome	8	11.4
ICANS[2]	3	4.3
Blood and lymphatic system disorders	70	100.0
Neutropenia	62	88.6
Lymphopenia	39	55.7
Leukopenia	38	54.3
Anaemia	36	51.4
Thrombocytopenia	24	34.3
Febrile neutropenia	2	2.9
Cytopenia	1	1.4
Leukocytosis	1	1.4
Infections and infestations	10	14.3
Urinary tract infection	2	2.9
Appendicitis	1	1.4
COVID-19	1	1.4
Cytomegalovirus infection reactivation	1	1.4
Enterococcal infection	1	1.4
Human herpesvirus 6 encephalitis	1	1.4
Infection	1	1.4
Orchitis	1	1.4
Sepsis[3,4]	1	1.4
Septic shock[4]	1	1.4
Investigations	10	14.3
Alanine aminotransferase increased	6	8.6
Aspartate aminotransferase increased	5	7.1
Blood creatinine increased	2	2.9
Blood alkaline phosphatase increased	1	1.4
Blood bilirubin increased	1	1.4
Blood fibrinogen decreased	1	1.4
Lymphocyte count increased	1	1.4
Respiratory, thoracic and mediastinal disorders	10	14.3
Hypoxia	4	5.7
Pleural effusion	2	2.9
Bronchial obstruction	1	1.4
Dyspnoea	1	1.4
Epistaxis	1	1.4
Laryngeal inflammation	1	1.4
Respiratory failure	1	1.4

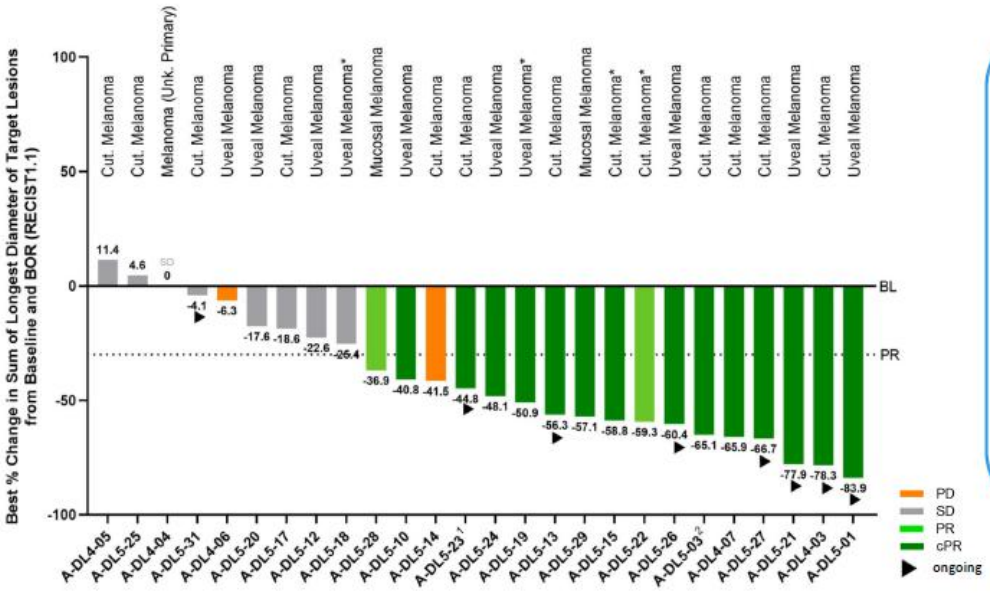
Adverse event (System organ class, Preferred term)	≥ Grade 3 No.	≥ Grade 3 %
Table continued...		
Metabolism and nutrition disorders	7	10.0
Hypokalaemia	3	4.3
Hyponatraemia	3	4.3
Hypophosphataemia	2	2.9
Dehydration	1	1.4
Failure to thrive	1	1.4
Vascular disorders	7	10.0
Hypertension	6	8.6
Hypotension	1	1.4
Renal and urinary disorders	6	8.6
Acute kidney injury	4	5.7
Nephritis	1	1.4
Proteinuria	1	1.4
Gastrointestinal disorders	5	7.1
Abdominal pain	3	4.3
Diarrhoea	1	1.4
Ileus	1	1.4
Vomiting	1	1.4
General disorders and administration site conditions	4	5.7
Fatigue	1	1.4
General physical health deterioration[5]	1	1.4
Pyrexia	1	1.4
Swelling face	1	1.4
Skin and subcutaneous tissue disorders	4	5.7
Rash maculo-papular	3	4.3
Eczema	1	1.4
Cardiac disorders	3	4.3
Atrial fibrillation[4]	3	4.3
Eye disorders	2	2.9
Periorbital oedema	1	1.4
Ulcerative keratitis	1	1.4
Injury, poisoning and procedural complications	2	2.9
Humerus fracture	1	1.4
Infusion related reaction	1	1.4
Musculoskeletal and connective tissue disorders	2	2.9
Back pain	1	1.4
Muscle spasms	1	1.4

Adverse event (System organ class, Preferred term)	≥ Grade 3 No.	≥ Grade 3 %
Table continued...		
Nervous system disorders	2	2.9
Headache	1	1.4
Posterior reversible encephalopathy syndrome	1	1.4
Endocrine disorders	1	1.4
Inappropriate antidiuretic hormone secretion	1	1.4
Hepatobiliary disorders	1	1.4
Cholangitis	1	1.4
Immune system disorders	1	1.4
Haemophagocytic lymphohistiocytosis	1	1.4
Reproductive system and breast disorders	1	1.4
Vaginal haemorrhage	1	1.4

All treatment-emergent adverse events (TEAEs) with ≥ Grade 3 regardless of relatedness to study treatment. 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 Cytokine release syndrome and ICANS were determined according to CARTOX criteria (Neelapu et al., 2019). Patients are counted only once per adverse event and severity classification. Based on interim data extracted from open clinical database (23-Aug-2024); [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] Fatal Adverse events were not considered related to any study drug; [4] Patient died from sepsis of unknown origin and did not receive IMA203 TCR-T cells; [5] DLT: Dose limiting toxicity in phase 1a at DL2 reported on March 17, 2021.

Best Overall Response for IMA203 in Melanoma

Objective Responses in Heavily Pretreated Patients in Phase 1b (N=28#)

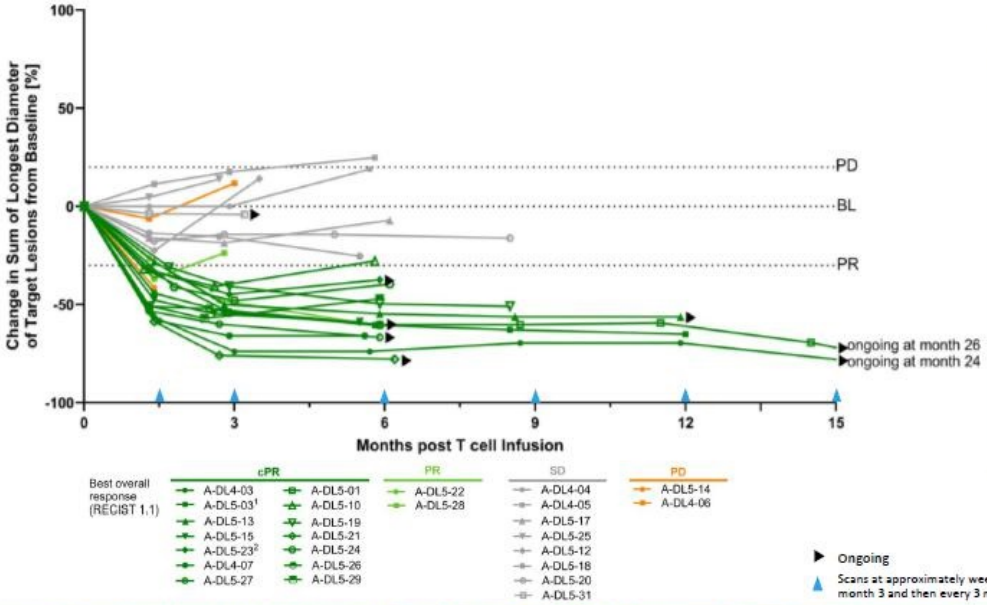


cORR	**54% (14/26)**
median DOR	**12.1 months**
(min, max)	(4.2, 25.5+ months)
mFU	9.3 months
7/14 confirmed responses ongoing	
median PFS	**6.0 months**
(min, max)	(0.3+, 26.8+ months)
median OS	**Not reached**
(min, max)	(0.3+, 26.8+ months)
mFU	8.6 months
ORR	62% (16/26)
Tumor shrinkage**	88% (23/26)
DCR (at week 6)	92% (24/26)

[1]First tumor assessment post infusion pending for two melanoma patients at data-cut; [2]Maximum change of target lesions and RECIST1.1 response at different timepoints. **Tumor shrinkage of target lesions; [1]Patient A-DL5-23 is off study at data cut-off; [2]Patient out of study due to PD (external assessment); Initial ORR: Objective response rate according to RECIST 1.1 at any post infusion scan; Confirmed ORR (cORR): Confirmed objective response rate according to RECIST 1.1 for patients with at least two available post infusion scans or patients with PD at any prior timepoint, patients with ongoing unconfirmed PR not included in cORR calculation; 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; Overall survival (OS) and progression-free survival (PFS) censored at data-cut; BL: Baseline PD: Progressive Disease; SD: Stable Disease; PR: Partial Response; cPR: Confirmed Partial Response; DCR: Disease control rate, mFU: median follow-up

Response Over Time of IMA203 in Melanoma

Durable Responses 2 Years+ after Treatment in Heavily Pretreated Patients in Phase 1b (N=28#)



▶ Ongoing

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

cORR	**54% (14/26)**
median DOR	**12.1 months**
(min, max)	(4.2, 25.5+ months)
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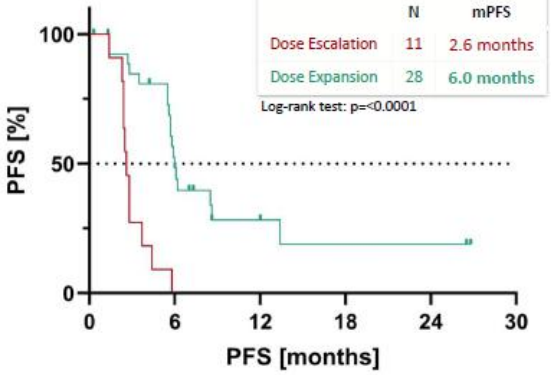
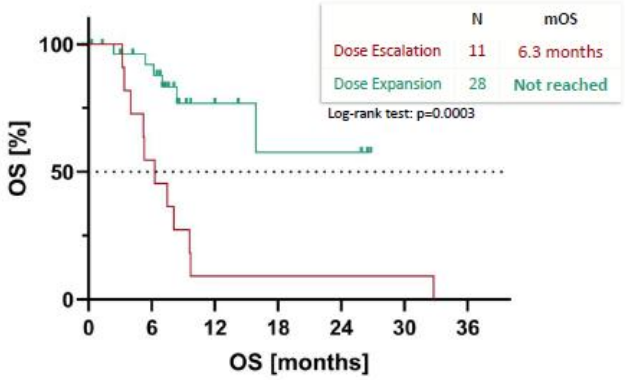
Significant Shift in PFS and OS Between Dose Escalation & Dose Expansion

PFS of 6 Months and OS Not Reached in Melanoma Efficacy Population

Progression Free Survival



Overall Survival



- Significant shift in PFS and OS between melanoma patients treated during the dose escalation and dose expansion phase
- PFS in dose escalation is comparable to reported data in 2L+ cut. melanoma population*
- OS in dose escalation is shorter than reported OS for 2L+ cut. melanoma population*
- All patients in the dose escalation group died and 20/28 patients are alive in dose expansion

Overall survival (OS) and progression-free survival (PFS) censored at data-cut; * These data are derived from different clinical trials at different points in time with differences in trial design and patient populations. As a result, cross-trial comparisons cannot be made, and no head-to-head clinical trials have been conducted.

