
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

November 8, 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 November 8, 2024, Immatics N.V. (the “Company” or “Immatics”) provided (i) updated Phase 1b clinical data on ACTengine® IMA203, (ii) Phase 1 clinical data on ACTengine® IMA203CD8 and (iii) preclinical data on other next-generation T cell candidates and combination strategies.

IMA203

The data cutoff was August 23, 2024, and the clinical data update includes all infused patients in the Phase 1b dose expansion part of the trial (N=41¹), consisting of 28² melanoma patients previously reported on October 10, 2024, and 13 non-melanoma patients, of which 10 non-melanoma patients were reported on November 8, 2023. The infused patient population is composed of patients with a median of 3 lines of prior systemic treatments, consisting of cutaneous melanoma patients, uveal melanoma patients, other melanoma patients, ovarian cancer patients, synovial sarcoma patients and patients with other indications.

Safety Data. The Company previously reported safety data for the 70³ patients in the Phase 1a dose escalation and Phase 1b dose expansion parts of the clinical trial across all dose levels and all tumor types. See the Report on Form 6-K filed with the Securities and Exchange Commission on October 10, 2024.

Anti-tumor Activity. The table below sets forth the observed anti-tumor activity of IMA203 in the Phase 1b clinical trial and durability of responses in all melanoma patients in the Phase 1b clinical trial.

	<u>Cutaneous melanoma (N=13)</u>	<u>Uveal melanoma (N=10)</u>	<u>Melanoma (Other) (N=3)</u>	<u>Ovarian Cancer (N=4)</u>	<u>Synovial Sarcoma (N=3)</u>	<u>Other Indications (N=6)</u>
Confirmed Objective Response Rate	54% (7/13)	60% (6/10)	1/3	2/4	1/3	1/6
Objective Response Rate	62% (8/13)	60% (6/10)	2/3	2/4	2/3	1/6
Tumor Shrinkage	85% (11/13)	100% (10/10)	2/3	3/4	3/3	5/6
Disease Control Rate (at week 6)	92% (12/13)	90% (9/10)	3/3	2/4	3/3	5/6

Durability. The Company previously reported durability data for the melanoma patients in the Phase 1b dose expansion part of the clinical trial. See the Report on Form 6-K filed with the Securities and Exchange Commission on October 10, 2024.

IMA203CD8

Patient Baseline Characteristics. As of data cutoff (September 30, 2024), 44⁴ heavily pretreated HLA-A*02:01 and PRAME-positive patients with solid tumors were infused with IMA203CD8 monotherapy across four escalating dose levels, with the median total infused dose being 1.48x10⁹ TCR-T cells, of which 41⁵ patients were evaluable for efficacy. The treated patient population is composed of patients with a median of 3 lines of prior systemic treatments.

Safety Data. The safety population included 44 patients. As shown in the table below, the most frequent adverse events were expected cytopenias (Grade 3-4) associated with lymphodepletion as well as mostly mild to moderate cytokine release syndrome (“CRS”) (Grade 1: 36% of patients, Grade 2: 48% of patients, Grade 3: 11% of patients; Grade 4: 2% of patients). As previously reported, two patients experienced dose-limiting toxicities at dose level 4b, which prompted a dosing adjustment to dose level 4a. After further assessing the tolerability profile of IMA203CD8

¹ All infused patients, first tumor assessment post infusion pending for 2/28 melanoma patients at data-cut.

² Includes one patient who started lymphodepletion but did not receive IMA203 TCR-T cells.

³ All patients who started lymphodepletion as of data cutoff.

⁴ All patients who started lymphodepletion.

⁵ All infused patients with at least one tumor assessment postbaseline.

in additional patients treated at dose level 4a, the eligibility criteria and the IL-2 dose regimen were modified, and dose escalation beyond dose level 4a was reinitiated. One Grade 5 adverse event classified as possibly related to treatment with IMA203CD8 was also observed as reported previously in March 2024. The maximum tolerated dose has not yet been determined.

Treatment-Emergent Adverse Events in the Safety Population (N=44)

Adverse event (System organ class, preferred term)	≥ Grade 3		Adverse event (System organ class, preferred term)	≥ Grade 3	
	No.	%		No.	%
Patients with any adverse event	44	100.0	... table continued		
Adverse events of special interest	7	15.9	Immune system disorders	4	9.1
Cytokine release syndrome ¹	6	13.6	Haemophagocytic lymphohistiocytosis ²	4	9.1
Immune effector cell-associated neurotoxicity syndrome	1	2.3	Infections and infestations	4	9.1
Blood and lymphatic system disorders	44	100.0	Pneumonia	2	4.5
Neutropenia	40	90.9	Infection	1	2.3
Anaemia	25	56.8	Sepsis ³	1	2.3
Lymphopenia	25	56.8	Systemic candida	1	2.3
Thrombocytopenia	15	34.1	Gastrointestinal disorders	3	6.8
Leukopenia	11	25.0	Diarrhoea	2	4.5
Febrile neutropenia	2	4.5	Abdominal pain	1	2.3
Investigations	9	20.5	Skin and subcutaneous tissue disorders	3	6.8
Alanine aminotransferase increased	5	11.4	Rash	2	4.5
Aspartate aminotransferase increased	5	11.4	Alopecia	1	2.3
Blood creatinine increased	2	4.5	Rash maculo-papular	1	2.3
Blood alkaline phosphatase increased	1	2.3	Vascular disorders	3	6.8
Blood bilirubin increased	1	2.3	Hypertension	3	6.8
Gamma-glutamyltransferase increased	1	2.3	Nervous system disorders	2	4.5
Metabolism and nutrition disorders	6	13.6	Neurotoxicity ²	1	2.3
Hypophosphataemia	2	4.5	Syncope	1	2.3
Acidosis	1	2.3	Renal and urinary disorders	2	4.5
Decreased appetite	1	2.3	Acute kidney injury	1	2.3
Hyperglycaemia	1	2.3	Urinary tract obstruction	1	2.3
Hypermagnesaemia	1	2.3	Hepatobiliary disorders	1	2.3
Hypoalbuminaemia	1	2.3	Hepatic function abnormal	1	2.3
General disorders and administration site conditions	5	11.4	Reproductive system and breast disorders	1	2.3
Fatigue	5	11.4	Pelvic pain	1	2.3
Oedema peripheral	1	2.3			
Musculoskeletal and connective tissue disorders	5	11.4			
Bone pain	3	6.8			
Myalgia	2	4.5			
Back pain	2	4.5			
Arthralgia	1	2.3			

Data cut-off Sep 30, 2024; All treatment-emergent adverse events (TEAEs) with ≥ Grade 3 regardless of relatedness to study treatment that occurred in at least 1 patient are presented; ¹ DLT: Dose limiting toxicity in patient DL4b-04. ² DLTs in patient DL4b-01; ³ 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. Event was reported in the Company's Annual Report on Form 20-F for the year ended December 31, 2023.

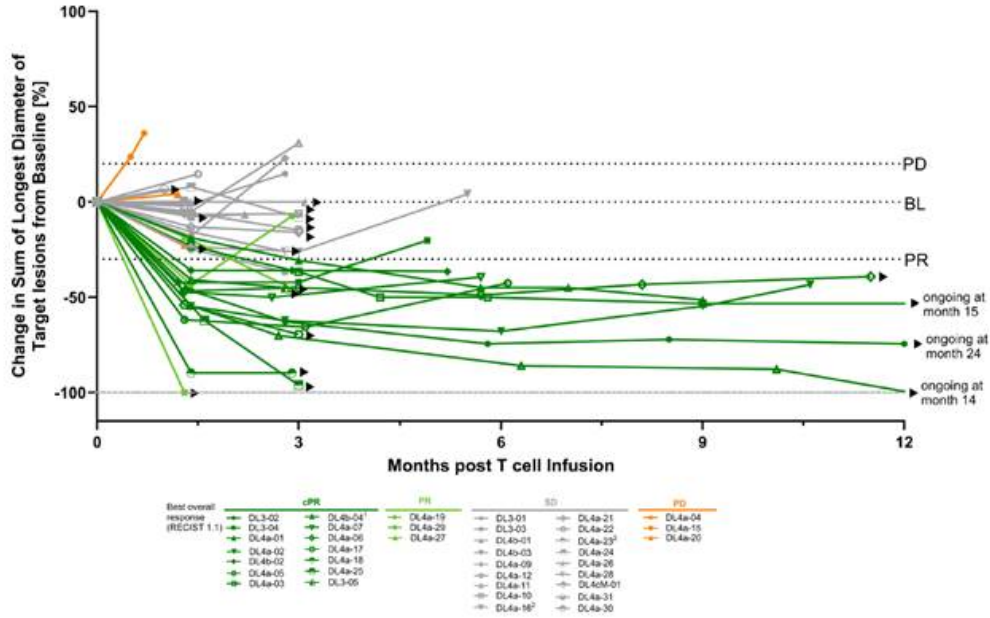
Anti-tumor Activity and Durability. In dose escalation, the objective response rate ("ORR") was 41% (17/41 patients) and the confirmed objective response rate ("cORR") was 41% (14/34 patients), all being partial responses; tumor shrinkage was observed in 84% of patients (32/38 patients⁶); and the disease control rate ("DCR") at week 6 was 85% (34/40 patients⁷). The median duration of response ("mDOR") was 9.2 months with a median follow-up of 13.1 months. As of data cutoff, 10 of the 17 responses were ongoing, of which three confirmed responses were ongoing at 14+, 15+ and 24+ months. Of note, these patients had been treated at substantially lower doses compared to IMA203 (GEN1); that is, in a range of 0.2-0.48x10⁹ TCR-T cells/m² BSA (dose level 3) to 0.801-1.2x10⁹ TCR-T cells/m² BSA (dose level 4c) T cells infused. Deep responses with ≥50% tumor size reduction were observed in 11 out of 17 responders. This group included two patients with complete response of target lesions, of which one patient showed a complete metabolic response according to PET-CT scan⁸.

⁶ Three patients excluded from tumor shrinkage analysis and figures due to lack of post-treatment assessment.

⁷ One patient had an early tumor assessment, outside the first assessment visit window and is not included in DCR calculation.

⁸ Metabolic CR on investigator-initiated PET month 14 post infusion.

Response over Time of IMA203CD8 in Dose Escalation



Translational Data. Translational data indicate that PRAME expression level is associated with clinical activity in IMA203 and IMA203CD8 treated patients. Both IMA203 and IMA203CD8 achieved deep responses despite IMA203CD8 patients receiving lower product doses. Based on the enhanced pharmacology of IMA203CD8, the evaluation of higher doses of IMA203CD8 in the ongoing dose escalation trial opens the possibility of addressing hard-to-treat solid tumor indications with a medium-level of PRAME copy numbers, such as ovarian cancer, endometrial cancers and triple-negative breast cancer.

Preclinical Data on New Approaches for TCR-T Based Cell Therapies

As part of its long-term strategy to expand its PRAME franchise, the Company has conducted preclinical studies for the potential future clinical development of next-generation TCR-T-based cell therapies targeting PRAME to further enhance the efficacy and durability of IMA203. These efforts include the evaluation of TCR-T cells armored with membrane-bound IL-15 (mbIL15) targeting tumor types with low PRAME copy numbers, such as squamous non-small-cell lung cancer and squamous head and neck cancers. In addition, the Company is developing an allogeneic cell therapy approach to further increase commercial attractiveness and to reach patients quickly with its next-generation off-the-shelf cell therapy, ACTallo[®].

At the Society for Immunotherapy of Cancer conference in November 2024, the Company presented two posters for its preclinical studies: First, the Company presented preclinical data on the use of mbIL15 in combination with IMA203, which the Company believes demonstrate the feasibility of co-expressing TCR and mbIL-15 to generate T cell product with enhanced durability and anti-tumor activity. Second, the Company presented preclinical data on the combination of IMA203 with a Moderna PRAME-encoding mRNA vaccine for the treatment of solid tumors, which showed that LNPs containing PRAME-encoding mRNA (i) induced T cell activation by demonstrating an upregulation of all activation markers tested, (ii) induced T cell effector cytokine secretion and (iii) induced T cell proliferation as demonstrated by an increase in CD8+ IMA203 T cell counts upon prolonged co-culture conditions. The effects were antigen-, TCR- and dose dependent as demonstrated by the absence of response with the negative controls and the changes in responses to mRNA-LNP dilution series. The Company planned a first-in-human clinical combination study of IMA203 with the selected PRAME mRNA-LNP construct to evaluate the safety,

tolerability and efficacy of the combination therapy in up to 15 patients with advanced or recurrent cutaneous melanoma and synovial sarcoma.

* * *

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

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 and 99.2 hereto) shall be deemed to be incorporated by reference into the registration statements on Form F-3 (Registration Nos. 333-240260, 333-274218 and 333-282569) 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
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99.1	Press release dated November 8, 2024
99.2	Corporate presentation dated November 8, 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.

Date: November 8, 2024

IMMATICS N.V.

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



PRESS RELEASE

**Immatics Announces Multiple Presentations at the
39th Annual Meeting of the Society for Immunotherapy of Cancer (SITC)
on TCR-T Therapy Candidates Targeting PRAME**

Two oral presentations and multiple posters on clinical and preclinical-stage candidates to be presented at SITC, demonstrating the strength of Immatics' TCR-T PRAME franchise to target solid cancers

- ACTengine® IMA203 demonstrates 54% cORR, 12.1 months mDOR and 6 months mPFS in heavily pretreated metastatic melanoma patients and >1-year mPFS in patients with deep responses; Company plans to start its randomized-controlled Phase 3 SUPRAME trial in December 2024 to evaluate IMA203 in second-line or later metastatic melanoma
- Next-generation ACTengine® IMA203CD8 TCR-T cell therapy targeting PRAME demonstrates enhanced pharmacology and potency per cell; Phase 1a dose escalation reinitiated to target higher doses, positioning this TCR-T candidate for future development in solid cancers with medium-level PRAME copy numbers, such as ovarian cancer, endometrial cancers and triple-negative breast cancer
- A first update on Immatics' Bispecific TCER® IMA402 targeting PRAME and initial clinical data from the ongoing Phase 1a dose escalation trial is expected to be reported by year-end

Houston, Texas and Tuebingen, Germany, November 8, 2024 – [Immatics N.V.](https://www.immatics.com) (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 an expanded clinical dataset from the ongoing Phase 1b dose expansion clinical trial for ACTengine® IMA203 in addition to updated Phase 1 dose escalation clinical data on its next-generation ACTengine® IMA203CD8 TCR-T cell therapy. For the first time, the Company also reported preclinical data on other next-generation T cell candidates and combination strategies as part of its strategy to further exploit opportunities in additional solid tumor types within its PRAME franchise.