IMA203 Phase 1b in Melanoma: Overview of Studies

PFS and OS Data in 2L+ Melanoma Cohorts

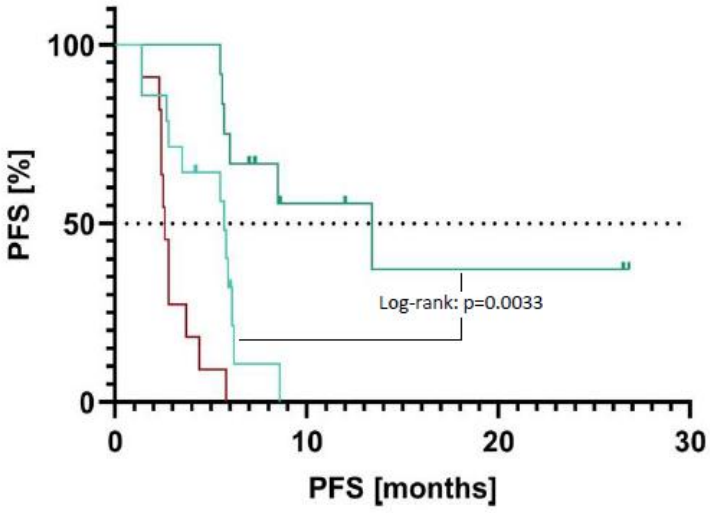
Drug Product	Phase	N	2L+ melanoma patient population	Prior lines of therapies	mPFS (months)	mOS (months)
IMA203 in Melanoma	1b (Dose Expansion)	28	46% cutaneous 43% uveal 11% other	4% n=0, 18% n=1, 32% n=2, 29% n=3:, 4% n=4, 11% n=5, 4% n=6 86% received prior CPI (median of 1 prior line of CPI in overall population, median of 2 prior lines of CPI in cut. melanoma) Median of 2 prior lines, median of 2 prior lines in cut. melanoma	**6.0**	**not reached**
IMA203 in Melanoma	1a (Dose Escalation)	11	73% cutaneous 18% uveal 9% other	0% n=1, 27% n=2, 73% n>2 prior lines 100% received prior CPI (median of 2 prior lines of CPI, median of 2.5 prior lines of CPI in cut. melanoma) Median of 4 prior lines, median of 4.5 prior lines in cut. melanoma	**2.6**	**6.3**
IMA201/202/203 combined in Melanoma	1a (Dose Escalation)	19	63% cutaneous 11% uveal 26% other	0% n=1, 16% n=2, 84% n>2 prior lines 100% received prior CPI (median 3 prior lines of CPI) Median of 4 prior lines, median of 4.5 prior lines in cut. melanoma	**2.5**	**5.3**
Lifileucel (C-144-01, Cohort 2+4)[1]	2	153	54% cutaneous 0% uveal 45% other	median of 3 prior lines (min/max: 1/9) 100% received prior CPI	**4.1**	**13.9**
Tilsotolimod + Ipilimumab (ILLUMINATE-301)[2]	3	238	85% cutaneous 0% uveal 15% other	57% n=1, 27% n=2, 12% n>2 prior lines 99% received prior CPI	**2.9**	**11.6**
Nivolumab + Relatlimab (RELATIVITY-020, D1 Cohort)[3]	1/2	354	68% cutaneous 0% uveal 32% other	46% n=1, 35% n=2, 19% n≥3 prior lines 99% received prior CPI	**2.1**	**14.7**

These data are derived from different clinical trials at different points in time with differences in trial design and patient populations. As a result, cross-trial comparisons cannot be made, and no head-to-head clinical trials havebeen conducted.

[1] Chesney et al., 2022; [2] Diab et al., 2024; [3] Ascierto et al., 2023.

Enhanced PFS in Phase 1b Melanoma Patients with Deep Responses

N=26#



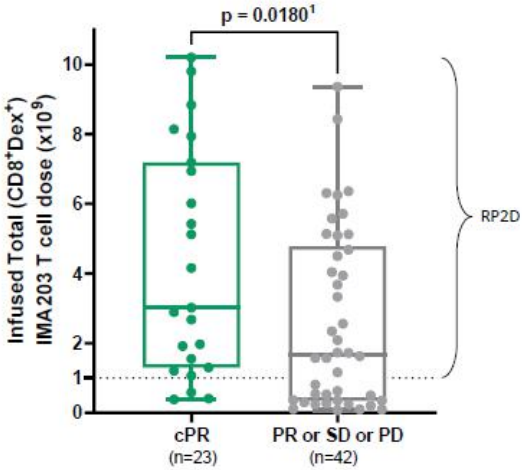
	N	mPFS
Dose Escalation IMA203	11	2.6 months
Dose Expansion IMA203 <50% tumor size reduction (including tumor size increase)	14*	5.7 months
Dose Expansion IMA203 ≥50% tumor size reduction	12	13.4 months

- Approx. half of all patients have a deep response (>50% tumor reduction)
- This subgroup of patients has highly medically meaningful mPFS of more than 1 year
- Patients with <50% tumor reduction (including tumor size increase) still observe a more than 2x longer mPFS as compared to patients treated in dose escalation with suboptimal doses

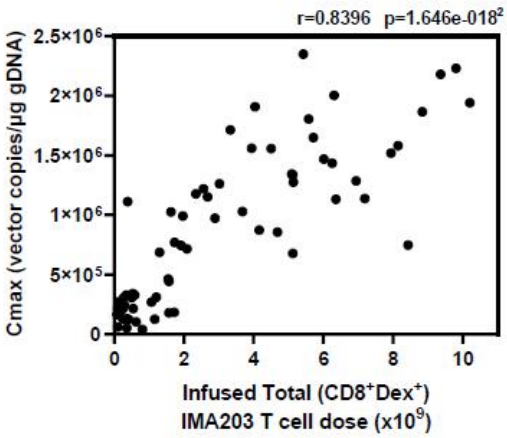
Excluding two patients that were infused but did not have their first tumor assessment post baseline at data-cut;
*Includes one patient with ongoing SD 4.4 months after infusion with tumor reduction <50%

Dose Response Relationship

IMA203 T Cell Dose is Associated with Clinical Activity and IMA203 T Cell Exposure (N=65 out of 68*)



IMA203 T Cell Dose is Associated with Clinical Activity

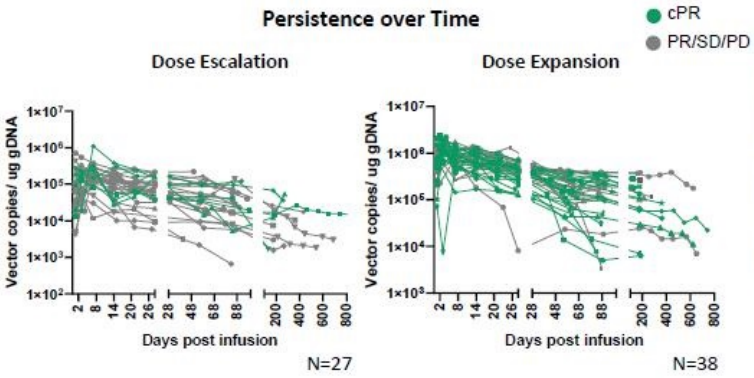


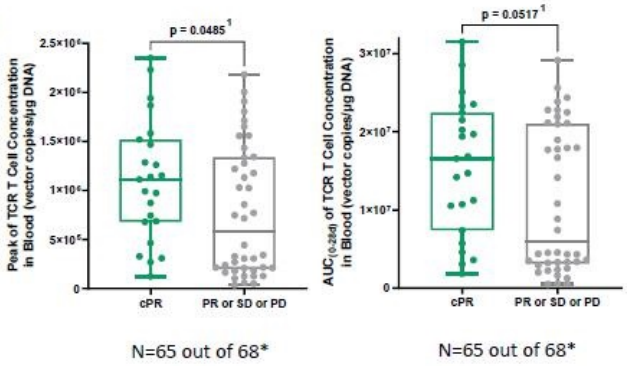
IMA203 T Cell Dose Correlates with T Cell Exposure

[1]Mann-Whitney U test, [2]Spearman Correlation; * no data available yet for patients recently treated;
PD: Progressive Disease; SD: Stable Disease; PR: Partial Response; cPR: Confirmed Partial Response; , RP2D: recommended phase 2 dose

Exposure Response Relationship

IMA203 T Cell Persistence Over Time and T Cell Exposure is Associated with Clinical Response





Rapid T cell engraftment (C_{max}) in all patients with over two years of persistence

Higher C_{max} and persistence in patients treated at higher doses in dose expansion versus dose escalation

IMA203 T cell exposure (C_{max} & $AUC_{(0\text{-}28d)}$) is associated with clinical responses

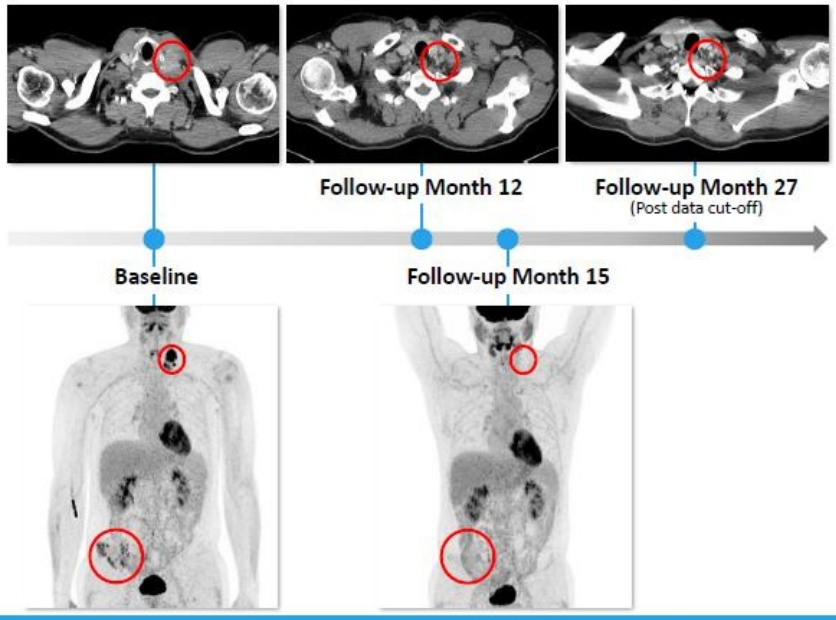
[1] Mann-Whitney U test; * no data available yet for patients recently treated;
PD: Progressive Disease; SD: Stable Disease; PR: Partial Response; cPR: Confirmed Partial Response, AUC: Area under curve

Patient Case A-DL4-03 : Cutaneous Melanoma

PET-based Complete Response 15 Months Post Infusion and Ongoing Response at 24 Months

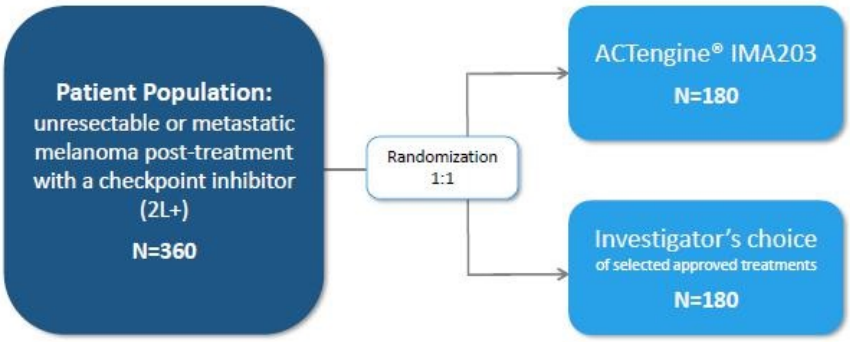
51-year-old male patient with complete remission according to PET imaging after 15 months and ongoing beyond two years post infusion at data cut

- 5 prior systemic treatment lines:
  - Dabrafenib + Trametinib
  - Pembrolizumab
  - Dabrafenib + Trametinib + Vemurafenib + Cobimetinib
  - Tebentafusp
  - Encorafenib + Binimetinib
- 13 years of cancer history
- 23 mm target lesion in cervical lymph node and non-target lesions in pelvic bone and lung
- Patient received ~$1.3x10^9$ IMA203 TCR-T cells
- Ongoing PR at 24 months post infusion with -78.3% reduction according to RECIST1.1
- Metabolic complete response reported based on investigator-initiated PET imaging at baseline and month 15 post infusion



SUPRAME: Registration-enabling Randomized Phase 3 Trial

Trial Design Following Recent Type D Meeting with FDA and SA Meeting with PEI[1]



Endpoints

- **Primary Endpoint**
  - **PFS**
- **Secondary Endpoints**
  - Safety
  - ORR + DOR
  - No OS detriment
  - Patient-reported outcomes (EORTC QLQ-C30, EQ-5D-5L)

Next Steps

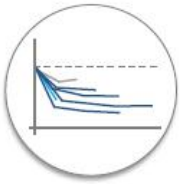
- SUPRAME Phase 3 trial is projected to commence in **December 2024**
- Pre-specified interim analysis planned after approx. 200 patients enrolled
- Full enrollment anticipated by late **2026**

ACTengine® IMA203 TCR-T Monotherapy Targeting PRAME in Melanoma

Summary of Clinical Data

Tolerability

Favorable tolerability profile:
mostly mild to moderate CRS;
infrequent ICANS
(5.7% Gr1, 4.3% Gr2, 4.3% Gr3);
no treatment related deaths



Anti-Tumor Activity & Durability

54% (14/26) cORR and 92% (24/26) DCR;
12.1 months mDOR and ongoing responses for over two years

PFS & OS

PFS of 6 months and OS not reached (mFU 8.6 months)

Biological Data

T cell dose and exposure are significantly associated with clinical response

Broad Reach

FDA RMAT designation received in multiple PRAME expressing cancers including cutaneous and uveal melanoma

SUPRAME Phase 3 trial is projected to commence in **December 2024**

IMA203 in Melanoma Targeted to Enter Randomized Phase 3 Trial in 2L+ Melanoma in 2024

Clinically and Commercially Attractive Features of IMA203

- ≥95% of cutaneous melanoma patients are PRAME-positive
- Favorable tolerability profile
  mostly mild to moderate CRS, infrequent ICANS (6% Gr1, 4% Gr2, 4% Gr3), no treatment related deaths
- Promising anti-tumor activity (cORR, mDOR, PFS)
- Leukapharesis as source for cell product, no surgery required
- Short manufacturing time of 7 days
  plus 7 days of QC release testing
- Low dose IL-2 post IMA203 infusion
  with better tolerability profile than high dose IL-2

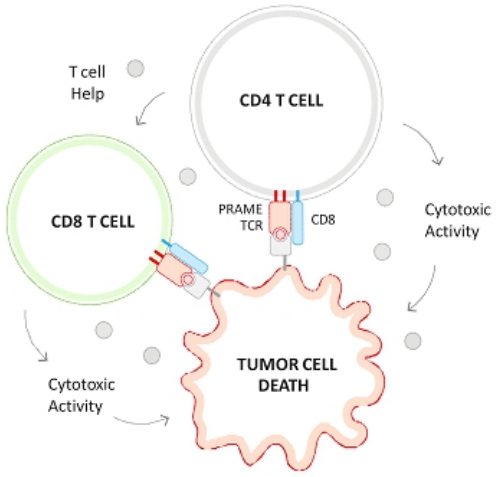
High Unmet Medical Need in Cutaneous and Uveal Melanoma

	Cutaneous Melanoma	Uveal Melanoma
Patient Population	**2L+** CPI-refractory, BRAF/MEK inhibitor-refractory if BRAF mutation+	**2L+** Kimmtrak-refractory, CPI/chemotherapy-refractory
IMA203 Opportunity	**~3,000** HLA-A*02:01 and PRAME-positive cutaneous melanoma patients annually in the US[1]	**~300** HLA-A*02:01 and PRAME-positive uveal melanoma patients annually in the US[2]

CPI: Checkpoint inhibitor; [1] Based on annual mortality of ~7,700 cutaneous melanoma patients in the US, HLA-A*02:01 prevalence of 41% in the US and PRAME prevalence of 95% (TCGA RNAseq data combined with proprietary MS-guided RNA expression threshold); [2] Based on annual mortality of ~800 uveal melanoma patients in the US, HLA-A*02:01 prevalence of 41% in the US and PRAME prevalence of 89% (IMADetect® qPCR testing of screening biopsies from clinical trial patients (n=33))

IMA203CD8 GEN2 – IMA203 TCR-T Monotherapy Leveraging CD8 and CD4 cells

Differentiated Pharmacology Compared to 1st-Generation TCR-only Approaches

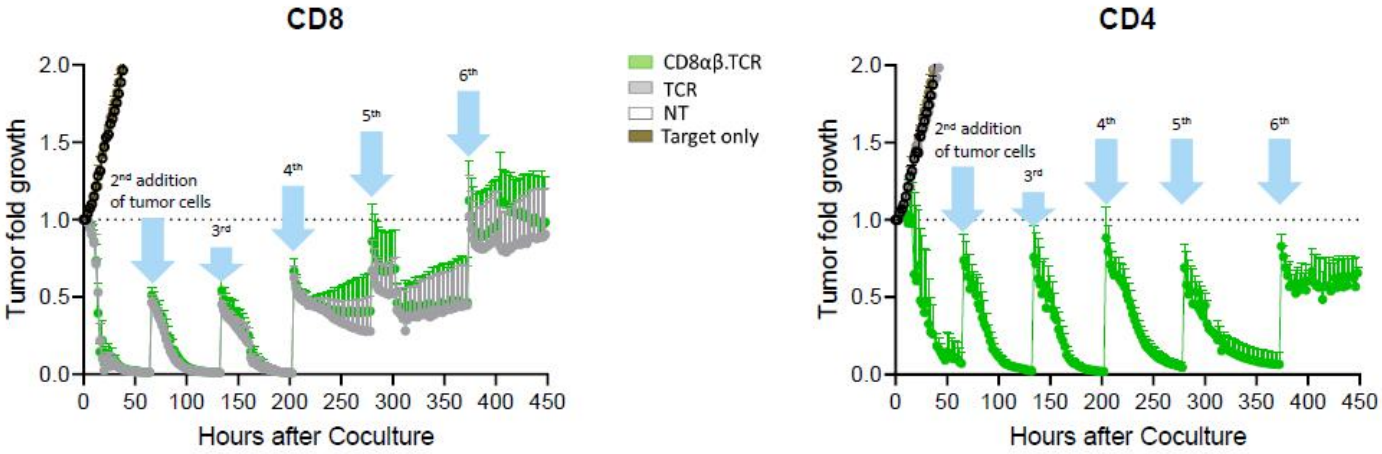


- IMA203CD8 (GEN2) designed to broaden the clinical potential of IMA203 TCR-T monotherapy by adding functional CD4 T cells via co-transduction of CD8αβ alongside PRAME TCR
- Activated CD4 T cells aid activity of other immune cells by releasing cytokines and acquire cytotoxic functions
- Functional CD4 T cells mediate longer anti-tumor activity than CD8 T cells and potentiate the anti-tumor activity of the cell product in preclinical studies[1]
- Data from CD19 CAR-T-treated leukaemia patients suggest a relevant role of engineered CD4 T cells in long-term durability[2]

[1]Internal data not shown here, published in Bajwa *et al.* 2021 Journal for Immunotherapy of Cancer; [2] Melenhorst *et al.* 2022 Nature, Bai *et al.* 2022 Science Advances

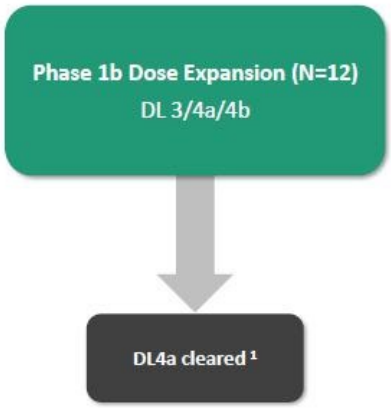
IMA203CD8 (GEN2) – Preclinical Assessment of Anti-Tumor Efficacy

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



IMA203CD8 (GEN2) – Overview of Patient Characteristics

Data cut-off as of Sep 30, 2023



	All Comers
Efficacy population*	N=12
Prior lines of systemic treatment (median, min, max)	3 (1, 5)
LDH at baseline >1 x ULN [% of patients]	50.0
Baseline tumor burden Median target lesion sum of diameter [mm] (min, max)	79.8 (20.0, 182.0)
Dose level	DL3/DL4a/DL4b

* Patients with at least one available tumor response assessment post infusion; IMA203CD8 DL3: 0.2-0.48x10^9 TCR-T cells/m^2 BSA, IMA203CD8 DL4a: 0.481-0.8x10^9 TCR-T cells/m^2 BSA, IMA203CD8 DL4b: 0.801-1.2x10^9 TCR-T cells/m^2; [1] DL4a cleared in Dec 2023

Tolerability Data – IMA203CD8 (GEN2)

All ≥Grade 3 Adverse Events (N=12)

TEAEs by maximum severity for all patients (N=12)

Adverse event (System organ class, preferred term)	≥ Grade 3 No.	≥ Grade 3 %
Patients with any adverse event	**12**	**100.0**
Adverse events of special interest	**3**	**25.0**
Cytokine release syndrome [1]	3	25.0
Immune effector cell-associated neurotoxicity syndrome	0	0.0
Blood and lymphatic system disorders	**11**	**91.7**
Neutropenia	9	75.0
Anaemia	8	66.7
Lymphopenia	8	66.7
Thrombocytopenia	4	33.3
Leukopenia	2	16.7
Investigations	**4**	**33.3**
Aspartate aminotransferase increased	2	16.7
Neutrophil count decreased	2	16.7
Alanine aminotransferase increased	1	8.3
Blood alkaline phosphatase increased	1	8.3
Blood bilirubin increased	1	8.3
Gamma-glutamyltransferase increased	1	8.3
Metabolism and nutrition disorders	**2**	**16.7**
Hypermagnesaemia	1	8.3
Hypoalbuminaemia	1	8.3
Hypophosphataemia	1	8.3
Nervous system disorders	**2**	**16.7**
Neurotoxicity [2]	1	8.3
Syncope	1	8.3
Immune system disorders	**1**	**8.3**
Haemophagocytic lymphohistiocytosis [2]	1	8.3
Infections and infestations	**1**	**8.3**
Infection	1	8.3

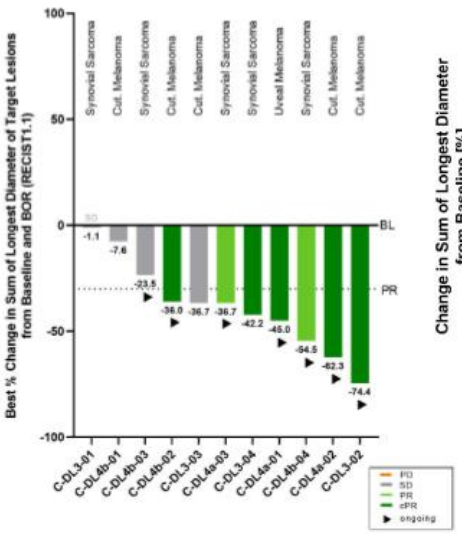
- Manageable tolerability
- Most frequent ≥Grade 3 AEs were expected cytopenia associated with lymphodepletion
- No IMA203CD8-related Grade 5 Adverse Events[1]
- Dose escalation ongoing

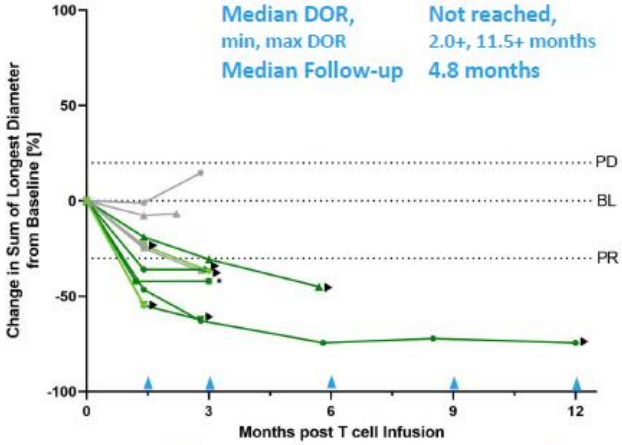
All treatment-emergent adverse events (TEAEs) with ≥ Grade 3 regardless of relatedness to study treatment that occurred in at least 1 patient (except for ICANS, where no event was documented; listed for completeness due to being an adverse event of special interest) are presented. Adverse events were 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 (30-Sep-2023); [1] DLT: Dose limiting toxicity in patient DL4b-04. [2] DLTs in patient DL4b-01;

[1] Subsequent to data cut-off a Grade 5 event, possibly related to treatment, was observed. The patient's immediate cause of death was considered to be fatal sepsis, aggravated by the immunosuppression, a high-grade Immune Effector Cell-Associated Hemophagocytic Lymphohistiocytosis-Like Syndrome (IEC-HS), and the fast-progressing disease.

IMA203CD8 (GEN2) (N=12#) – BOR and Response over Time

Data cut-off Sep 30, 2023





Median DOR, **Not reached,**
min, max DOR **2.0+, 11.5+ months**
Median Follow-up **4.8 months**

ORR **58% (7/12)**
cORR **56% (5/9)**

- 6 out of 7 responses ongoing
- 11/12 patients show tumor shrinkage
- Deepening of response from SD to PR in two patients (C-DL4a-01, C-DL4a-03)
- Ongoing durable response 12+ months after infusion

Best overall response (RECIST 1.1)

cPR	PR	SD	PD
C-DL3-02	C-DL4a-03	C-DL3-01	
C-DL3-04	C-DL4b-04	C-DL3-03	
C-DL4a-01		C-DL4b-01	
C-DL4a-02		C-DL4b-03	
C-DL4b-02			

* Patient C-DL4a-04 was PD ~6 weeks after infusion, not shown due to non-evaluable target lesions at tumor assessment

▶ Ongoing

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

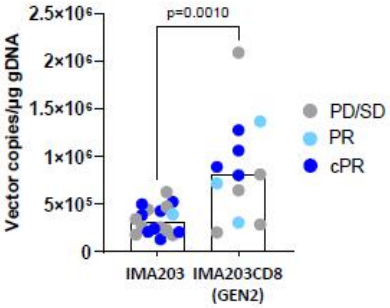
* Clinical tumor progress after 4.9 months post infusion, investigator information

Initial ORR: Objective response rate according to RECIST 1.1 at any post infusion scan; Confirmed ORR (cORR): Confirmed objective response rate according to RECIST 1.1 for patients with at least two available post infusion scans or patients with progressive disease (PD) at any prior timepoint, patients with ongoing unconfirmed PR not included in cORR calculation; 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; 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; BOR: Best Overall Response; DOR: Duration of Response

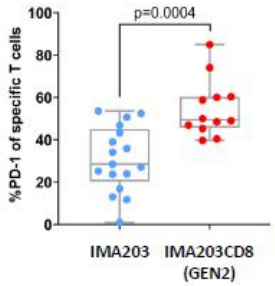
IMA203CD8 (GEN2): Translational Data Shows Enhanced Pharmacology

IMA203 Phase 1b vs IMA203CD8 (GEN2)

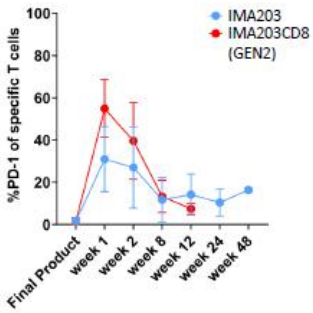
Higher peak expansion (C_{max}) of IMA203CD8 T cells when normalized to infused dose



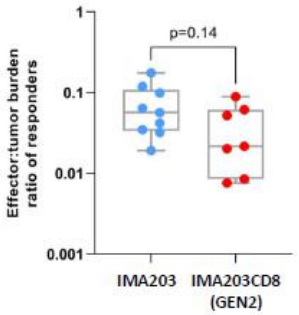
Higher activation levels in IMA203CD8 T cells at week 1...