All dates and times of Immatics' upcoming oral and poster presentations at the 39th Annual Meeting of the Society for Immunotherapy of Cancer (SITC) are available [here](#). The data slides

are accessible in the '[Events & Presentations](#)' section of the Investor & Media section of the Company's website.

"Immatics remains fully focused on the clinical development of our most advanced lead product candidate, IMA203, in second-line or later metastatic melanoma patients. We look forward to the initiation of SUPRAME, the registration-enabling Phase 3 trial, in December," said Dr. Cedrik Britten, Chief Medical Officer at Immatics. "Today, we also provide an update on our first, next-generation cell therapy, IMA203CD8, which is designed to achieve enhanced anti-tumor activity. The data announced confirm IMA203CD8's enhanced pharmacology and potency per cell in patients. These attributes highlight the potential of this therapy in hard-to-treat solid tumors with medium-level PRAME copy numbers, including ovarian, endometrial and triple-negative breast cancer. The next step will be to further increase the cell dose to assess the full clinical potential of IMA203CD8 beyond melanoma. In addition, we strive to continuously improve the potential therapeutic benefit for patients with a range of PRAME-positive cancers through the expansion of our PRAME franchise."

ACTengine® IMA203 Monotherapy Phase 1b Trial - Clinical Data and Development Path Summary

On [October 10, 2024](#), Immatics provided a data update on IMA203 monotherapy in 28¹ heavily pretreated metastatic melanoma patients from the ongoing Phase 1b dose expansion part of the clinical trial in which patients were treated at the recommended Phase 2 dose (RP2D, 1 to 10 billion total TCR-T cells).

The data announced today include all infused patients in the Phase 1b dose expansion part of the trial (N=41²), consisting of the 28 melanoma patients reported on October 10, 2024, and 13 non-melanoma patients, of which 10 non-melanoma patients were reported on November 8, 2023.

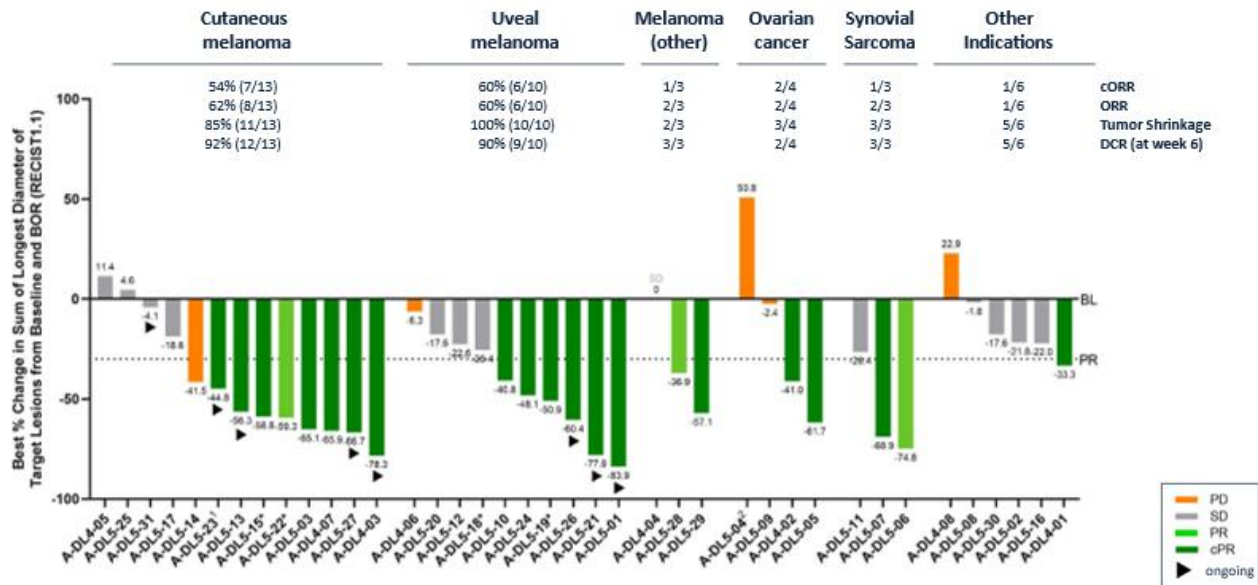
IMA203 monotherapy has maintained a favorable tolerability profile with no treatment-related Grade 5 events in the entire safety population (N=70³ Phase 1a and Phase 1b patients across all dose levels and all tumor types).

Best Overall Response for IMA203 in Dose Expansion in All Indications (N=41[#])

¹ Includes one patient who started lymphodepletion but did not receive IMA203 TCR-T cells.

² All infused patients, first tumor assessment post infusion pending for 2/28 melanoma patients at data-cut.

³ All patients who started lymphodepletion as of the data cut-off on August 23, 2024.



Data cut-off Aug 23, 2024; #First tumor assessment post infusion pending for 2/28 melanoma patients at data-cut; *Maximum change of target lesions and RECIST1.1 response at different timepoints. ¹Patient A-DL5-23 is off study at data cut-off; ²Patient received one dose nivolumab erroneously.

Development Path for IMA203

Based on the Phase 1b data, the Company is on track to commence SUPRAME, the registration-enabling Phase 3 randomized-controlled clinical trial in melanoma for IMA203, in December 2024.

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, including nivolumab/relatimab, nivolumab, ipilimumab, pembrolizumab, lifileucel (US only) or chemotherapy. The primary endpoint for full approval will be median PFS and secondary endpoints will include objective response rate, safety, duration of response, no overall survival detriment and patient-reported outcomes.

Patient enrollment for SUPRAME is forecast to be completed in 2026, and a pre-specified interim analysis is planned for early 2026. Immatics aims to submit a Biologics License Application (BLA) in early 2027 for full approval.

ACTengine® IMA203CD8 (GEN2) Monotherapy Phase 1 Dose Escalation Trial - Patient Population & Clinical Data Summary

Patient population: Heavily pretreated patients with solid tumors

As of data cut-off on September 30, 2024, 44⁴ heavily pretreated HLA-A*02:01 and PRAME-positive patients with solid tumors were infused with IMA203CD8 monotherapy across four escalating dose levels, of which 41⁵ patients were evaluable for efficacy. The median total infused dose was 1.48×10^9 TCR-T cells, and the patient population is composed of patients with a median of three lines of prior systemic treatments.

Safety: *Treatment with IMA203CD8 demonstrates a manageable tolerability profile across dose levels*

IMA203CD8 monotherapy has maintained a manageable tolerability profile in the 44 patients treated. The most frequent adverse events at or above Grade 3 were expected cytopenia associated with lymphodepletion. Some patients also experienced mild to moderate CRS (Grade 1: 36% Grade 2: 48% Grade 3: 11% Grade 4: 2%).

As previously reported, two patients experienced dose-limiting toxicities at dose level 4b, which prompted a dosing adjustment to dose level 4a. After further assessing the tolerability profile of IMA203CD8 in additional patients treated at dose level 4a, the eligibility criteria and the IL-2 dose regimen were modified, and dose escalation beyond dose level 4a was reinitiated. One Grade 5 adverse event classified as possibly related to treatment with IMA203CD8 was also observed as reported previously in March 2024. The maximum tolerated dose has not yet been determined.

Anti-tumor activity and durability: *Deep and durable objective responses observed*

- As of data cut-off on September 30, 2024, 10 of 17 responses were ongoing, of which three confirmed responses were ongoing at 14+, 15+ and 24+ months.
- Of note, these patients had been treated at substantially lower doses compared to IMA203 (GEN1), i.e. in a range of $0.2-0.48 \times 10^9$ TCR-T cells/m² BSA (dose level 3) to $0.801-1.2 \times 10^9$ TCR-T cells/m² BSA (dose level 4c) T cells infused.
- Deep responses with $\geq 50\%$ tumor size reduction were observed in 11 out of 17 responders. This group included two patients with complete response of target lesions, of which one patient showed a complete metabolic response according to PET-CT scan⁶.
- 41% (14/34) confirmed objective response rate (cORR) and 41% (17/41) objective response rate (ORR).
- Median duration of response (mDOR) of 9.2 months at a median follow-up (mFU) of 13.1 months.

⁴ All patients who started lymphodepletion.

⁵ All infused patients with at least one tumor assessment postbaseline.

⁶ Metabolic CR on investigator-initiated PET month 14 post infusion.

Tumor shrinkage⁷ of 84% (32/38) and disease control rate⁸ at week 6 of 85% (34/40).

Translational data: Opportunity of IMA203CD8 in medium-level PRAME expressing indications

Translational data indicate that PRAME expression level is associated with clinical activity in IMA203 and IMA203CD8 treated patients. Both IMA203 and IMA203CD8 achieved deep responses despite IMA203CD8 patients receiving lower product doses. Based on the enhanced pharmacology of IMA203CD8, the evaluation of higher doses of IMA203CD8 in the ongoing dose escalation trial opens the possibility of addressing hard-to-treat solid tumor indications with a medium-level of PRAME copy numbers, such as ovarian cancer, endometrial cancers and triple-negative breast cancer.

Preclinical Data on New Approaches for TCR-T Based Cell Therapies

As part of Immatics' long-term strategy to expand its PRAME franchise, the Company has conducted preclinical studies for the potential future clinical development of next-generation TCR-T-based cell therapies targeting PRAME to further enhance the efficacy and durability of IMA203. These efforts include the evaluation of TCR-T cells armored with membrane-bound IL-15 (mbIL15) targeting tumor types with low PRAME copy numbers, such as squamous non-small-cell lung cancer and squamous head and neck cancers. In addition, the Company is developing an allogeneic cell therapy approach to further increase commercial attractiveness and to reach patients quickly with its next-generation off-the-shelf cell therapy, ACTallo®. The preclinical data will be presented during poster sessions at SITC.

About ACTengine® IMA203, IMA203CD8 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

⁷ Three patients excluded from tumor shrinkage analysis and figures due to lack of post-treatment assessment.

⁸ One patient had an early tumor assessment, outside the first assessment visit window and is not included in DCR calculation.

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

Certain statements in this press release 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, 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 press release 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 press release 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.

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Immatics Press Release November 8, 2024

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Immatics Corporate Presentation

November 8, 2024



Delivering the Power of T cells to Cancer Patients

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Forward-Looking Statement



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Forward-Looking Statements. Certain statements in this presentation 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 presentation 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.

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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



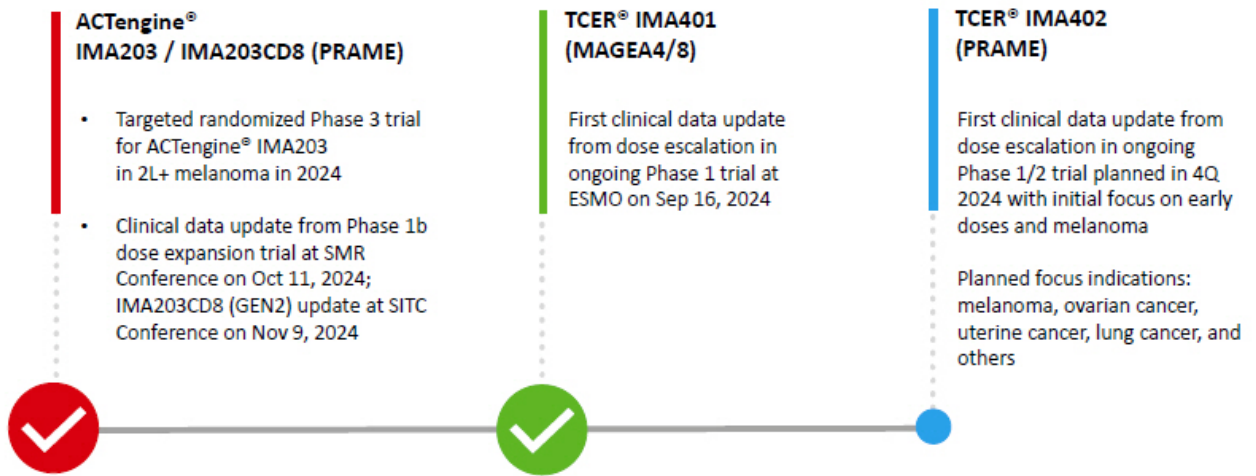
Differentiated Platforms

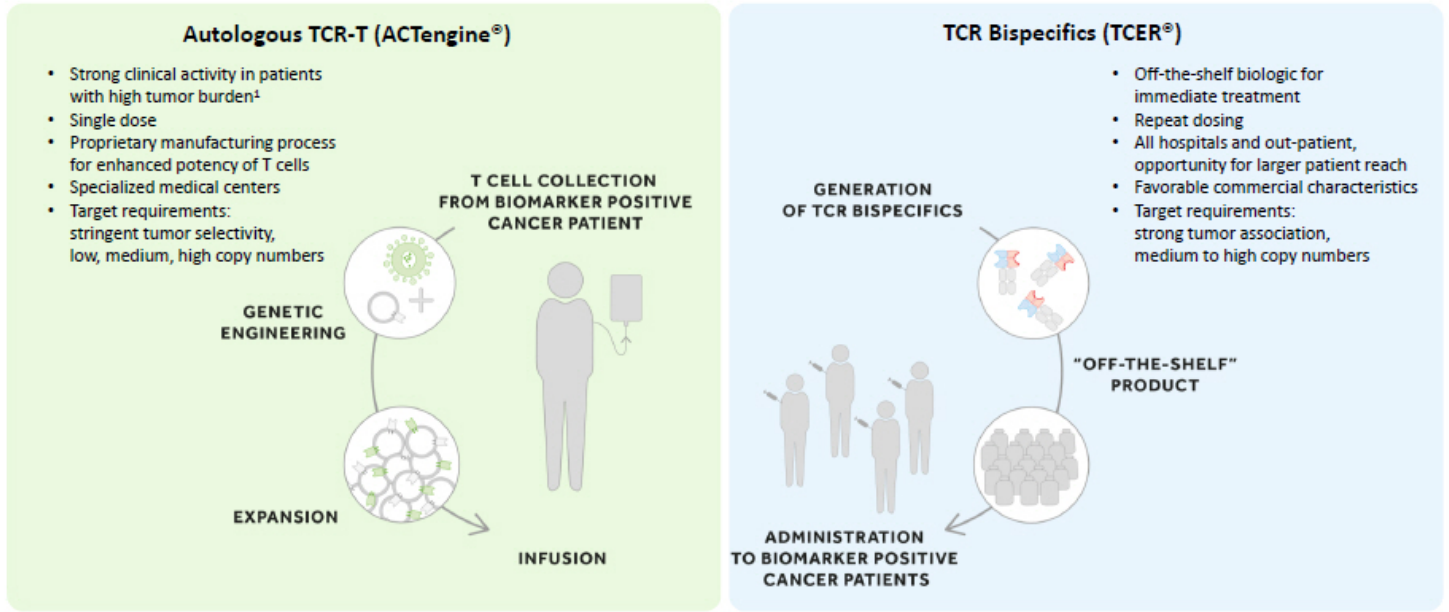
Unique technologies to identify true cancer targets and right TCRs