...without exhaustion over time



Trend towards responses at lower cell dose and higher tumor burden with IMA203CD8



Initial translational data indicates higher biological and clinical activity of IMA203CD8 (GEN2)

ACTengine® IMA203CD8 (GEN2) TCR-T Monotherapy Targeting PRAME

Summary of IMA203CD8 Clinical Data and Planned Next Steps

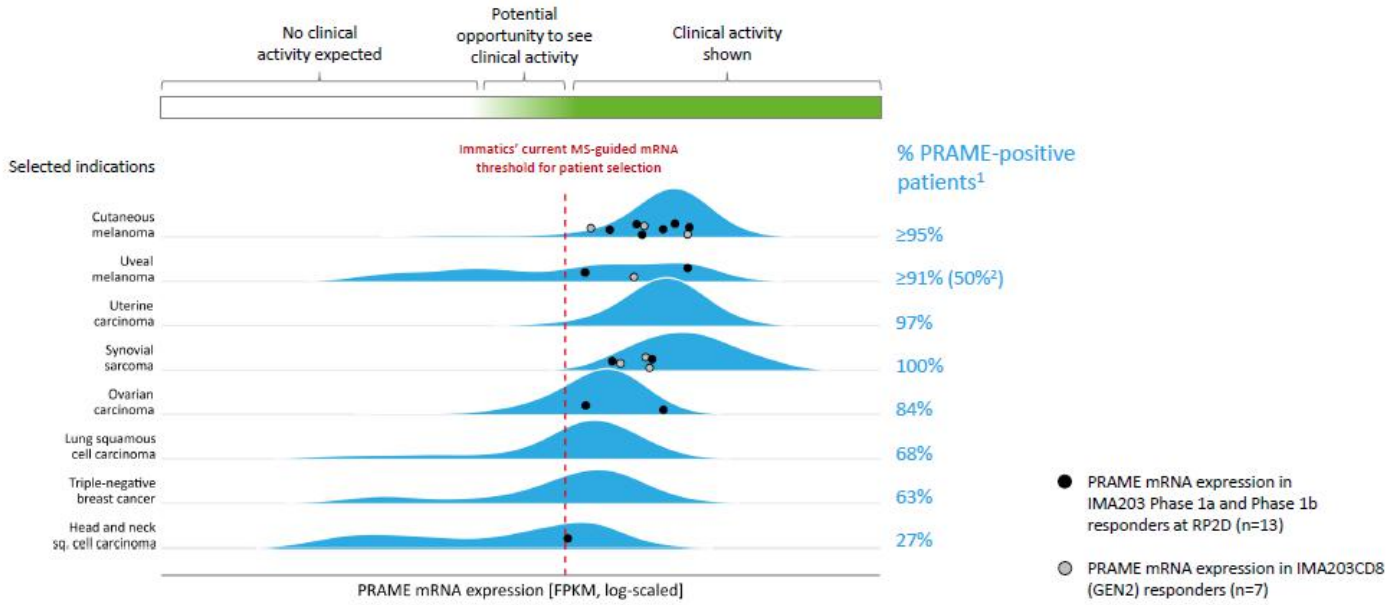
- Enhanced primary and secondary pharmacology when compared to IMA203
- Manageable tolerability (2 DLTs at DL4b, dose escalation ongoing)
- Initial clinical activity observed with differentiated response pattern
  - 56% (5/9) cORR
  - 6 out of 7 responses ongoing at data cut-off, durable response at 12+ months
  - SD converting to PR over time (N=2)
  - Enhanced biological efficacy with PRs at lower T cell:tumor cell ratio compared to IMA203

Next Step

Clinical footprint expansion outside of melanoma in addition to treating melanoma patients

Potential of IMA203 in Additional Solid Cancer Indications

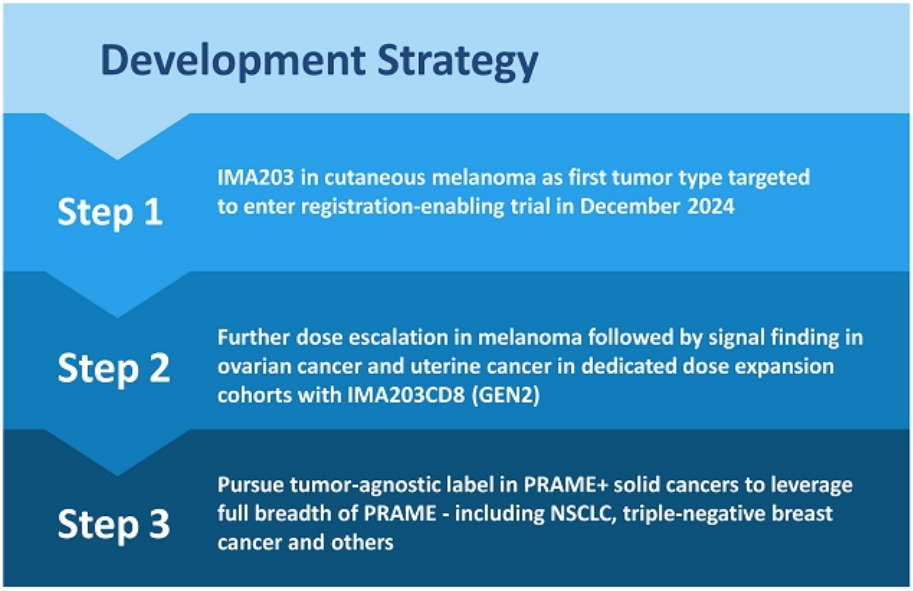
Based on PRAME Expression in IMA203 and IMA203CD8 (GEN2) Responders



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=33) demonstrates substantial higher prevalence of 91% 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 / IMA203CD8 TCR-T Monotherapy Targeting PRAME

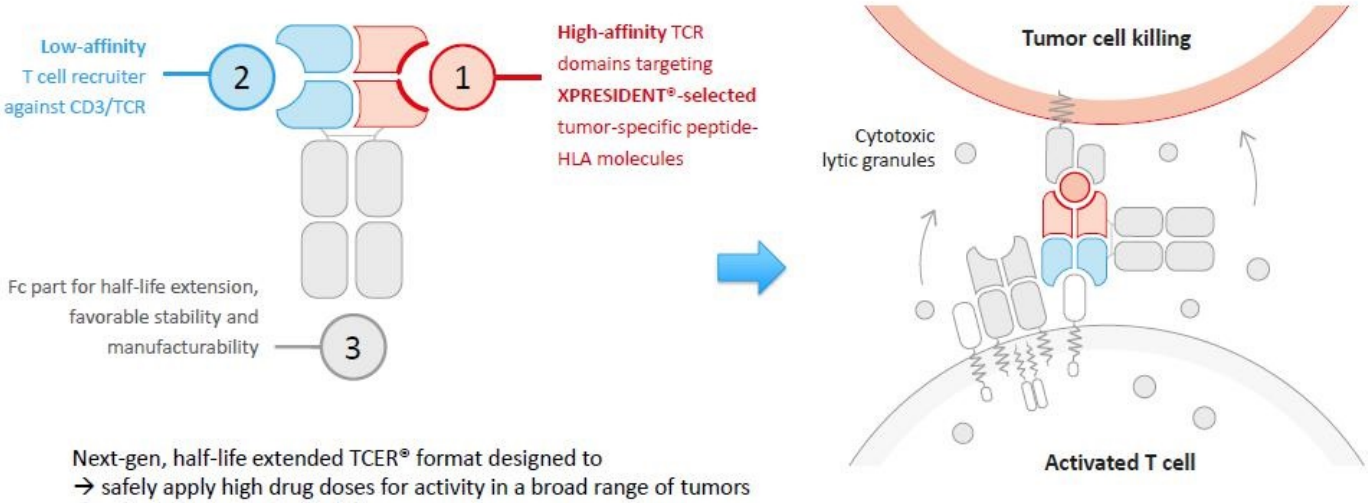
Leveraging the Full Breath of PRAME in Three Steps



TCER® – TCR Bispecifics

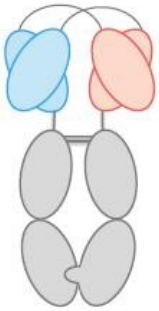
TCER® – Immatics' Next-generation, Half-Life Extended Bispecifics

Proprietary TCER® Format Consisting of Three Distinct Elements



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

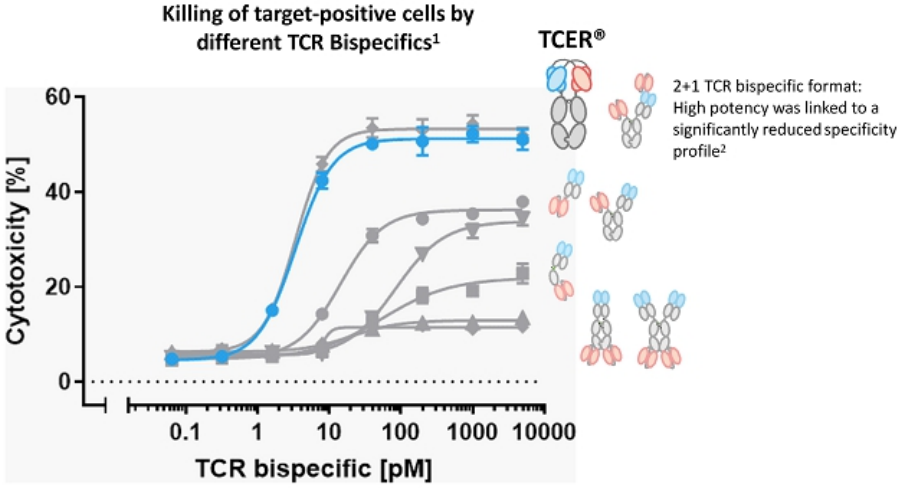
3 **Next-generation TCER® format**

- ✓ 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®

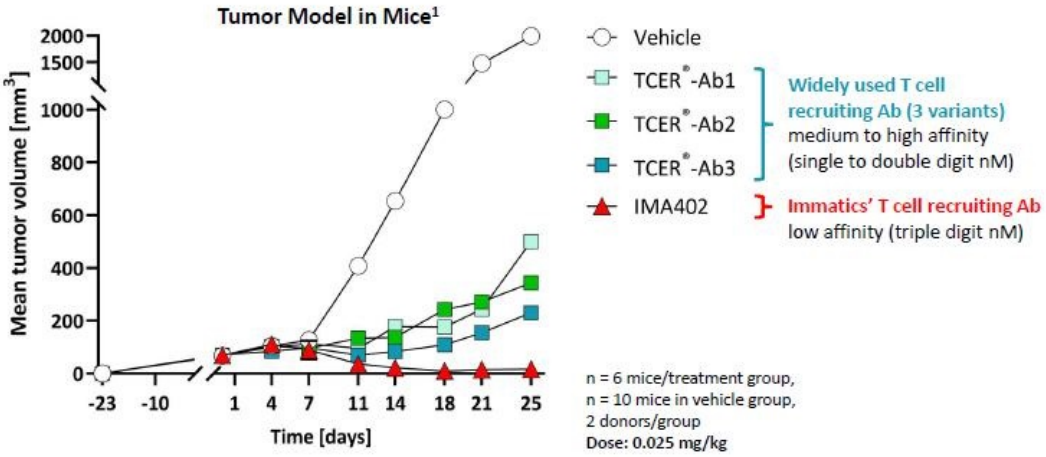


- Seven different TCR Bispecific formats were evaluated with a pHLA targeting TCR and the identical T cell recruiting antibody
- TCER® format had higher combination of potency and specificity[2] than six alternative TCR Bispecific format designs evaluated