Therapeutic Opportunity

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





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

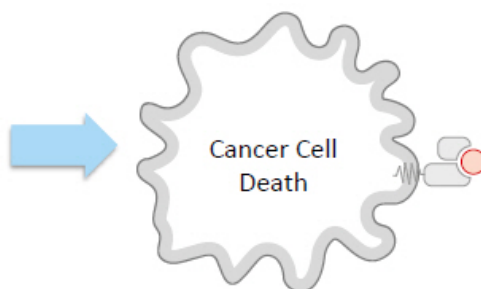
Our Pipeline of TCR-based Adoptive Cell Therapies and Bispecifics

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

Realizing the Full Multi-Cancer Opportunity of PRAME

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

Indication	% PRAME positive patients ¹
Uterine Carcinosarcoma	100%
Sarcoma Subtypes	up to 100%
Uterine Carcinoma	95%
Cut. Melanoma	95%
Uveal Melanoma ²	90%
Ovarian Carcinoma	85%
Squamous NSCLC	70%
TNBC	65%
Small Cell Lung Cancer	45%
Kidney Carcinoma	up to 40%
Cholangiocarcinoma	35%
Adeno NSCLC	25%
Breast Carcinoma	25%
HNSCC	25%
Esophageal Carcinoma	25%
HCC	20%
Bladder Carcinoma	20%



Phase 1b dose expansion ongoing

Phase 3 trial in preparation

TCER® IMA402
(TCR Bispecific)



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

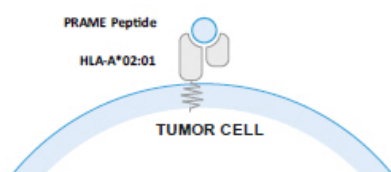
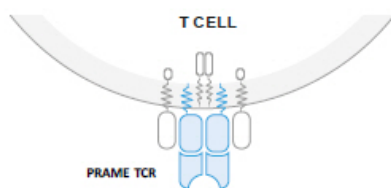
Leverage the full potential of targeting PRAME by continued evaluation of the best suited therapeutic modality (ACTengine® vs. TCER® or both) for each cancer type



ACTengine® IMA203 – TCR-T Targeting PRAME

The Multi-Cancer Opportunity of PRAME

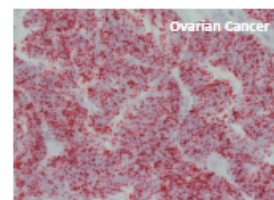
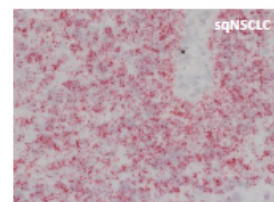
One of the Most Promising Solid Tumor Targets for TCR-based Therapies Known To Date



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

	<u>Incidence</u>	<u>R/R Incidence</u>	<u>PRAME Positive</u>
Cut. Melanoma	99,800	7,700	95%
Uveal Melanoma	1,500	800	89%
Ovarian Carcinoma	19,900	12,800	84%
Uterine Carcinoma	62,700	10,700	97%
Uterine Carcinosarcoma	3,300	1,900	100%
Squamous NSCLC	57,000	34,600	68%
Small Cell Lung Cancer	31,900	19,400	45%
Adeno NSCLC	91,200	55,300	25%
HNSCC	66,500	15,100	27%
Breast Carcinoma	290,600	43,800	26% TNBC: 63%
Synovial Sarcoma	1,000	400	100%
Cholangiocarcinoma	8,000	7,000	33%

Patient Population

Based on R/R Incidence, PRAME and HLA-A*02:01+

2,999
292
4,408
4,255
779
9,646
3,579
5,668
1,672
4,669
164
947

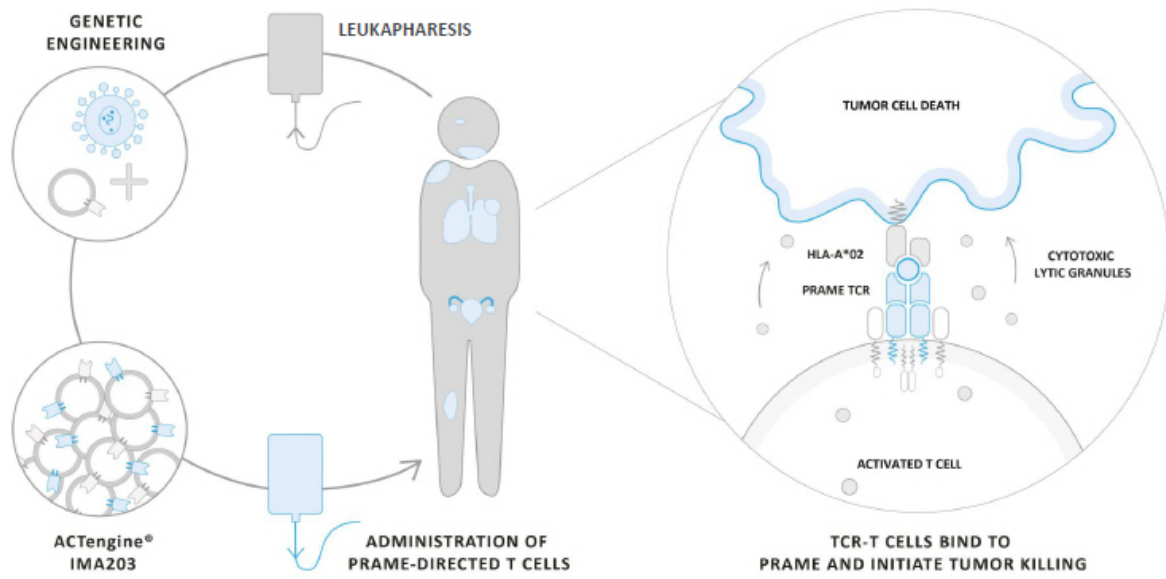
**TOTAL ~39,000
annually in the US**

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

ACTengine® IMA203 Targeting PRAME – Mechanism of Action

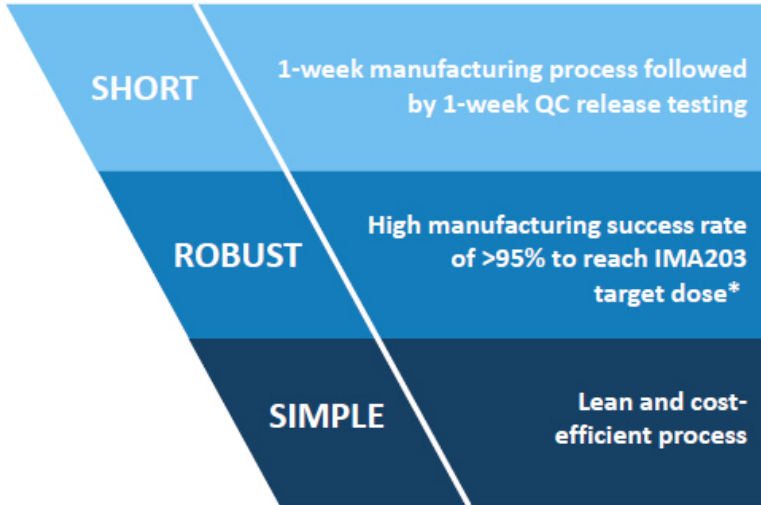
Immatics' Leading TCR-T Approach



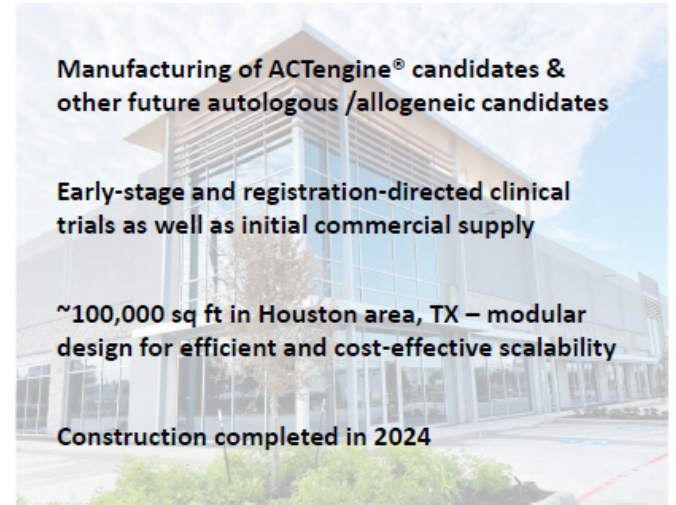
ACTengine® IMA203 TCR-T Product Manufacturing

Differentiated Manufacturing Process and Setup

Proprietary Manufacturing Process



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



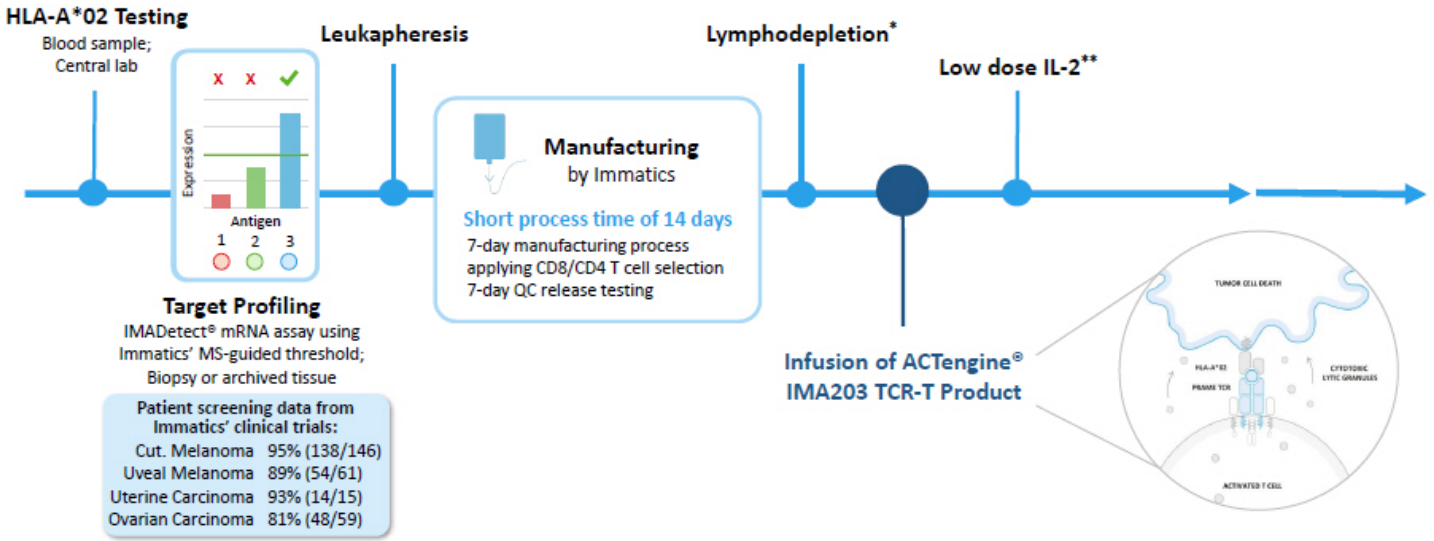
ACTengine® IMA203 TCR-T Monotherapy – Patient Flow

Screening & Manufacturing Phase

Treatment & Observation Phase

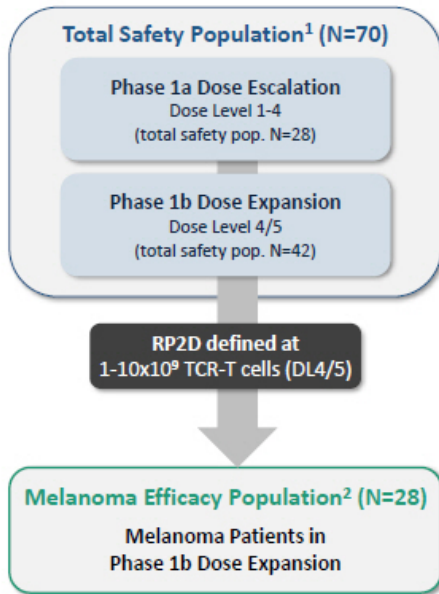
Long Term Follow-up

Safety and efficacy monitoring for 12 months



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	Total	N=11	Total	N=28
	Melanoma	N=41	Cutaneous melanoma	N=8	Cutaneous melanoma	N=13
	Other	N=29	Uveal melanoma	N=2	Uveal melanoma	N=12
			Mucosal melanoma	N=1	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)	

Most Frequent Adverse Events of IMA203 Across All Dose Levels in Phase 1a/b N=70 Patients in Total Safety Population¹

- 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 3²
- **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
(1x10⁹ to 10x10⁹ TCR-T cells)**

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

All ≥Grade 3 Adverse Events (N=70¹)

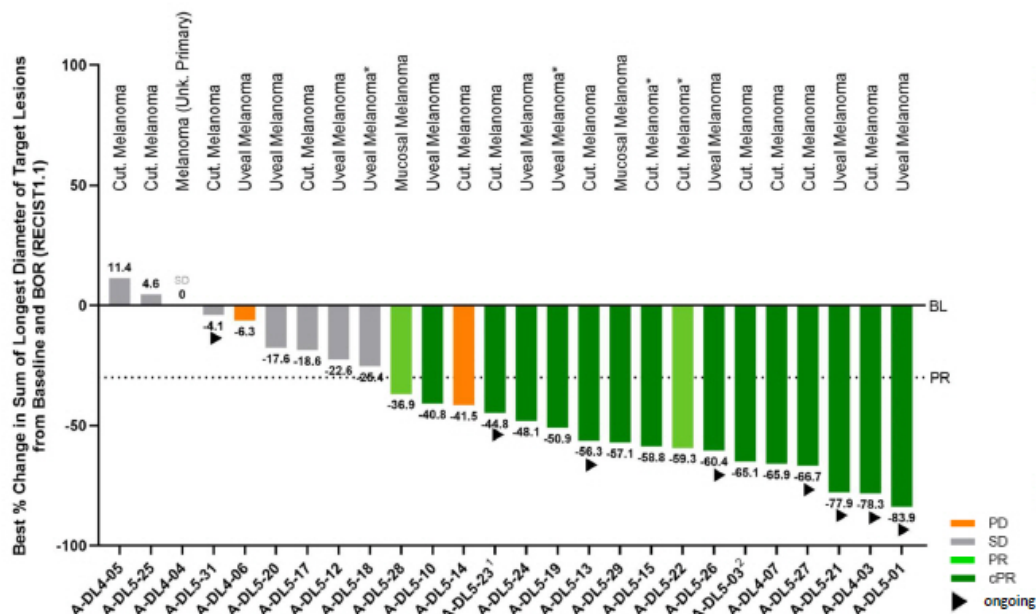
TEAEs by maximum severity for all patients in Phase 1a and Phase 1b (N=70¹)

Adverse event (System organ class, Preferred term)	≥ Grade 3		Adverse event (System organ class, Preferred term)	≥ Grade 3		Adverse event (System organ class, Preferred term)	≥ Grade 3	
	No.	%		No.	%		No.	%
Patients with any adverse event	70	100.0	table continued...			table continued...		
Adverse Events of Special Interest	9	12.9	Metabolism and nutrition disorders	7	10.0	Nervous system disorders	2	2.9
Cytokine release syndrome	8	11.4	Hypokalaemia	3	4.3	Headache	1	1.4
ICANS ²	3	4.3	Hyponatraemia	3	4.3	Posterior reversible encephalopathy syndrome	1	1.4
Blood and lymphatic system disorders	70	100.0	Hypophosphataemia	2	2.9	Endocrine disorders	1	1.4
Neutropenia	62	88.6	Dehydration	1	1.4	Inappropriate antidiuretic hormone secretion	1	1.4
Lymphopenia	39	55.7	Failure to thrive	1	1.4	Hepatobiliary disorders	1	1.4
Leukopenia	38	54.3	Vascular disorders	7	10.0	Cholangitis	1	1.4
Anaemia	36	51.4	Hypertension	6	8.6	Immune system disorders	1	1.4
Thrombocytopenia	24	34.3	Hypotension	1	1.4	Haemophagocytic lymphohistiocytosis	1	1.4
Febrile neutropenia	2	2.9	Renal and urinary disorders	6	8.6	Reproductive system and breast disorders	1	1.4
Cytopenia	1	1.4	Acute kidney injury	4	5.7	Vaginal haemorrhage	1	1.4
Leukocytosis	1	1.4	Nephritis	1	1.4			
Infections and infestations	10	14.3	Proteinuria	1	1.4			
Urinary tract infection	2	2.9	Gastrointestinal disorders	5	7.1			
Appendicitis	1	1.4	Abdominal pain	3	4.3			
COVID-19	1	1.4	Diarrhoea	1	1.4			
Cytomegalovirus infection reactivation	1	1.4	Illness	1	1.4			
Enterococcal infection	1	1.4	Vomiting	1	1.4			
Human herpesvirus 6 encephalitis	1	1.4	General disorders and administration site conditions	4	5.7			
Infection	1	1.4	Fatigue	1	1.4			
Orchitis	1	1.4	General physical health deterioration ³	1	1.4			
Sepsis ⁴	1	1.4	Pyrexia	1	1.4			
Sepsis shock ⁵	1	1.4	Swelling face	1	1.4			
Investigations	10	14.3	Skin and subcutaneous tissue disorders	4	5.7			
Alanine aminotransferase increased	6	8.6	Rash maculo-papular	3	4.3			
Aspartate aminotransferase increased	5	7.1	Eczema	1	1.4			
Blood creatinine increased	2	2.9	Cardiac disorders	3	4.3			
Blood alkaline phosphatase increased	1	1.4	Atrial fibrillation ⁶	3	4.3			
Blood bilirubin increased	1	1.4	Eye disorders	2	2.9			
Blood fibrinogen decreased	1	1.4	Periorbital oedema	1	1.4			
Lymphocyte count increased	1	1.4	Ulcerative keratitis	1	1.4			
Respiratory, thoracic and mediastinal disorders	10	14.3	Injury, poisoning and procedural complications	2	2.9			
Hypoxia	4	5.7	Humerus fracture	1	1.4			
Pleural effusion	2	2.9	Influenza related reaction	1	1.4			
Bronchial obstruction	1	1.4	Musculoskeletal and connective tissue disorders	2	2.9			
Dyspnoea	1	1.4	Muscle pain	1	1.4			
Epistaxis	1	1.4	Back pain	1	1.4			
Laryngeal inflammation	1	1.4	Muscle spasms	1	1.4			
Respiratory failure	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 (Neeapu 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 DL1: 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#)



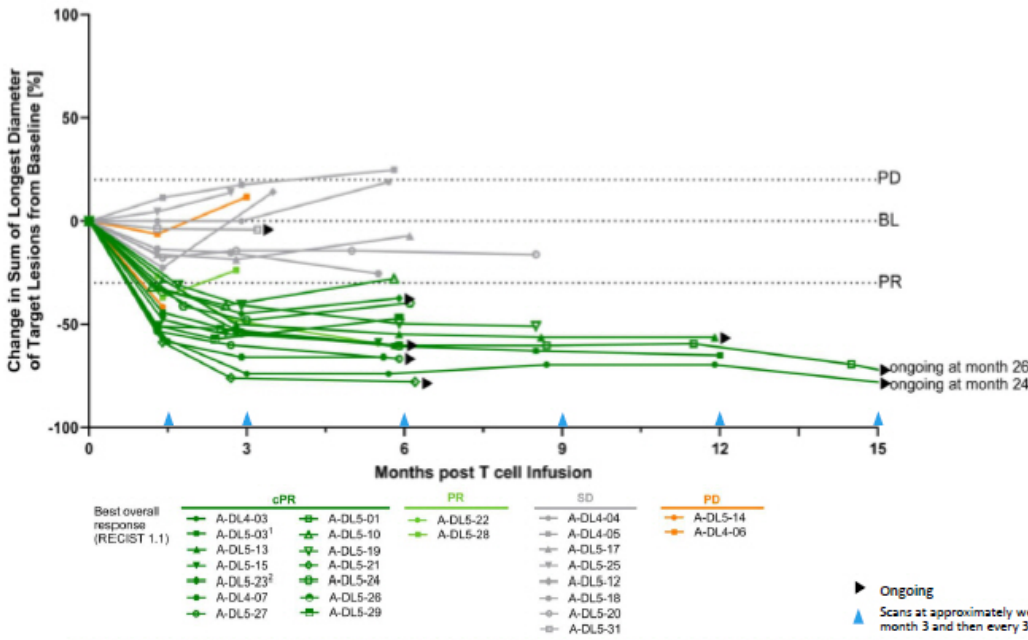
cORR	54% (14/26)
median DOR	12.1 months
(min, max)	(4.2, 25.5+ months)
mFU	9.3 months
7/14 confirmed responses ongoing	
median PFS	6.0 months
(min, max)	(0.3+, 26.8+ months)
median OS	Not reached
(min, max)	(0.3+, 26.8+ months)
mFU	8.6 months
ORR	62% (16/26)
Tumor shrinkage**	88% (23/26)
DCR (at week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

IMA203

#First tumor assessment post infusion pending for two melanoma patients at data cut; *Maximal change of target lesions and RECIST1.1 response at different timepoints; **Tumor shrinkage of target lesions; †Patient A-DL5-33 is off study at data cut-06; ‡Patient out of study due to PD (internal assessment); †††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. Data cut-off Aug 23, 2024 17

Response Over Time of IMA203 in Melanoma

Durable Responses 2 Years+ after Treatment 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
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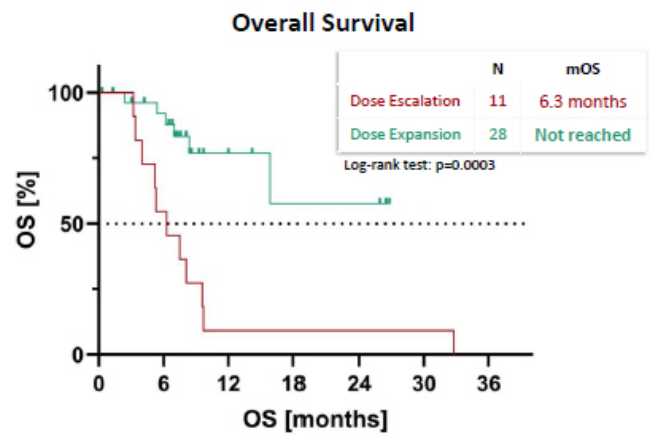
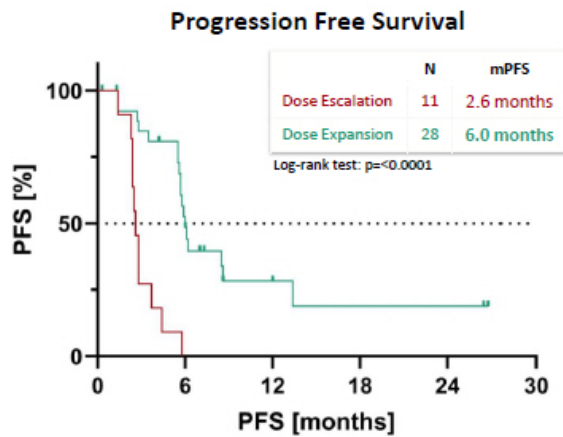
IMA203

#First tumor assessment post infusion pending for two melanoma patients at data cut-off. **Tumor shrinkage of target lesions. †Treated out of study due to PD (interim assessment). ‡Patient A-DL5-23 is off study at data cut-off. †††mORR, 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 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-off. ††† Baseline PD/Progressive Disease; SD, Stable Disease; PR, Partial Response; cPR, Confirmed Partial Response; DCR, Disease control rate; mFU, median follow-up.

Data cut-off Aug 23, 2024 18

Significant Shift in PFS and OS Between Dose Escalation & Dose Expansion

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



- 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

IMA203 Phase 1b in Melanoma: Overview of Studies

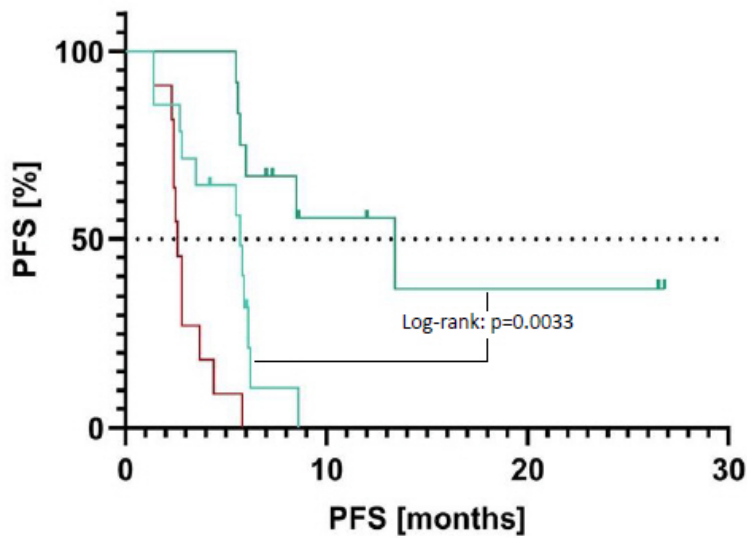
PFS and OS Data in 2L+ Melanoma Cohorts

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.