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

TCER® Format Is Designed for Optimized Efficacy and Safety

Superior Tumor Control Using a Novel, Low-Affinity Recruiter

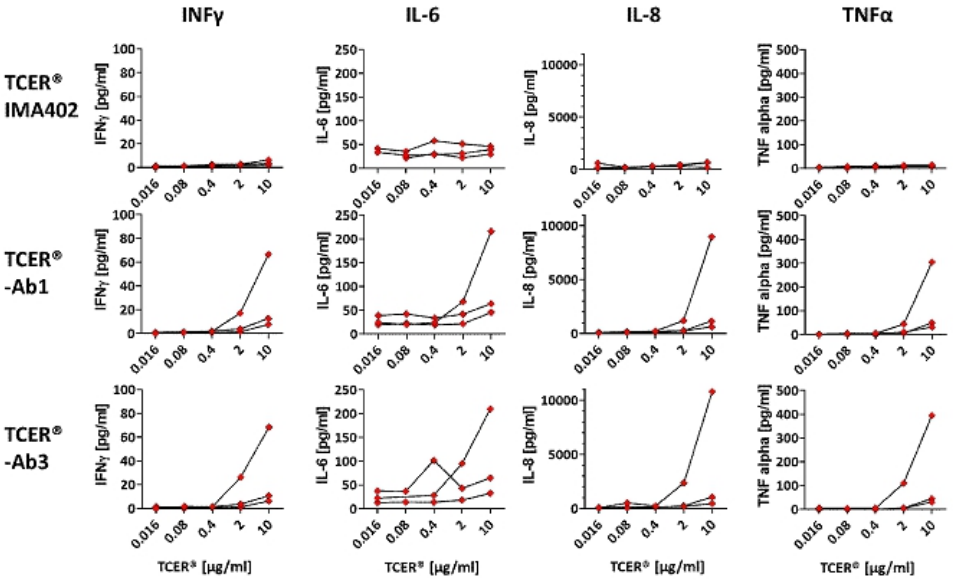


Proprietary, **low-affinity T cell recruiting region** demonstrates superior tumor control compared to analogous TCER® molecules designed with higher-affinity variants of a widely used recruiter

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

TCER® Format Is Designed for Optimized Efficacy and Safety

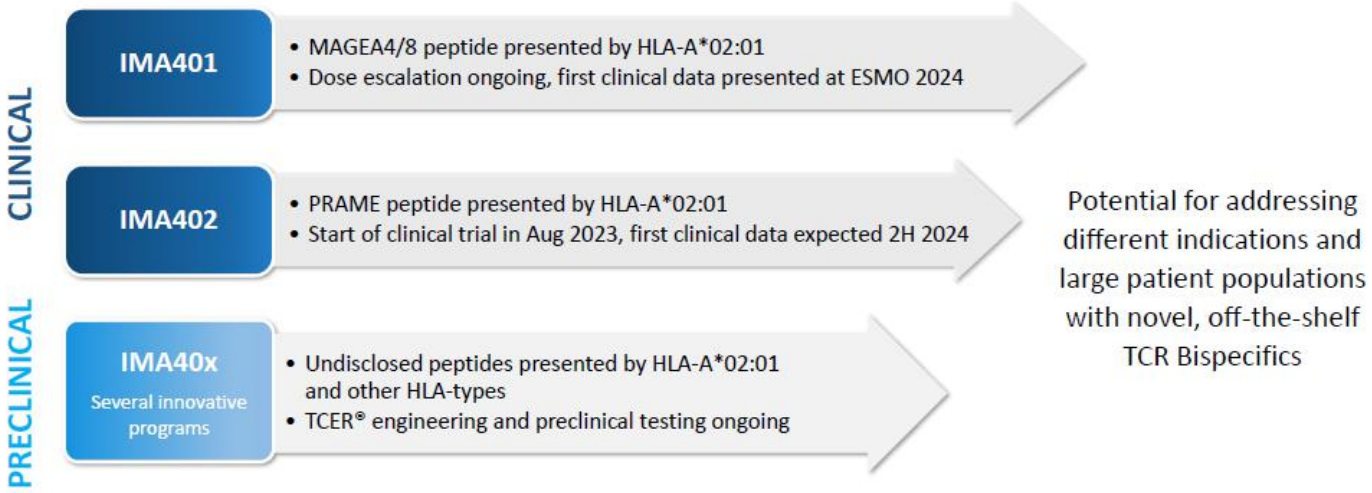
Reduced Target-Unrelated Recruiter-Mediated Cytokine Release using a Low-Affinity Recruiter



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



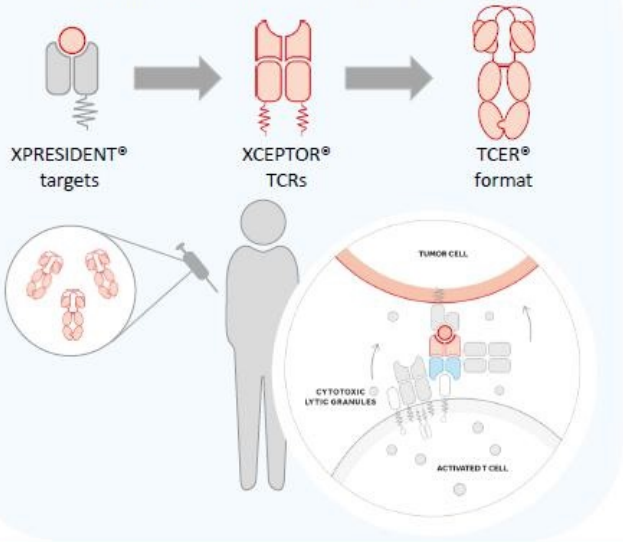
The current collaboration with Moderna includes the development of mRNA-enabled *in vivo* expressed TCER® molecules

In Vivo Expressed TCER® Molecules Targeting Cancer-specific pHLA Targets

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

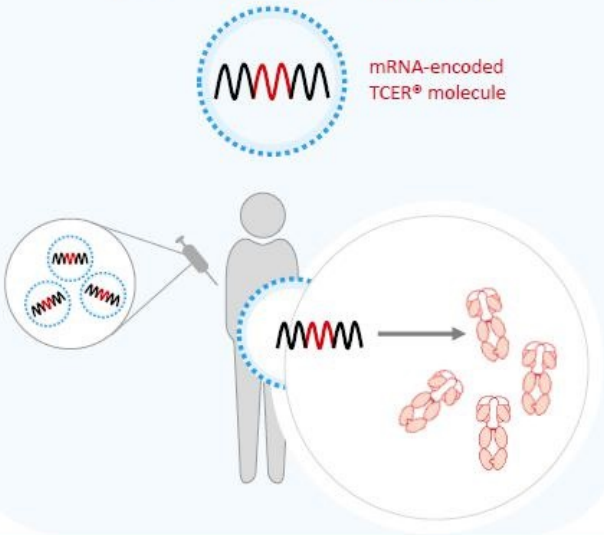
Immatics

Proprietary cancer targets & TCR Bispecifics format



Moderna

Delivery of TCER® biologics through mRNA

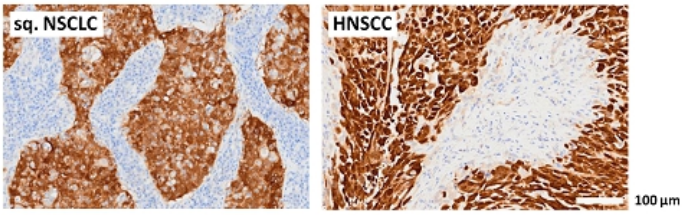


TCER® IMA401 Targeting MAGEA4/8

TCER® IMA401 Targeting MAGEA4/8

Higher Target Density of MAGEA4/8 Peptide

MAGEA4 protein detection in tumor samples (IHC)

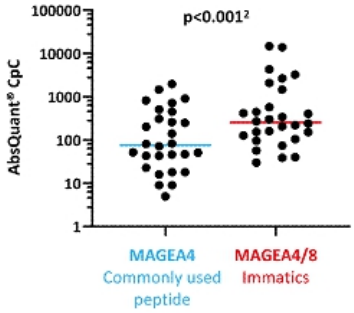


MAGEA4/8 target prevalence in selected cancer indications

Indications	Target prevalence[1] [%]	Number of addressable patients*
Squamous non-small cell lung carcinoma	52%	22k
Head and neck squamous cell carcinoma	36%	7k
Bladder carcinoma	29%	9k
Ovarian carcinoma	23%	4k
Esophageal carcinoma	23%	3k
Small cell lung cancer	21%	4k
Triple-negative breast cancer	20%	2k
Gastric adenocarcinoma	14%	3k
Cutaneous melanoma	18%	2k
Non-small cell lung adenocarcinoma	9%	6k

*1L+ Unresectable or Metastatic Addressable Patient Populations (US, UK, EU4 in 2025), total MAGE A4/AB+ and HLA-A*02+

MAGEA4 and MAGEA4/8 Peptide (AbsQuant®)



MAGEA4/8 target is presented at >5-fold higher target density[3] than a commonly used MAGEA4 target peptide

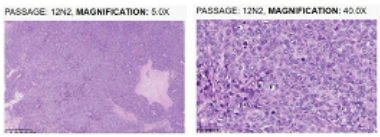
[1]MAGEA4/8 target prevalences are based on TCGA and in-house data combined with a XPRESIDENT®-determined target individual MS-based mRNA expression threshold; qPCR-threshold for patient screening; [2]Students paired T test; [3]Copy number per tumor cell (CpC) measured on a paired-sample basis by AbsQuant®, i.e. comparing MAGEA4 vs. MAGEA4/8 peptide presentation on same sample

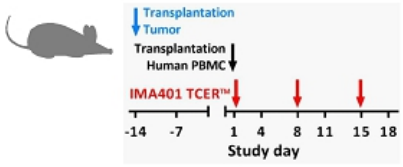
TCER® IMA401 (MAGEA4/8) – Assessment of Anti-Tumor Activity *in vitro*

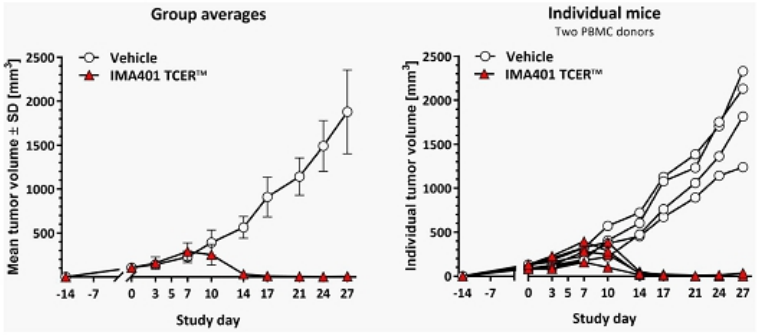
Patient-Derived Tumor Model

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



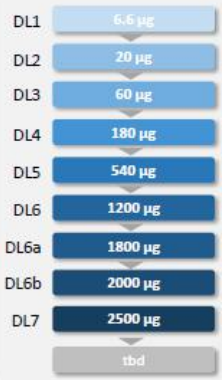




- TCER® IMA401 shows **high anti-tumor activity in Patient-derived xenograft model** of non-small cell lung adenocarcinoma
- **Remission observed in all mice (3 out of 4 mice with complete remission)**

Trial Design – IMA401-101 Phase 1a Dose Escalation

First-in-Human Basket Trial Targeting the MAGEA4/8 Peptide in Solid Tumors



Total safety population (N=35)

- MABEL-based starting dose
- Dose escalation based on cohorts of 1-6 patients using adaptive design (BLRM model)
- Four initial q1w step dosings[1] up to target dose, q2w after reaching target dose[2]

- MTD not yet determined
- Dose escalation ongoing to optimize dosing intervals and schedule

Objectives

Primary:
- Determine MTD and/or RP2D

Secondary:
- Tolerability
- Pharmacokinetics
- Initial anti-tumor activity

Key Eligibility Criteria

- Recurrent and/or refractory **solid tumors**
- HLA-A*02:01 positive
- MAGEA4/8-positive as confirmed by mRNA-based assay[3]
- ECOG status 0-2
- Received or not eligible for all available indicated standard of care treatments

[1]Step dosing with 300 µg and 600 µg introduced at DL6; Low-dose dexamethasone pre-medication used at higher dose levels as used with other approved bispecific products has been implemented as preventive measure for continued dose escalation; Patients can increase their dose to previously cleared dose levels; [2]q2w: once every two weeks, weekly (q1w) dosing was applied up to DL5; [3]IMADetect®: proprietary mRNA-based assay using Immatics' MS-guided threshold; BLRM: Bayesian logistic regression model; MTD: Maximum tolerated dose.