Enhanced PFS in Phase 1b Melanoma Patients with Deep Responses

N=26[#]

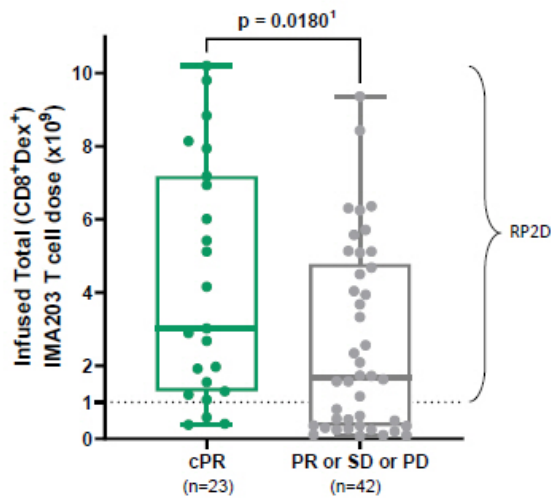


	N	mPFS
Dose Escalation IMA203	11	2.6 months
Dose Expansion IMA203 <50% tumor size reduction (including tumor size increase)	14*	5.7 months
Dose Expansion IMA203 ≥50% tumor size reduction	12	13.4 months

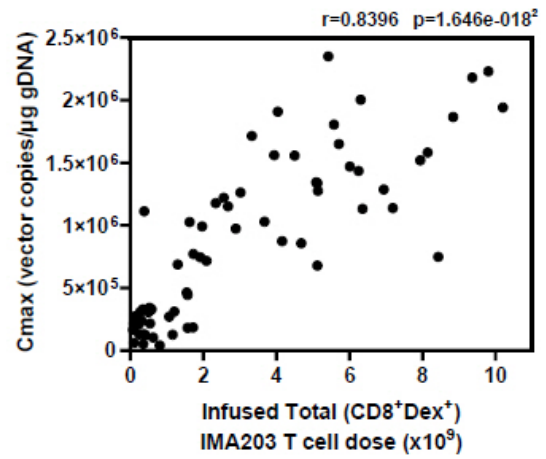
- Approx. half of all patients have a deep response (>50% tumor reduction)
- This subgroup of patients has highly medically meaningful mPFS of more than 1 year
- Patients with <50% tumor reduction (including tumor size increase) still observe a more than 2x longer mPFS as compared to patients treated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

Dose Response Relationship

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



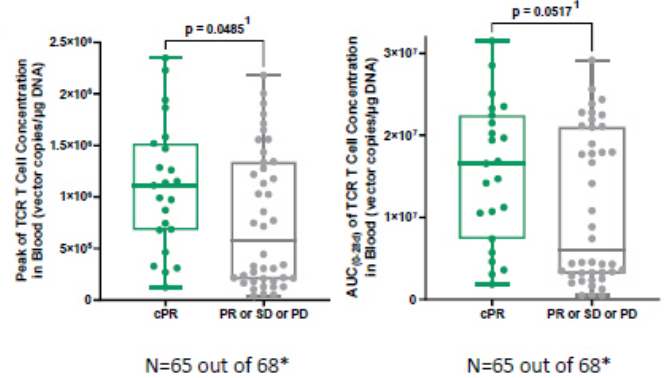
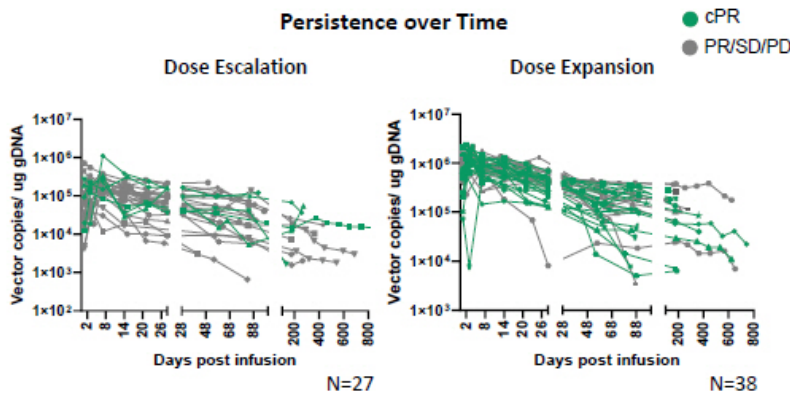
IMA203 T Cell Dose is Associated with Clinical Activity



IMA203 T Cell Dose Correlates with T Cell Exposure

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

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

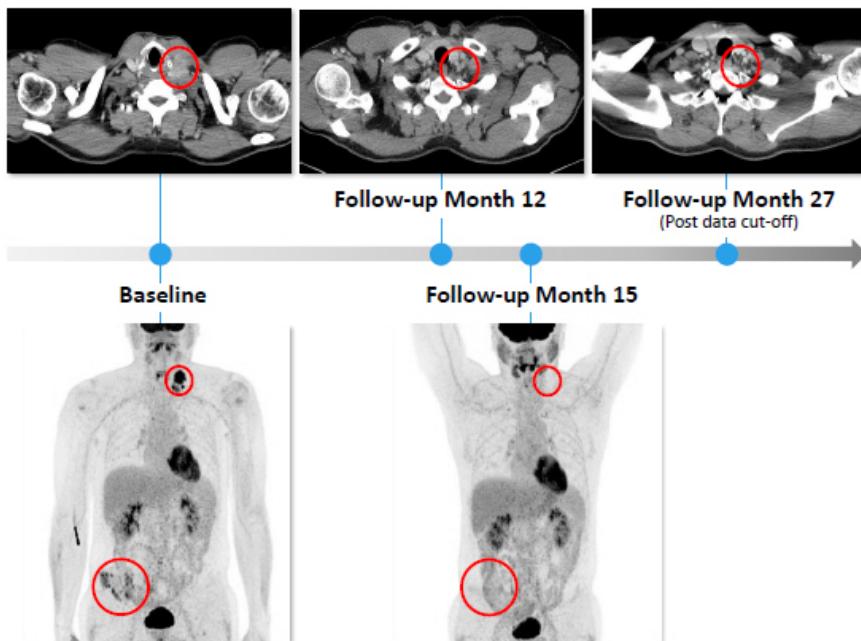
Higher C_{max} and persistence in patients treated at higher doses in dose expansion versus dose escalation

Patient Case A-DL4-03 : Cutaneous Melanoma

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

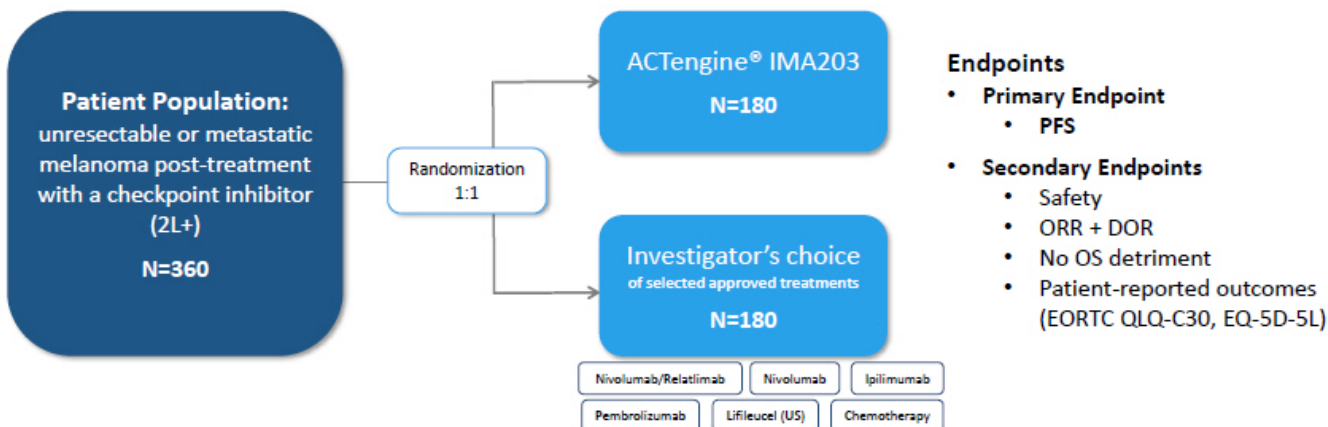
51-year-old male patient with complete remission according to PET imaging after 15 months and ongoing beyond two years post infusion at data cut

- 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 $\sim 1.3 \times 10^9$ 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



SUPRAME: Registration-enabling Randomized Phase 3 Trial

Trial Design Following Recent Type D Meeting with FDA and SA Meeting with PEI¹

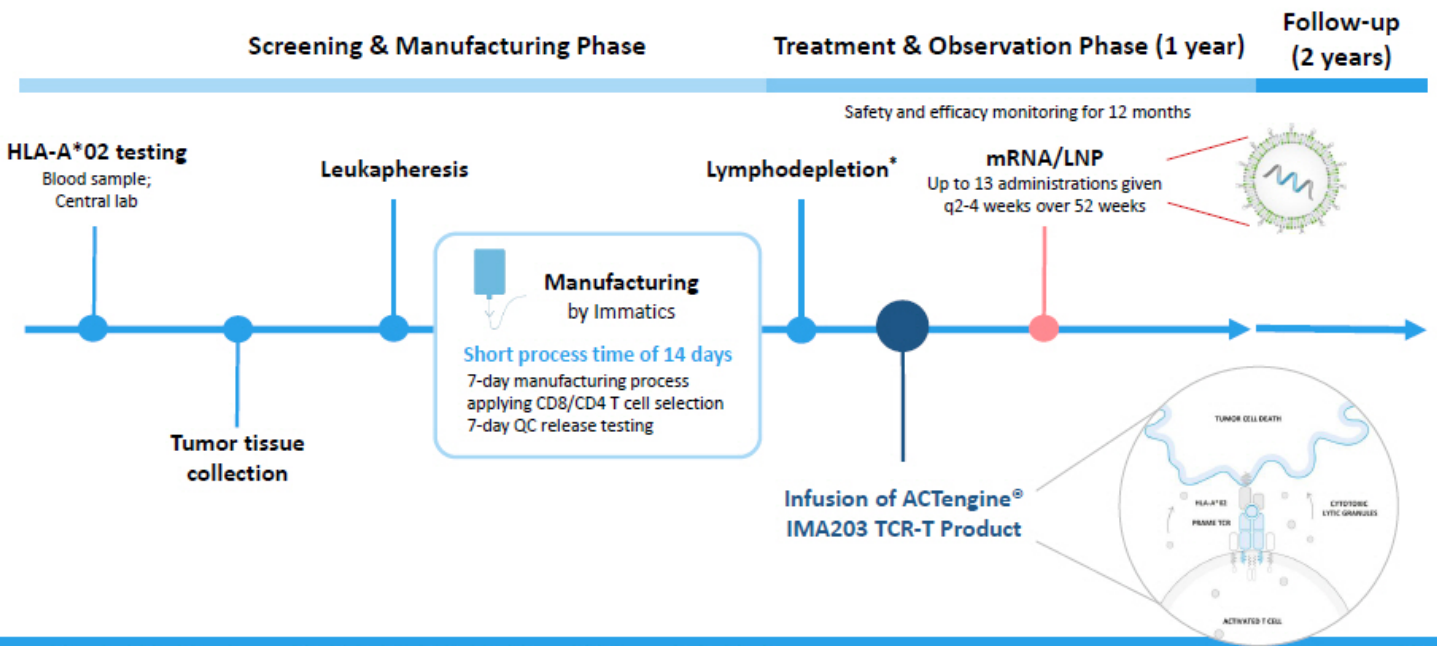


Next Steps

- 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**

Combining Immatic's TCR-T Therapy with Moderna's mRNA Cancer Vaccine – Patient Flow

IMA203 Targeting PRAME Together with PRAME mRNA-based Cancer Vaccine



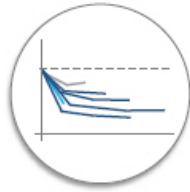
* 30 mg/m² Fludarabine and 500 mg/m² Cyclophosphamide for 4 days; ** 1m IU daily days 1-5 and twice daily days 6-10

Summary of Clinical Data



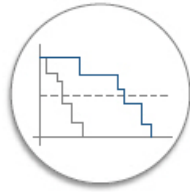
Tolerability

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 in cutaneous melanoma patients 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)
Leukapheresis 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

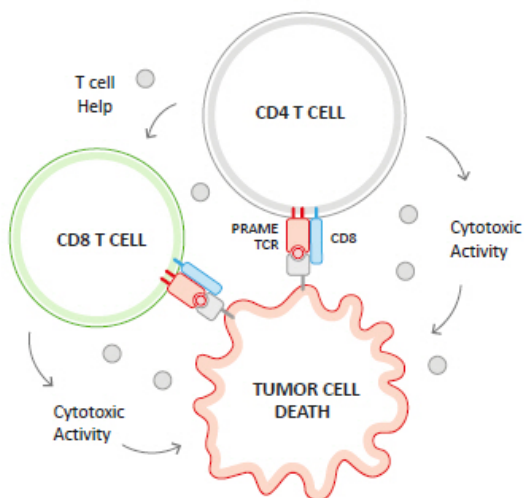
IMA203

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 thresholds); ² Based on annual mortality of ~300 uveal melanoma patients in the US, HLA-A*02:01 prevalence of 41% in the US and PRAME prevalence of 85% (IMADetect[®] qPCR testing of screening biopsies from clinical trial patients [n=33])

Data cut-off Aug 23, 2024 28

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

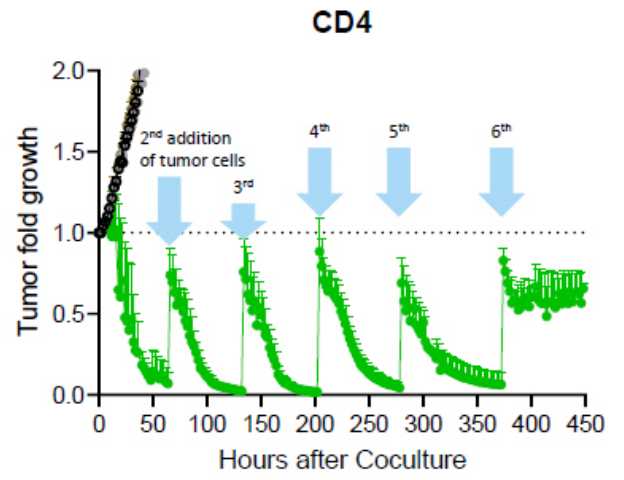
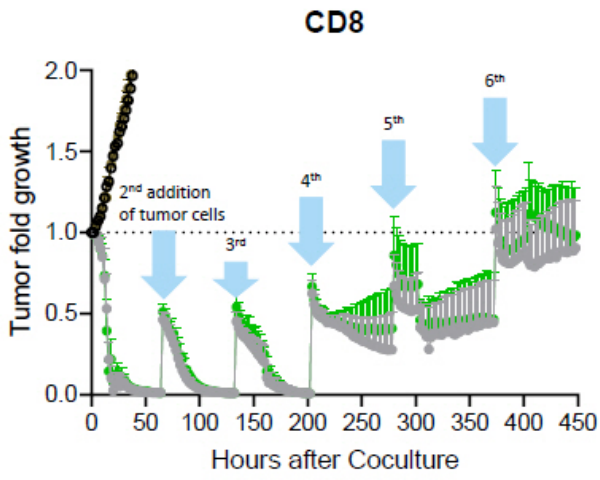
Differentiated Pharmacology Compared to 1st-Generation TCR-only Approaches



- IMA203CD8 (GEN2) designed to broaden the clinical potential of IMA203 TCR-T monotherapy by adding functional CD4 T cells via co-transduction of CD8 $\alpha\beta$ 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 studies¹
- Data from CD19 CAR-T-treated leukaemia patients suggest a relevant role of engineered CD4 T cells in long-term durability²

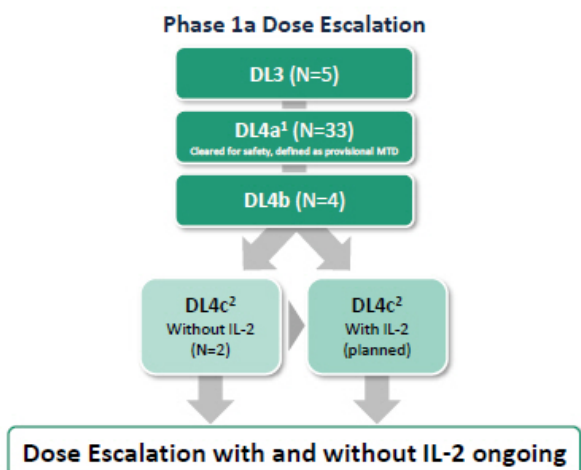
IMA203CD8 (GEN2) – Preclinical Assessment of Anti-Tumor Efficacy

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



IMA203CD8 (GEN2) – Overview of Patient Characteristics

Data cut-off Sep 30, 2024



	Total Safety Population	Efficacy Population
Number of patients	N=44 ³	N=41 ⁴
Prior lines of systemic treatment (median, min, max)	3 (0, 8)	3 (0, 8)
LDH at baseline >1 x ULN [% of patients]	47.7	43.9
Baseline tumor burden Median target lesion sum of diameter [mm] (min, max)	84.5 (12.4, 434.4)	83.0 (12.4, 434.4)
With liver/brain lesions at baseline [% of patients]	45.5	43.9
Infused dose levels TCR-T cells/m ² BSA [x10 ⁹]	DL3: 0.2-0.48 DL4a: 0.481-0.8 DL4b: 0.801-1.2 DL4c ² : 0.801-1.2	DL3: 0.2-0.48 DL4a: 0.481-0.8 DL4b: 0.801-1.2 DL4c ² : 0.801-1.2
Total infused dose TCR-T cells [x10 ⁹] (median, min, max)	1.48 (0.44, 2.05)	1.47 (0.44, 2.05)

Tolerability Data – IMA203CD8 (GEN2)

All ≥Grade 3 Adverse Events (N=44)

TEAEs by maximum severity for all patients (N=44)

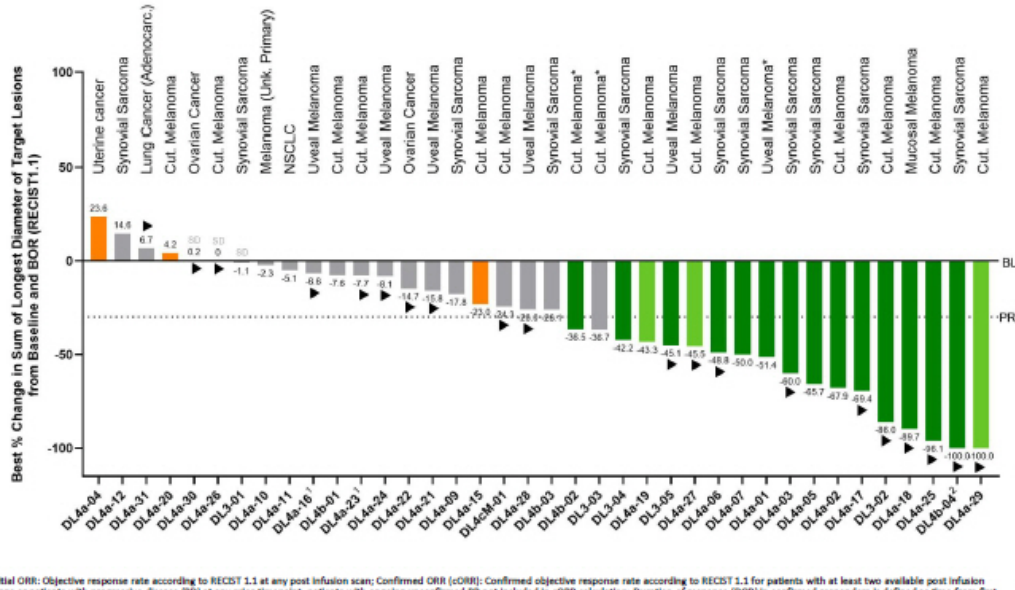
Adverse event (System organ class, preferred term)	≥ Grade 3		Adverse event (System organ class, preferred term)	≥ Grade 3	
	No.	%		No.	%
Patients with any adverse event	44	100.0	... table continued		
Adverse events of special interest	7	15.9	Immune system disorders	4	9.1
Cytokine release syndrome ¹	6	13.6	Haemophagocytic lymphohistiocytosis ¹	4	9.1
Immune effector cell-associated neurotoxicity syndrome	1	2.3	Infections and infestations	4	9.1
Blood and lymphatic system disorders	44	100.0	Pneumonia	2	4.5
Neutropenia	40	90.9	Infection	1	2.3
Anaemia	23	56.8	Sepsis ¹	1	2.3
Lymphopenia	23	56.8	Systemic candida	1	2.3
Thrombocytopenia	13	34.1	Gastrointestinal disorders	3	6.8
Leukopenia	11	25.0	Diarrhoea	2	4.5
Feverile neutropenia	2	4.5	Abdominal pain	1	2.3
Investigations	9	20.5	Skin and subcutaneous tissue disorders	3	6.8
Alanine aminotransferase increased	3	11.4	Rash	2	4.5
Aspartate aminotransferase increased	3	11.4	Alopecia	1	2.3
Blood creatinine increased	2	4.5	Rash maculo-papular	1	2.3
Blood alkaline phosphatase increased	1	2.3	Vascular disorders	3	6.8
Blood bilirubin increased	1	2.3	Hypertension	3	6.8
Gamma-glutamyltransferase increased	1	2.3	Nervous system disorders	2	4.5
Metabolism and nutrition disorders	6	13.6	Neurotoxicity ¹	1	2.3
Hypophosphataemia	2	4.5	Syncope	1	2.3
Acidosis	1	2.3	Renal and urinary disorders	2	4.5
Decreased appetite	1	2.3	Acute kidney injury	1	2.3
Hyperglycaemia	1	2.3	Urinary tract obstruction	1	2.3
Hypermagnesaemia	1	2.3	Hepatobiliary disorders	1	2.3
Hypoalbuminaemia	1	2.3	Hepatic function abnormal	1	2.3
General disorders and administration site conditions	5	11.4	Reproductive system and breast disorders	1	2.3
Fatigue	3	11.4	Pelvic pain	1	2.3
Oedema peripheral	1	2.3			
Musculoskeletal and connective tissue disorders	5	11.4			
Bone pain	3	6.8			
Myalgia	2	4.5			
Back pain	2	4.5			
Arthralgia	1	2.3			

- Overall manageable tolerability profile
- Expected cytopenia
- Mostly mild to moderate CRS:
 - 36% (16/44) Grade 1
 - 48% (21/44) Grade 2
 - 11% (5/44) Grade 3
 - 2% (1/44) Grade 4
- DLTs in 2 patients at DL4b as previously reported by the Company:
 - Patient DL4b-01: high *in vivo* T cell expansion, Grade 4 neurotoxicity, Grade 4 CRS, Grade 3 HLH
 - Patient DL4b-04: Grade 3 CRS defined by Grade 3 ALT resolved to Grade 2 within 10 days; no need for vasopressors or ventilation
- One possibly-related Grade 5 adverse event as previously reported by the Company:
 - Cause of death: fatal sepsis - aggravated by immunosuppression, IEC-HS, fast-progressing disease
- Consecutive modification I/E criteria + IL2 scheme
- Dose escalation ongoing based upon manageable tolerability in patients at DL4a

All treatment-emergent adverse events (TEAEs) with ≥ Grade 3 regardless of relatedness to study treatment that occurred in at least 1 patient are presented; DLT: Dose limiting toxicity in patient DL4b-04. ¹DLTs in patient DL4b-01: ¹The 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. Event was reported in Annual Report 2023.

IMA203CD8 (GEN2) (N=41) – Best Overall Response in Dose Escalation

Data cut-off Sep 30, 2024



cORR 41% (14/34)

median DOR 9.2 months
(min, max) 2.0+, 23.5+
mFU 13.1 months

10/17 responses ongoing including 3 confirmed responses at 1+ year

Deep responses with ≥50% tumor size reduction in 11/17 responders incl. 2 patients with complete response of target lesions

ORR 41% (17/41)

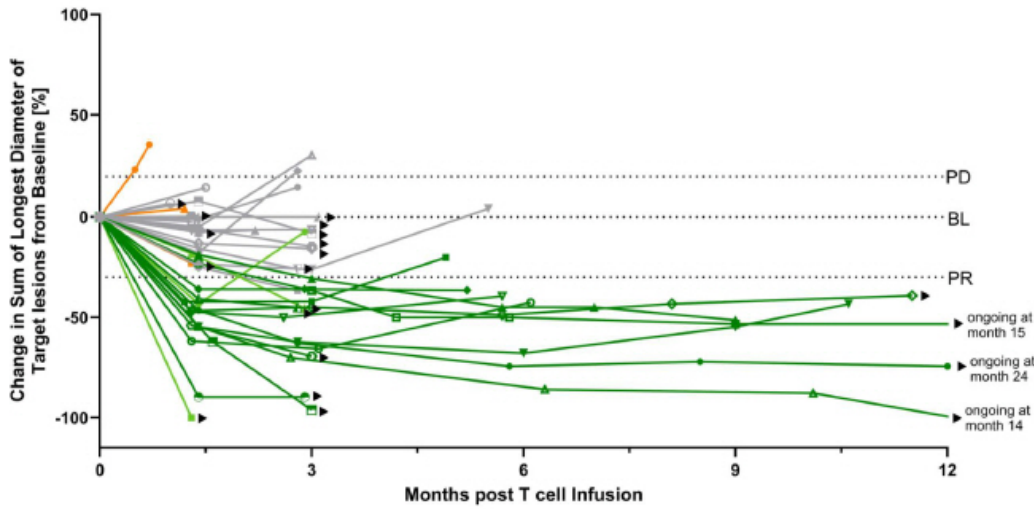
Tumor shrinkage³ 84% (32/38)

DCR⁴ (at week 6) 85% (34/40)

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) (N=41) – Response over Time in Dose Escalation

Data cut-off Sep 30, 2024



cORR 41% (14/34)

median DOR 9.2 months
(min, max) 2.0+, 23.5+
mFU 13.1 months

10/17 responses ongoing including 3 confirmed responses at 1+ year

Deep responses with $\geq 50\%$ tumor size reduction in 11/17 responders incl. 2 patients with complete response of target lesions

ORR 41% (17/41)

Tumor shrinkage³ 84% (32/38)

DCR⁴ (at week 6) 85% (34/40)

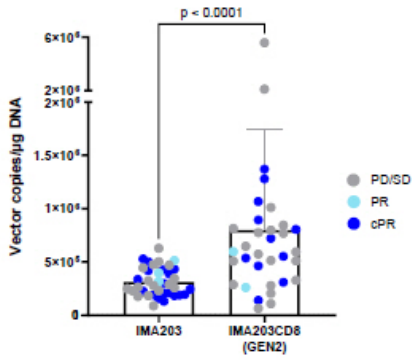
Best overall response (RECIST 1.1)	cPR	PR	SD	PD
DL3-02	DL4b-04 ¹	DL4a-19	DL3-01	DL4a-21
DL3-04	DL4b-07	DL4b-29	DL3-03	DL4a-22
DL4a-01	DL4a-06	DL4a-27	DL4b-01	DL4a-23 ²
DL4a-02	DL4a-17		DL4b-03	DL4a-24
DL4b-02	DL4a-18		DL4a-09	DL4a-25
DL4a-05	DL4a-25		DL4a-12	DL4a-26
DL4a-03	DL3-05		DL4a-11	DL4a-28
			DL4a-10	DL4a-31
			DL4b-10 ²	DL4a-30

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

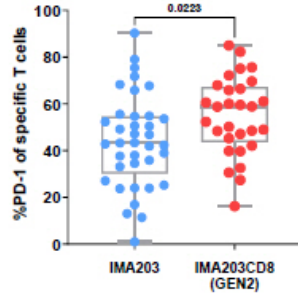
IMA203CD8 (GEN2): Translational Data Shows Enhanced Pharmacology

IMA203 Phase 1b vs IMA203CD8 (GEN2)

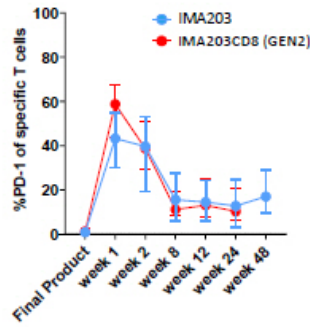
Higher peak expansion (C_{max}) of IMA203CD8 T cells when normalized to infused dose



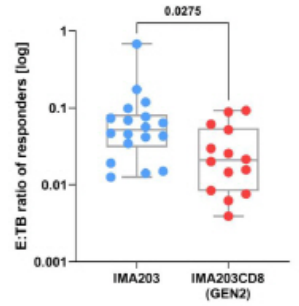
Higher activation levels in IMA203CD8 T cells at week 1...