Baseline Characteristics

Heavily Pre-treated Patients with a Broad Range of Tumor Types

Characteristic	Safety Population N=35	Efficacy-evaluable Population[1] N=29	Patients with relevant IMA401 doses and MAGEA4/8^{high} levels[2] N=17
Age			
Median (min, max)	62 (19, 82)	63 (35, 82)	64 (35, 82)
ECOG performance status			
0 - n [%]	10 [28.6]	6 [20.7]	3 [17.6]
1 - n [%]	23 [65.7]	21 [72.4]	12 [70.6]
2 - n [%]	2 [5.7]	2 [6.9]	2 [11.8]
Prior lines of systemic treatment			
Median (min, max)	4 (2, 8)	3 (2, 8)	4 (2, 8)
LDH at baseline			
≤ 1xULN [%]	51.4	55.2	41.2
1-2xULN [%]	40.0	41.4	58.8
> 2xULN [%]	8.6	3.4	0.0
Baseline tumor burden			
Median target lesion sum of diameter [mm] (min, max)	74 (15, 202.8)	80 (15, 202.8)	84 (18, 202.8)
Number of organs with metastases			
Median (min, max)	3 (1, 6)	3 (1, 6)	3 (1, 6)
Liver/ Brain Lesions			
[% of patients]	40.0	41.4	47.1

[1]Efficacy Analysis Set (EAS) prospectively defined in the study protocol: patients who received at least four IMA401 infusions and had at least one post-baseline efficacy assessment or clinical progression. Three patients did not receive all four infusions due to clinical progression and three patients awaiting their first scans as of the data cut-off date are not included in the EAS; [2]Patients in this analysis had received IMA401 infusions at ≥1 mg and showed MAGEA4/8 target expression higher than the MAGEA4/8 qPCR threshold. LDH: Lactate dehydrogenase; ULN: Upper limit of normal.

IMA401 Demonstrates Manageable Tolerability in N=35 Patients

Most Frequent Related AEs were Lymphopenia, CRS and Neutropenia

Treatment-related AEs[1], n [%]	All Grades	≥ Grade 3
Lymphopenia	12 [34]	11 [31]
Cytokine release syndrome	11 [31]	0
Neutropenia	8 [23]	5 [14]
Facial pain	6 [17]	2 [6]
Anaemia	5 [14]	4 [11]
Thrombocytopenia	5 [14]	2 [6]
Headache	5 [14]	1 [3]
Hypertension	4 [11]	2 [6]
Leukopenia	4 [11]	2 [6]
Fatigue	4 [11]	0
Nausea	3 [9]	0
Hypoxia	2 [6]	1 [3]
Aspartate aminotransferase increased	1 [3]	1[3]
Febrile neutropenia	1 [3]	1[3]
Pneumonia	1 [3]	1[3]
Sinus tachycardia	1 [3]	1[3]

TEAEs, n [%]	All Grades	≥ Grade 3
Any	32 [91]	26 [74]
Treatment-related	28 [80]	19 [54]

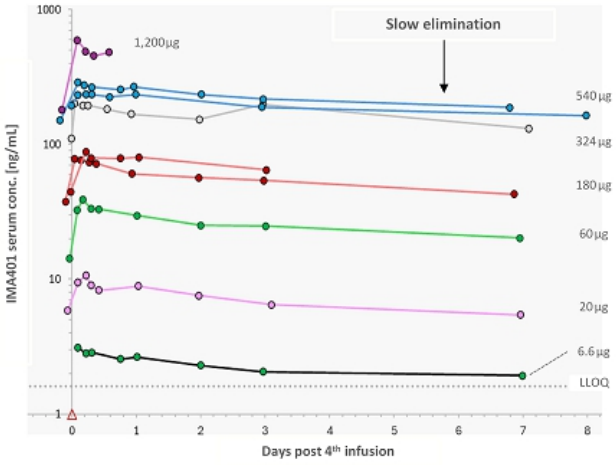
- Overall **manageable tolerability** profile
- **Most frequent/relevant related AEs** were
  - transient lymphopenia,
  - mild to moderate CRS (23% Grade 1, 9% Grade 2, **no Grade ≥ 3**), majority at first dose
  - neutropenia[2] occurred mostly at initial target dose and fully resolved in all cases except one (see below)
  - one possibly related death (pneumonia in the context of lung tumor progression and concurrent neutropenia) as previously reported[3]
- **MTD not reached** based on the BLRM

[1]All treatment-emergent adverse events (TEAEs) at least possibly related to IMA401 infusion with grade 1-2 occurring in at least 9% of patients and all events with grade 3-5; [2]with three dose-limiting events at 2.5 mg (DLT), neutropenia observed in patients with and without dexamethasone pre-medication; [3]reported in Annual Report 2023, patient did not receive dexamethasone pre-medication; CRS: Cytokine Release Syndrome; BLRM: Bayesian logistic regression model; MTD: Maximum tolerated dose.

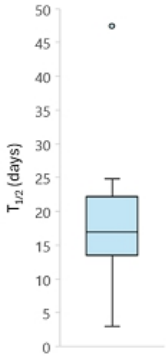
IMA401 Pharmacokinetics

TCER® Format Shows Extended Half-Life in Solid Cancer Patients

PK profiles
(1 week profiles after 4th IMA401 infusion)



Median half-life:
16.9 days (N=16)[1]



Observed $T_{1/2}$ > 2 weeks

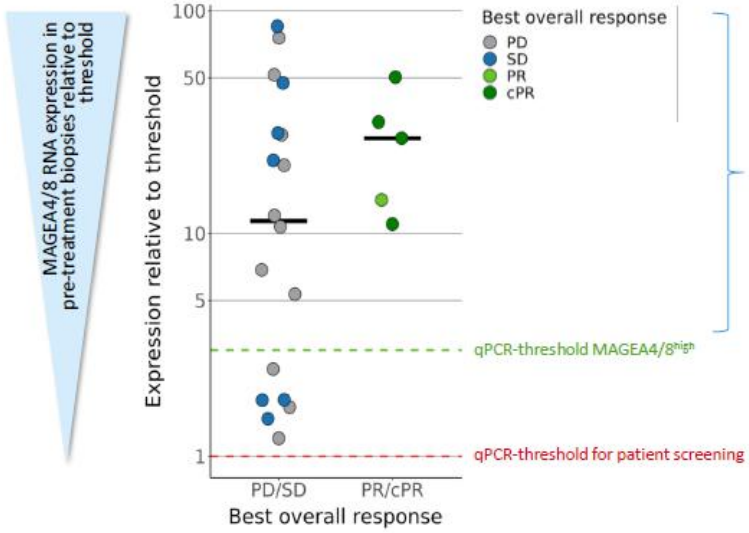
- Confirms "antibody-like" half-life predicted by preclinical *in-vivo* data[2]
- Supports exploring increased dosing intervals of up to q4w and pursuing alignment with typically applied CPI dosing regimens

[1]Half-lifes derived from 2nd PK profiles close to steady-state. Calculated by non-compartmental analysis (NCA) using Phoenix WinNonlin (Certara); Interquartile range (25%-75% percentile): 13.5-22.2 days; [2]Data presented at European Antibody Congress 2020; Zinn et al., *Nature Cancer*, 2023: https://doi.org/10.1038/s43018-023-00516-z; LLOQ: lower limit of quantification; q4w: once every four weeks. CPI: Checkpoint inhibitor

Data cut-off Jul 23, 2024

Objective Responses are Associated with Target Expression

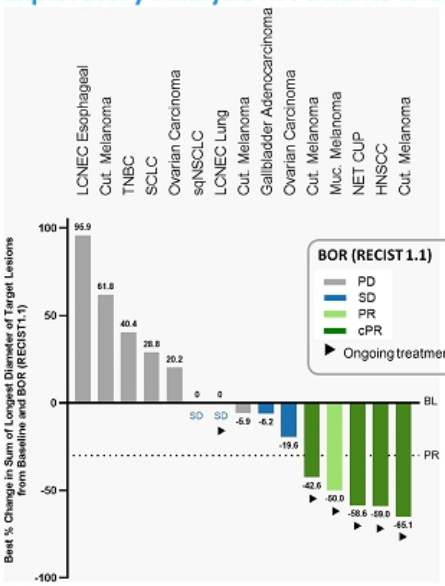
Exploratory Analysis in Patients with MAGEA4/8^{high} Expression at Relevant IMA401 Doses (DL6-7; N=17)

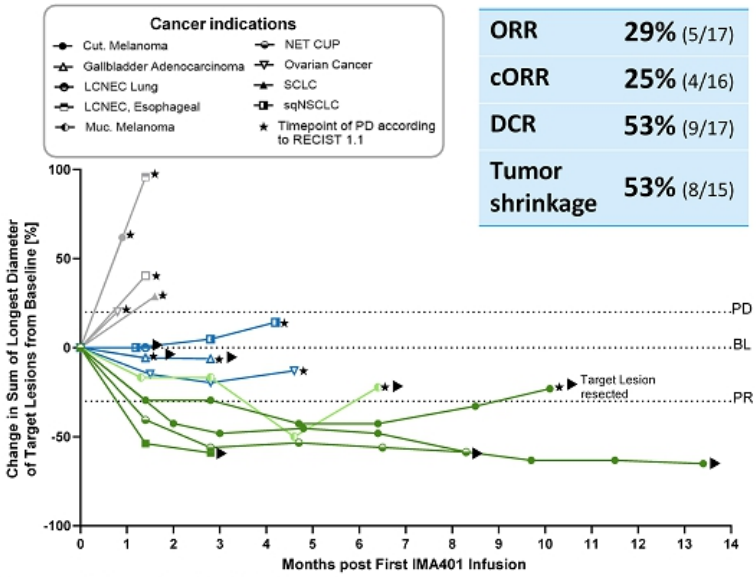


[1]Patients in this analysis had received IMA401 infusions at ≥1 mg and showed MAGEA4/8 target expression above indicated MAGEA4/A8^{High} qPCR threshold (n=17); PD: Progressive disease; PR: Partial response; cPR: confirmed Partial response; SD: Stable disease.

IMA401 Demonstrates Initial Anti-Tumor Activity in Multiple Tumor Types

Exploratory Analysis in Patients with MAGEA4/8^{high} Expression at Relevant IMA401 Doses (DL6-7; N=17*)





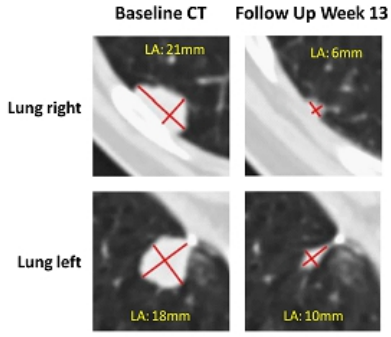
ORR	**29%** (5/17)
cORR	**25%** (4/16)
DCR	**53%** (9/17)
Tumor shrinkage	**53%** (8/15)

Cancer Indications: Cut.: Cutaneous; HNSCC: Head & Neck Squamous Cell Carcinoma; LCNEC: Large Cell Neuroendocrine Carcinoma; Muc.: Mucosal; NET CUP: Neurodendocrine Tumor, Cancer of Unknown Primary; SCLC: Small Cell Lung Cancer; sqNSCLC: Squamous Non-small Cell Lung Cancer; TNBC: Triple Negative Breast Cancer.

*Patients in this analysis are part of the efficacy analysis set with at least one post-treatment tumor assessment and had received IMA401 infusions at ≥1 mg and showed MAGEA4/8 target expression higher than the MAGEA4/8 qPCR threshold (n=17); Confirmed ORR (cORR): Confirmed objective response rate according to RECIST 1.1 for patients with at least two available post infusion scans or patients with progressive disease (PD) at any prior timepoint; two patients not included in tumor shrinkage calculation or shown in the figures as they had clinical progression and post-treatment tumor assessment is not available; PR: Partial Response; cPR: Confirmed Partial Response; SD: Stable Disease.