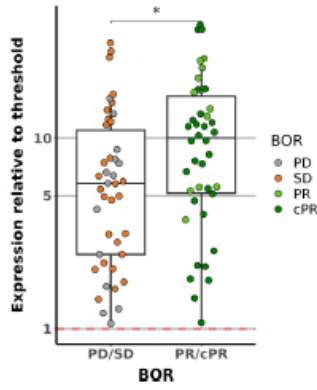
...without exhaustion over time



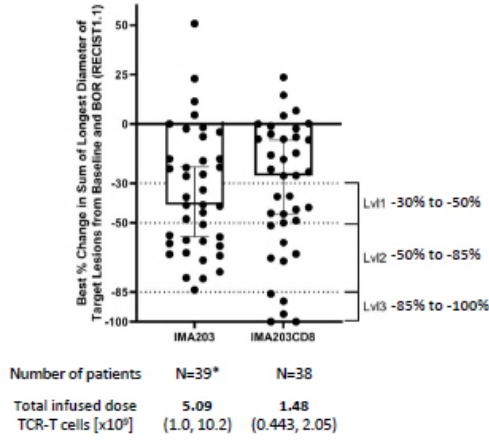
Trend towards responses at lower cell dose and higher tumor burden with IMA203CD8



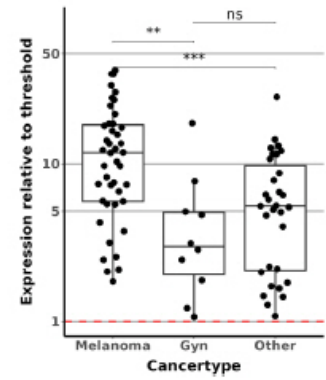
PRAME expression level associates with clinical activity in IMA203 and IMA203CD8 treated patients



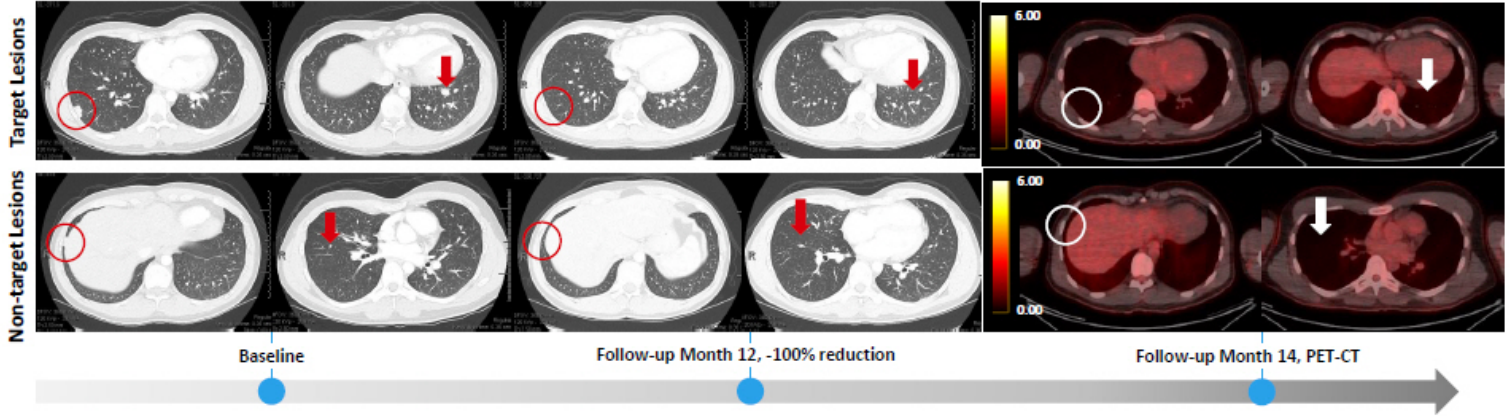
Both IMA203 and IMA203CD8 achieve deep responses despite IMA203CD8 patients receiving lower doses



Enhanced pharmacology of IMA203CD8, with potential for higher dosing, opens avenues to explore its full potential in patients with medium-level PRAME expression



Patient Case DL4b-04: Synovial Sarcoma



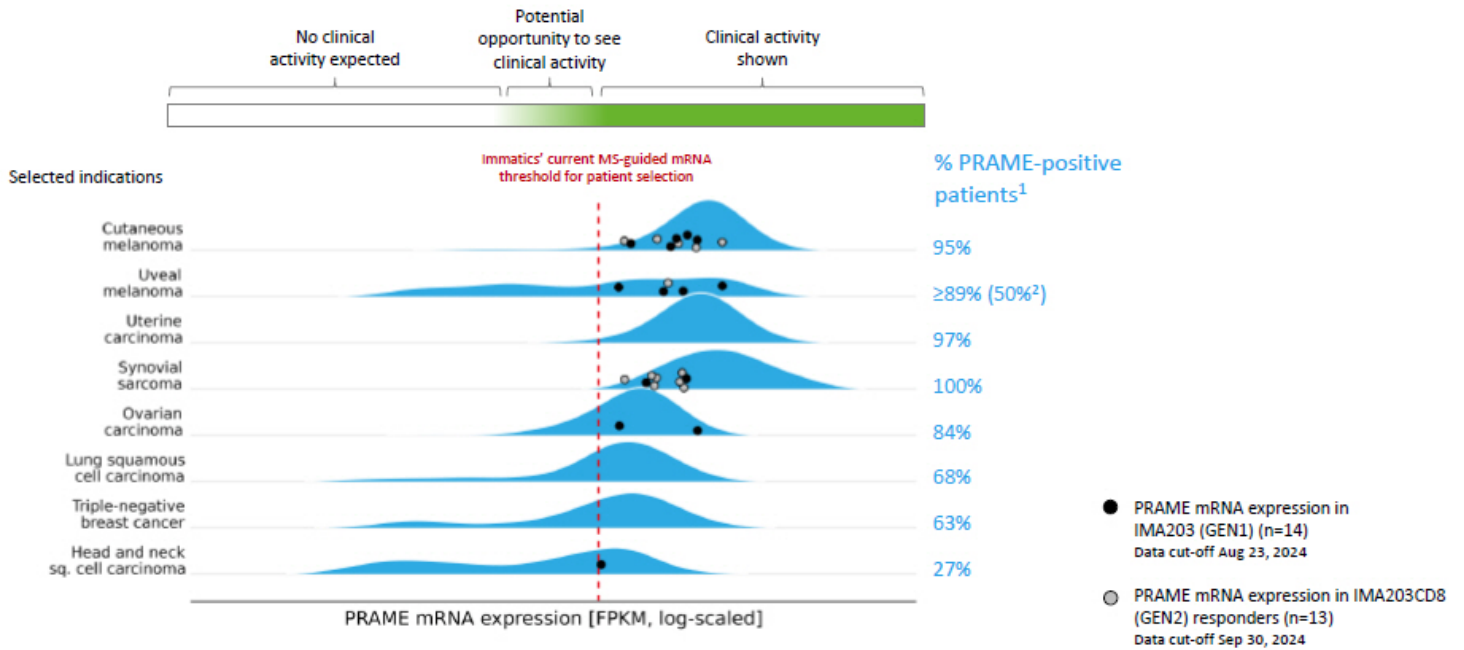
24-year-old male patient with complete remission according to PET imaging after 14 months post infusion

- 1 prior systemic treatment line: Doxorubicin + Ifosfamide + Mesna
- 3 years of cancer history
- At BL: 33.4 mm TL sum in lung, NTL in lymph nodes and lung
- Received $\sim 2.05 \times 10^9$ IMA203CD8 TCR-T cells
- Metabolic CR on investigator-initiated PET month 14 post infusion
- Ongoing PR at 14+ months post infusion with -100% reduction according to RECIST 1.1

- Manageable tolerability with most frequent \geq Grade 3 AEs being expected cytopenia
 - DLTs in 2 patients at DL4b triggered dosing adjustment to DL4a
 - Manageable tolerability in patients at DL4a combined with modifications of the eligibility criteria and IL-2 scheme allows further exploration of higher doses
- Deep and durable objective responses already observed at low doses (median: 1.48×10^9 T cells)
 - 41% (14/34) cORR and tumor shrinkage in 84% (32/38) of patients including two patients with complete response of target lesions
 - 9.2 months median DOR with 3 confirmed responses ongoing at 1+ year
- Opportunity of IMA203CD8 in medium-level PRAME expressing indications
 - Association of PRAME expression with clinical activity in IMA203 and IMA203CD8 treated patients
 - Deep responses with IMA203CD8, even though applied dose still lower than IMA203
- **Dose escalation with and without post-infusion low-dose IL-2 is ongoing** to investigate the full clinical potential of IMA203CD8 in hard-to-treat solid tumors such as ovarian cancer, endometrial cancers and triple-negative breast cancer

Potential of IMA203 in Additional Solid Cancer Indications

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



IMA203

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=61) demonstrates substantial higher prevalence of 89% compared to prevalence based on TCGA data of 30%; TCGA: early & late-stage primary tumor samples, Immatics clinical trials: late-stage/metastatic tumor samples, Role of PRAME in metastasis of uveal melanoma: Heid et al. 2016 Clinical Cancer Research; MS: mass spectrometry

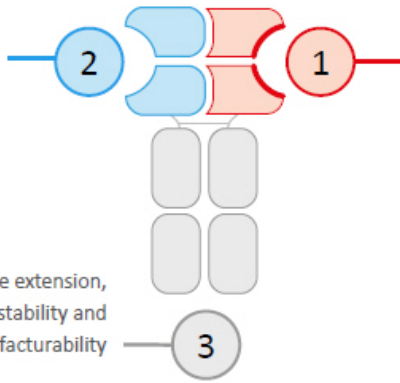


TCER[®] – TCR Bispecifics

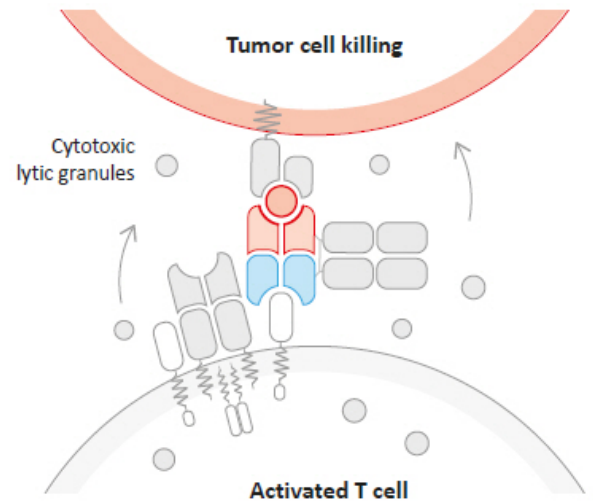
TCER® – Immatics' Next-generation, Half-Life Extended Bispecifics

Proprietary TCER® Format Consisting of Three Distinct Elements

Low-affinity
T cell recruiter
against CD3/TCR

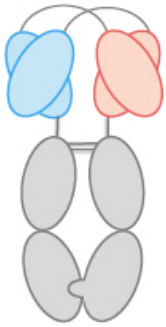


High-affinity TCR
domains targeting
XPRESIDENT®-selected
tumor-specific peptide-
HLA molecules



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



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

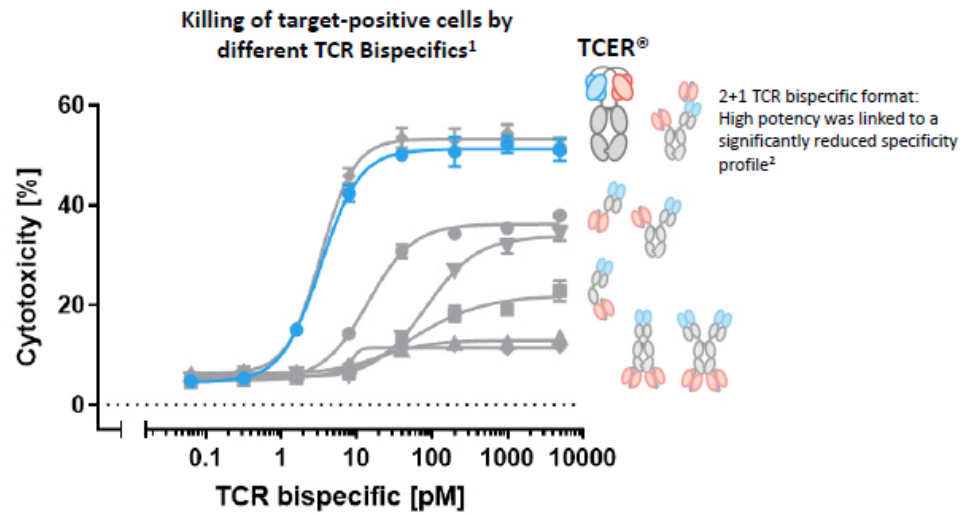
- ✓ Off-the-shelf biologic with antibody-like manufacturability³ and low cost of goods
- ✓ Superior anti-tumor activity⁴ compared to six alternative bispecific formats
- ✓ Half-life of several days expected in humans