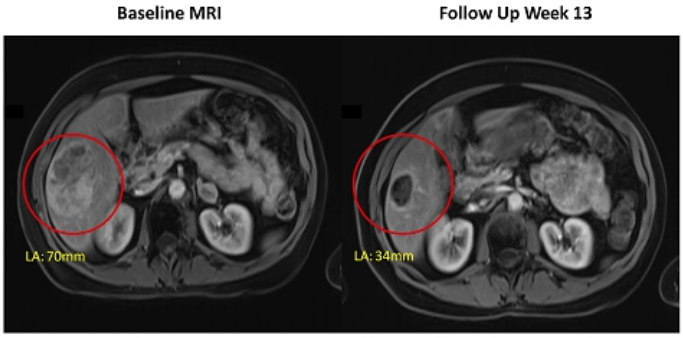
Clinical Activity in Heavily Pre-Treated Cancer Patients

63-year-old male, HNSCC, MAGEA4/8^{high}



Patient Characteristics	Outcomes
HNSCC, Hypopharynx	cPR -59% reduction
Lesions in lung	cPR ongoing at week 12 post-treatment start
3 prior lines of therapy: Platinum chemotherapy, anti-PD-1/chemotherapy, anti-EGFR/chemotherapy	

60-year-old female, NET CUP, MAGEA4/8^{high}



Patient Characteristics	Outcomes
NET CUP	cPR -56% reduction (BOR: -58.6%)
Lesions in liver, lung, bone, pancreas, adrenal gland, lymph nodes	cPR ongoing at week 36 post-treatment start
4 prior lines of therapy: Two lines of radiopharmaceuticals, chemotherapy, mTOR inhibitor	

CT and MRI scans courtesy of treating physicians (Dr. Manik Chatterjee, University Hospital Wuerzburg and Dr. Max-Felix Häring, Eberhard Karls University Tuebingen); HNSCC: Head and neck squamous cell carcinoma; NET CUP: Neuroendocrine tumor-cancer of unknown primary; LA: Long axis; cPR: confirmed Partial response; BOR: Best overall response

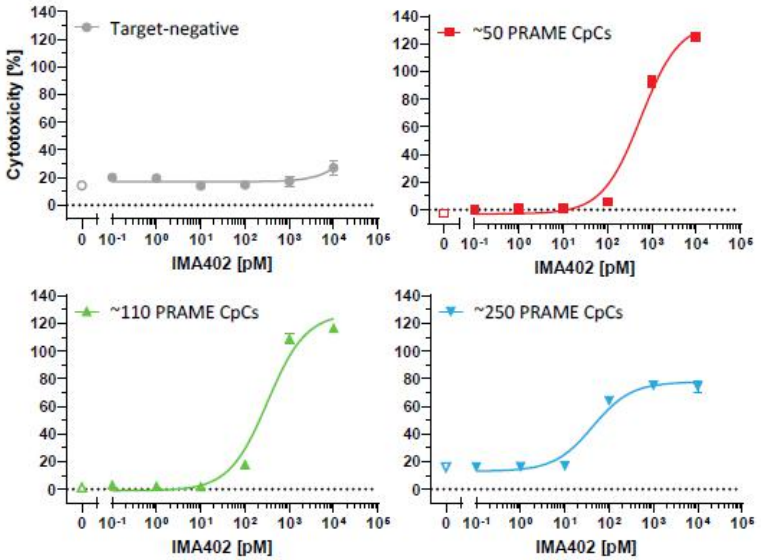
- **Tolerability**: Most common treatment-related AEs are low-grade CRS, transient lymphopenia and neutropenia
- **Pharmacokinetics**: Median terminal half-life of 16.9 days supporting potential further flexibility in future dosing schedules incl. combination with CPI and increased dosing intervals up to q4w
- **Initial anti-tumor activity in heavily pre-treated patients**
  - Objective responses in HNSCC, neuroendocrine tumor of unknown origin, cutaneous and mucosal melanoma including durable ongoing PRs of up to 13+ months
  - Deep responses (tumor shrinkage of ≥ 50%) in four patients including deepening of responses over time
  - Objective responses are associated with target expression and IMA401 dose: ORR 29%, cORR 25%, and tumor shrinkage in 53% of patients with relevant IMA401 doses and MAGEA4/8^{high} target levels
- **Dose escalation ongoing**

AE: Adverse Event; CRS: Cytokine Release Syndrome; CPI: checkpoint inhibitors; q4w: once every four weeks; HNSCC: Head and neck squamous cell carcinoma; PR: Partial Response

TCER® IMA402 Targeting PRAME

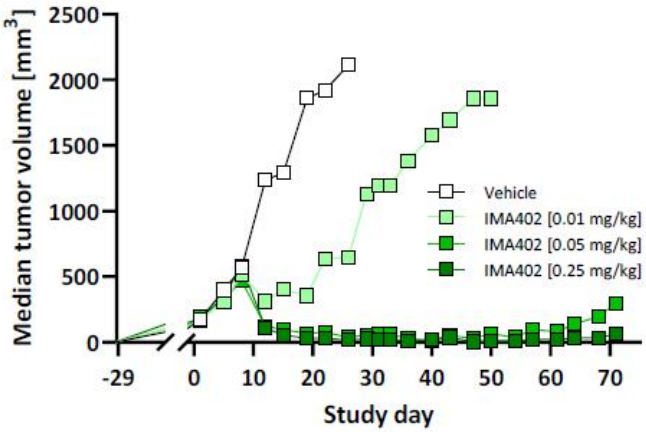
TCER® IMA402 Targeting PRAME – Efficacy Assessment *in vitro*

Tumor Cell Killing at Low Physiological PRAME Peptide Levels



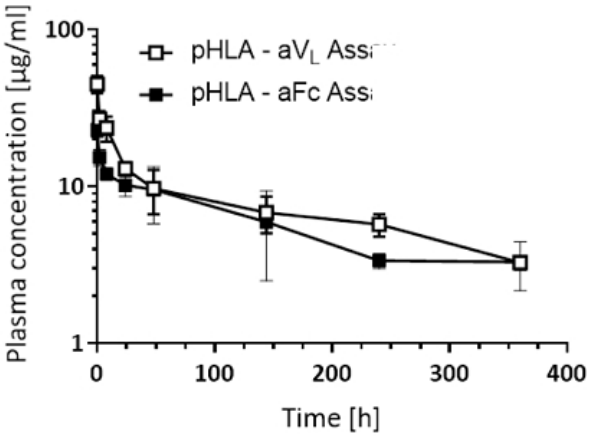
- TCER® IMA402 induces killing of tumor cells with PRAME target copies as low as 50 CpCs
- Physiological PRAME levels detected in majority of cancer tissues from patients are 100 – 1000 CpCs
- Preclinical activity profile enables targeting of a broad variety of tumor indications, such as lung cancer,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

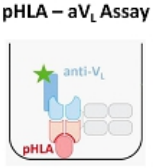
TCER® IMA402 Achieves Durable Tumor Control of Large Tumors *in vivo*

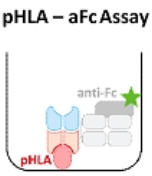


- Dose-dependent efficacy of IMA402 in cell line-derived *in vivo* mouse model
- Durable shrinkage of large tumors including complete responses over prolonged period
- Sufficiently high drug doses are key to achieving desired anti-tumor effect

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







- 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 2H 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
- Ovarian cancer, lung cancer, uterine cancer, melanoma, others

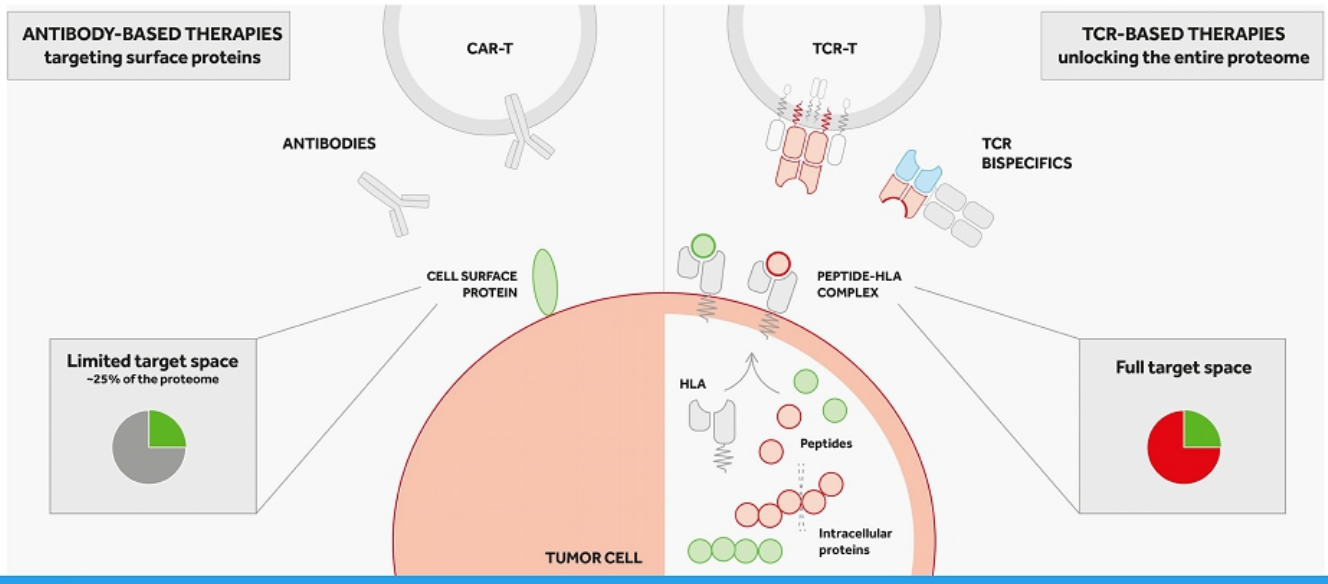
Phase 2a: Dose Expansion

Expansion cohort
Expansion cohort
Expansion cohort

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

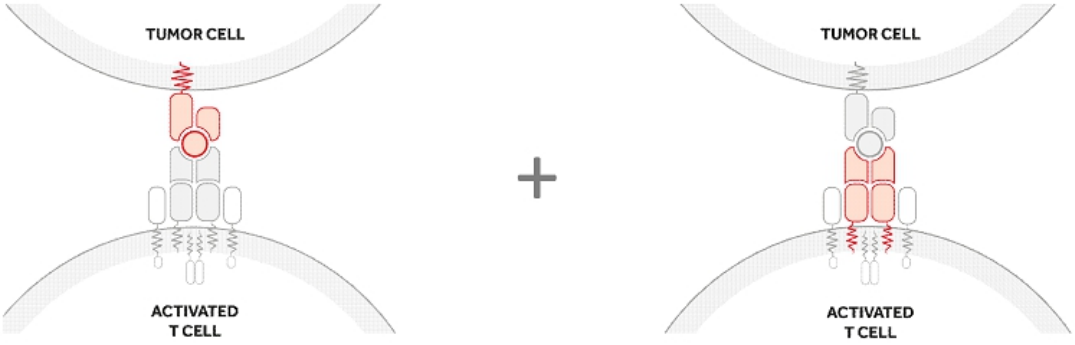
Immatics' Proprietary Target and TCR Discovery Platforms

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



True Cancer Targets & Matching Right TCRs

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



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®“*

Potential for Large Patient Populations across Multiple Solid Cancers

IMA203 / IMA402 PRAME

Uterine Carcinoma – 97%
Uterine Carcinosarcoma – 100%
Sarcoma Subtypes – up to 100%
Cut. Melanoma – 95%
Uveal Melanoma[1] – 89%
Ovarian Carcinoma – 84%
Squamous NSCLC – 68%
TNBC – 63%
Small Cell Lung Cancer – 45%
Kidney Carcinoma – up to 40%
Cholangiocarcinoma – 33%
HNSCC – 27%
Esophageal Carcinoma – 27%
Breast Carcinoma– 26%
Adeno NSCLC – 25%
HCC – 18%
Bladder Carcinoma – 18%

IMA401 MAGEA4/8

Squamous NSCLC – 52%
Sarcoma Subtypes – up to 60%
HNSCC – 36%
Bladder Carcinoma – 29%
Uterine Carcinosarcoma – 29%
Esophageal Carcinoma – 23%
Ovarian Carcinoma – 23%
Melanoma – 18%

IMA204 COL6A3 Exon 6

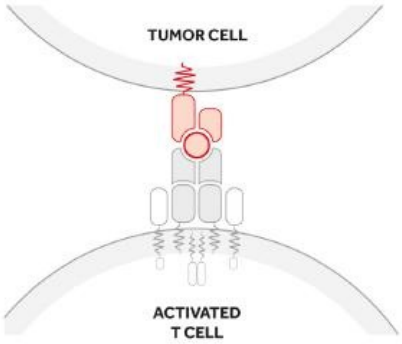
Pancreatic Carcinoma – 76%
Breast Carcinoma – 77%
Stomach Carcinoma – 67%
Sarcoma – 63%
Colorectal Carcinoma – 60%
Esophageal Carcinoma – 60%
Squamous NSCLC– 55%
Adeno NSCLC– 57%
HNSCC – 56%
Uterine Carcinosarcoma – 50%
Mesothelioma – 44%
Cholangiocarcinoma – 36%
Melanoma – 35%
Bladder Carcinoma – 34%
Ovarian Carcinoma – 31%

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

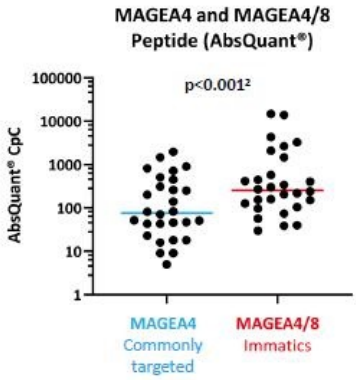
Target prevalence for selected solid cancer indications are based on TCGA (for SCLC: in-house) RNAseq data combined with a proprietary mass spec-guided RNA expression threshold;
[1] Uveal melanoma target prevalence is based on IMADetect® qPCR testing of screening biopsies from clinical trial patients (n=61)

Immatics' Unique Capability – Identification of the most Relevant Target

Example of MAGEA4/8 Peptide Target



Ranking of pHLA targets



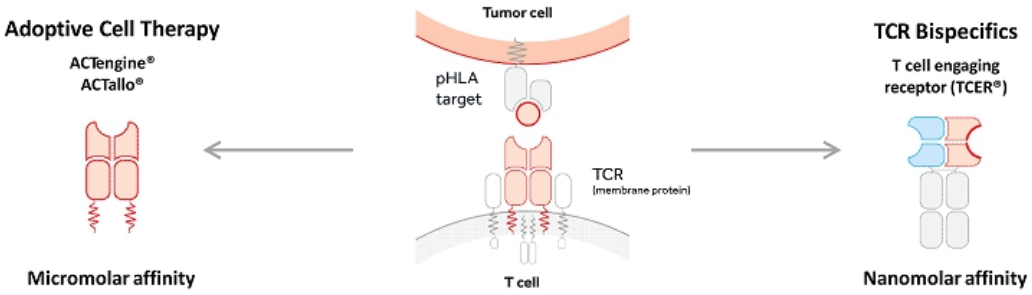
XPRESIDENT® quantitative information on target density[1] between peptides originating from the same source protein

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

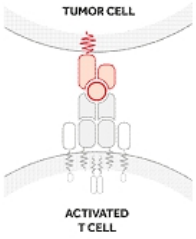
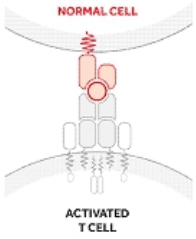
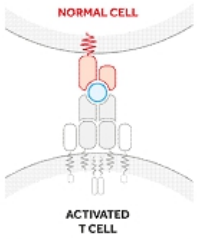


- Fast, efficient and highly sensitive discovery of highly specific, natural TCRs
- Protein engineering capabilities to design and maturate TCRs with increased affinity while retaining specificity
- Early de-selection of cross-reactive TCRs by the unique interplay between Immatics' target and TCR discovery 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

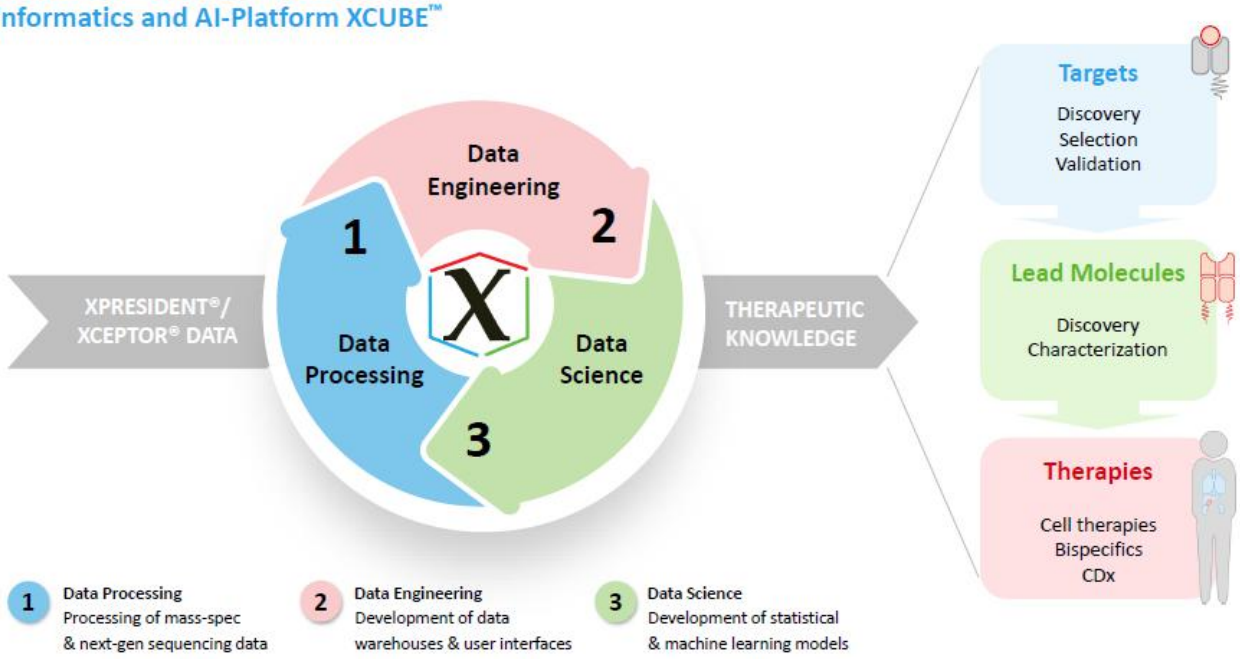
Target peptide presented on tumor cells	Target peptide presented on normal cells	Similar peptide presented on normal cells[1]	A different HLA is recognized on normal cells
			
Selective killing of tumor cells	On-target (off-tumor) toxicity	Off-target toxicity	Alloreactivity

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™



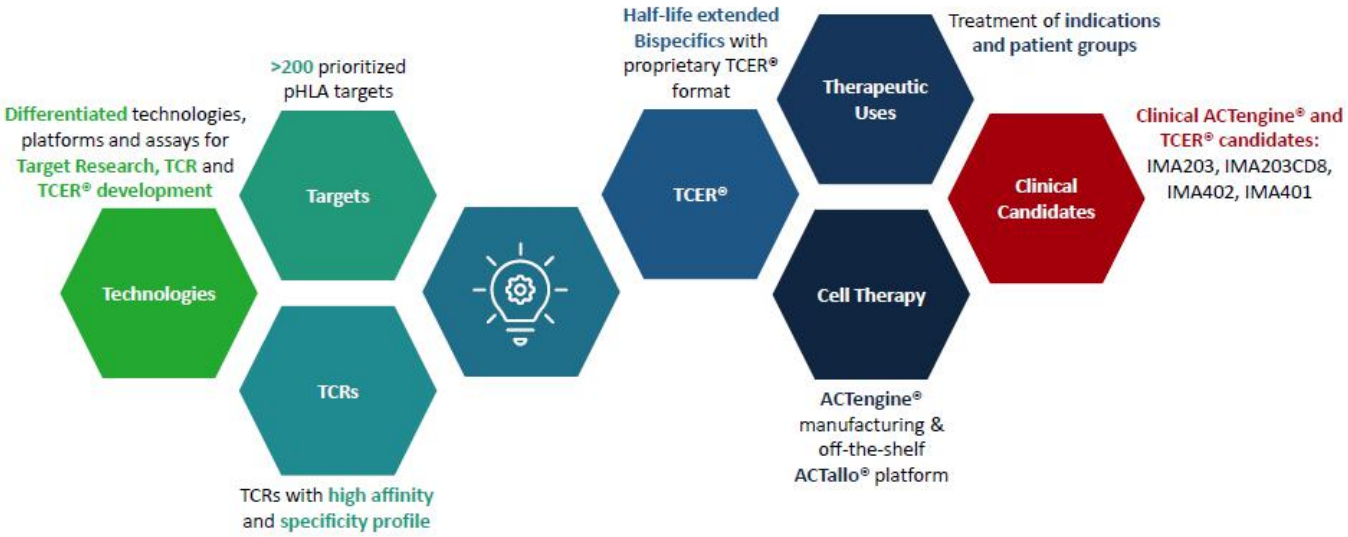
1 **Data Processing**
Processing of mass-spec & next-gen sequencing data

2 **Data Engineering**
Development of data warehouses & user interfaces

3 **Data Science**
Development of statistical & machine learning models

Immatics' Robust Intellectual Property Portfolio

Protection Strategy of Key Assets in Major Markets and Beyond



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]

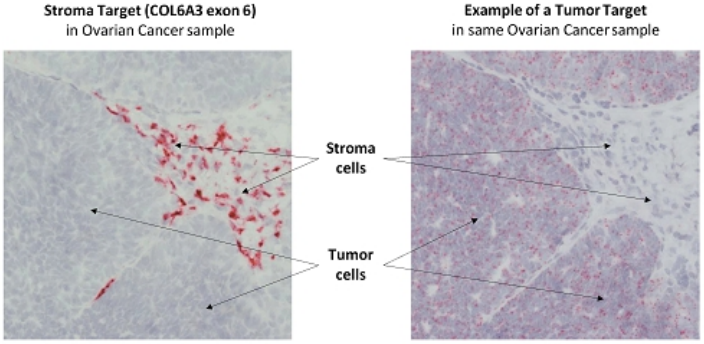
Pancreatic Carcinoma – 76%
Breast Carcinoma – 77%
Stomach Carcinoma – 67%
Sarcoma – 63%
Colorectal Carcinoma – 60%
Esophageal Carcinoma – 60%
Squamous NSCLC– 55%
Adeno NSCLC– 57%
HNSCC – 56%
Uterine Carcinosarcoma – 50%
Mesothelioma – 44%
Cholangiocarcinoma – 36%
Melanoma – 35%
Bladder Carcinoma – 34%
Ovarian Carcinoma – 31%

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

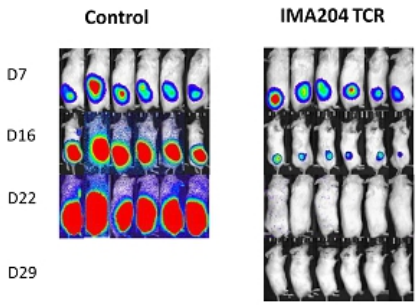
[1] Target density: peptide copy number per tumor cell, approximate range representing the majority of tumor samples analyzed; [2] Functional avidity: EC50 half maximal effective concentration;
[3] Solid cancer indications with 20% or more target expression, Target prevalence for selected cancer indications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



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



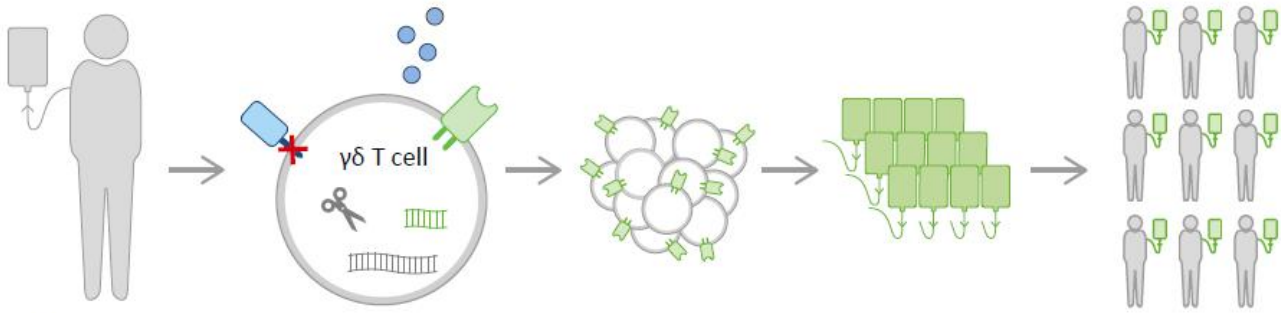
CD8-independent TCR leads to tumor eradication in all mice treated

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



γδ T cell Collection from Healthy Donor

Cell Engineering (gene editing & armoring)

Expansion

Off-the-shelf Products

Patient Treatment

- **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

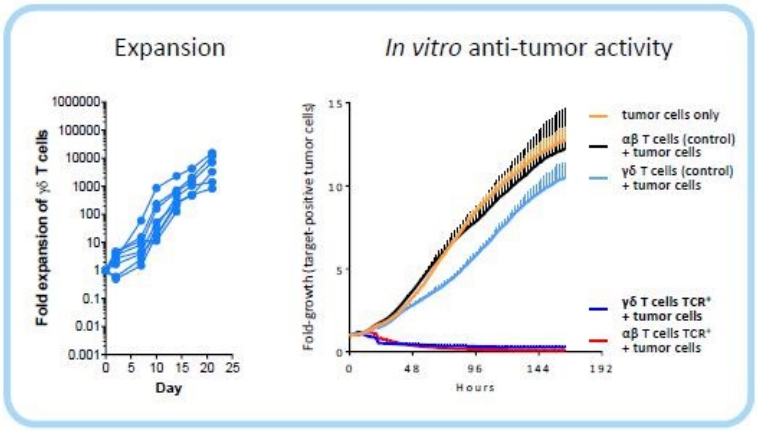
- Strategic collaborations combining Immatics' proprietary ACTallo® platform with Bristol Myers Squibb's next-gen technologies and Editas Medicine's CRISPR gene editing technology to develop next-gen allogeneic γδ TCR-T/CAR-T programs

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



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)

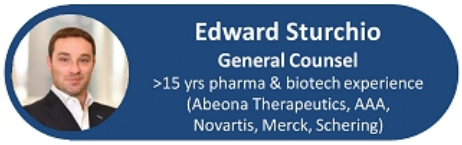
Carsten Reinhardt
Chief Development Officer
>20 yrs pharma & biotech experience
(Micromet, Roche, Fresenius)

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

Delivering

the Power of T cells to Cancer Patients

www.immatics.com