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

TCER®

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

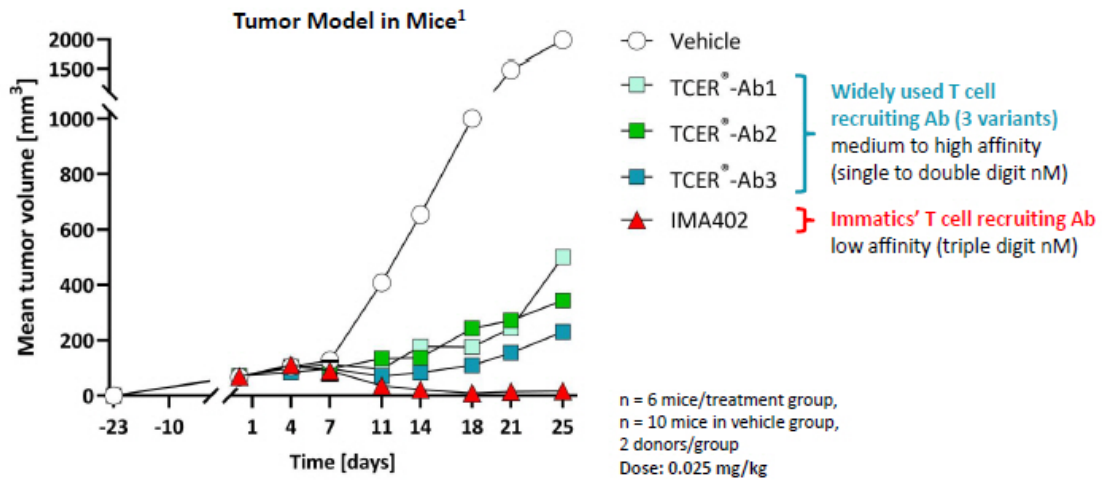
42



- 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 specificity² 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

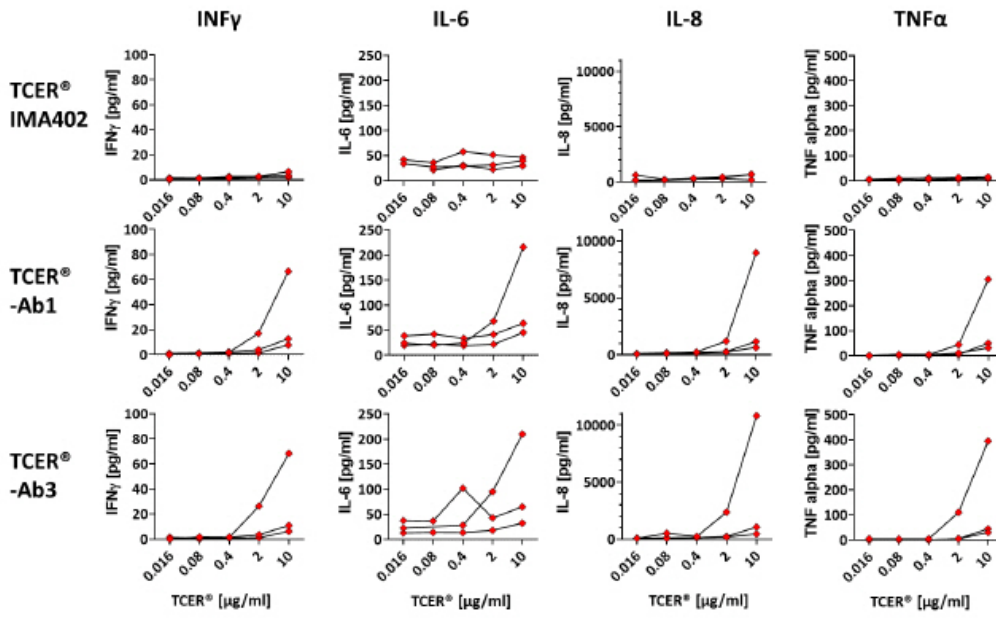
Superior Tumor Control Using a Novel, Low-Affinity Recruiter



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

TCER® Format Is Designed for Optimized Efficacy and Safety

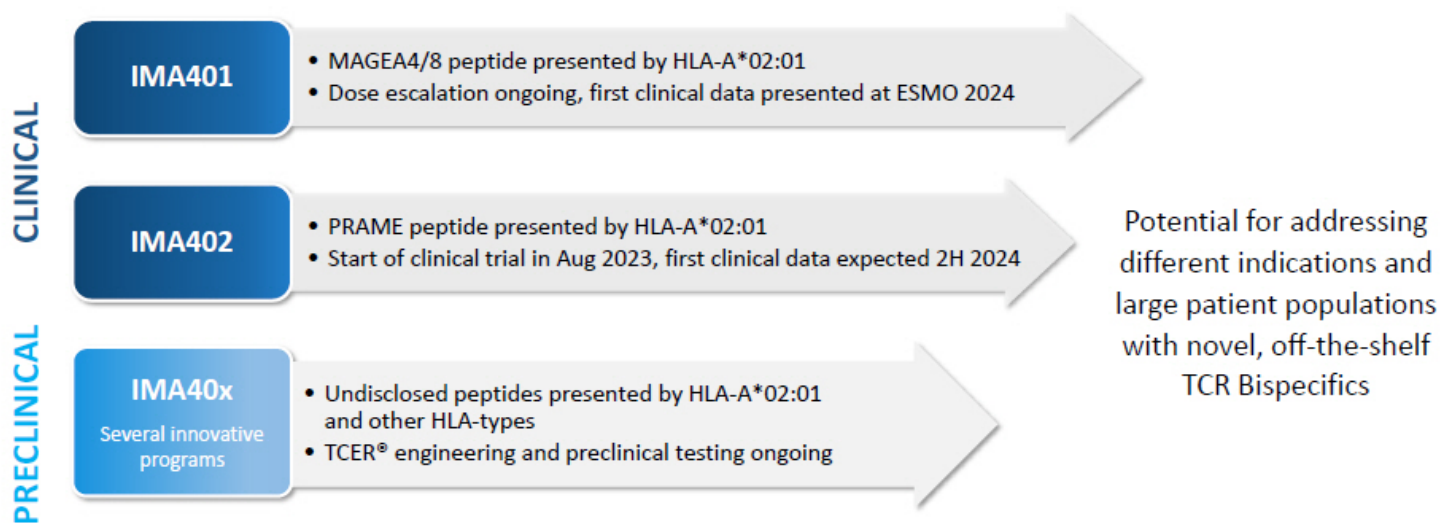
Reduced Target-Unrelated Recruiter-Mediated Cytokine Release using a Low-Affinity Recruiter



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

Our TCER® Portfolio

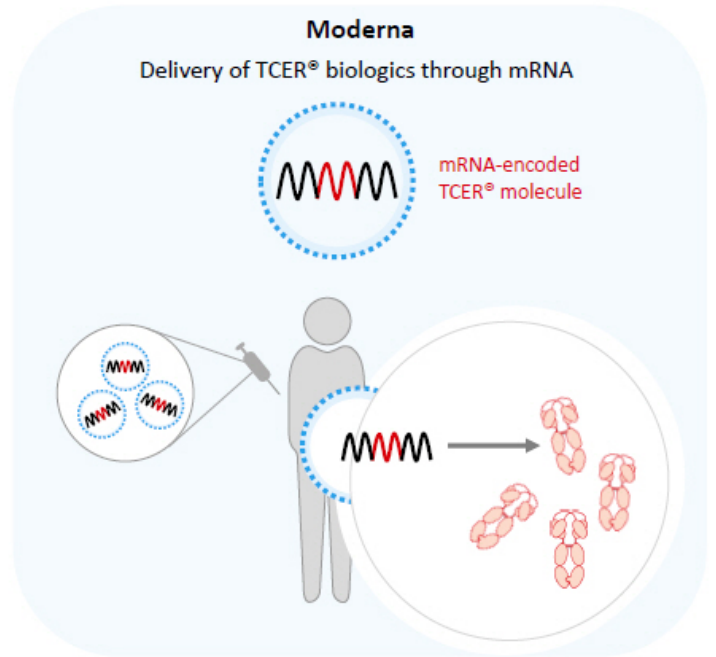
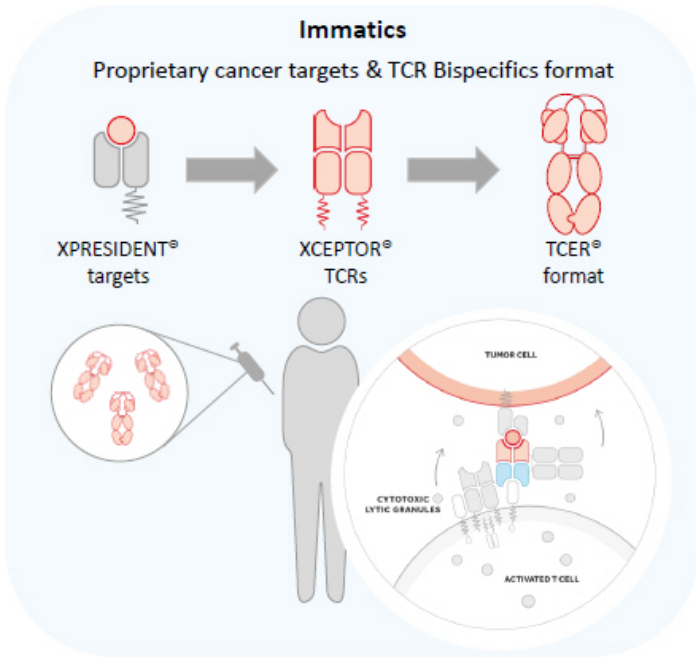
Broad Pipeline of Next-Gen Half-Life Extended TCR Bispecifics



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



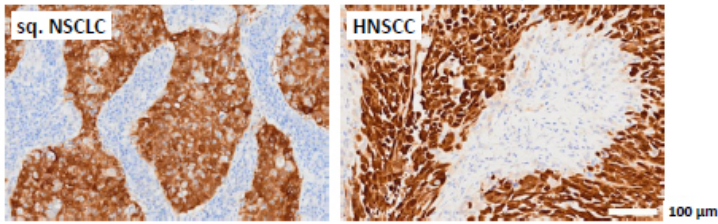


TCER[®] IMA401 Targeting MAGEA4/8

TCER® IMA401 Targeting MAGEA4/8

Higher Target Density of MAGEA4/8 Peptide

MAGEA4 protein detection in tumor samples (IHC)

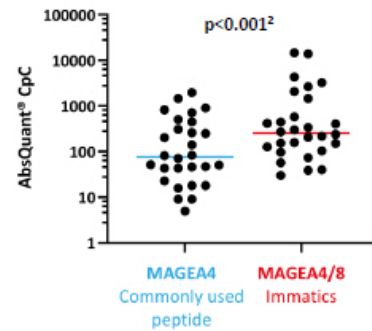


MAGEA4/8 target prevalence in selected cancer indications

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®)



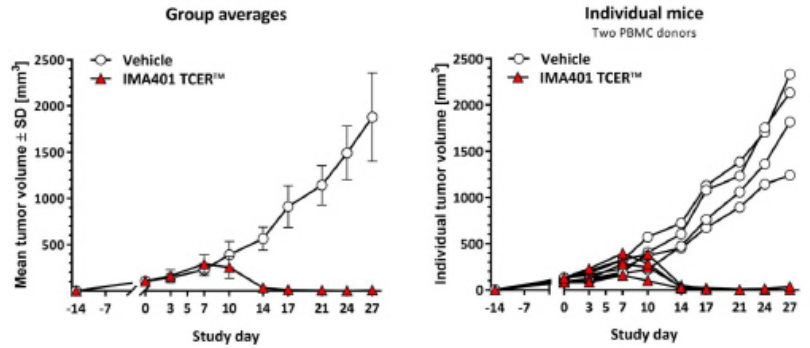
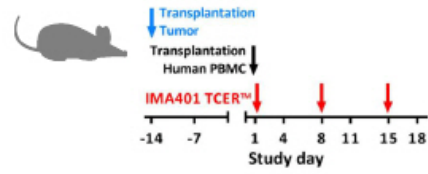
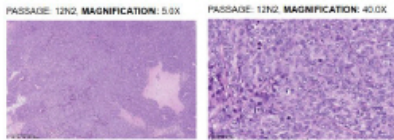
MAGEA4/8 target is presented at >5-fold higher target density³ than a commonly used MAGEA4 target peptide

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

Patient-Derived Tumor Model

NSCLC adenocarcinoma:

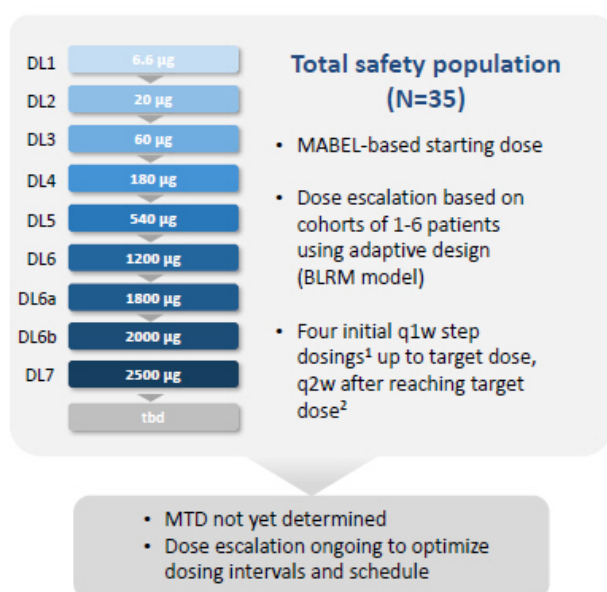
- Male, Caucasian, age 58, no therapy prior to surgery
- Site of origin: lung, differentiation poor
- Date of surgery: 1987, Freiburg Medical Center
- Volume doubling time: 7.3 day
- Histology:
 - Stroma content, 4%
 - Vascularization, high
 - Grading, undifferentiated



- 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



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 assay³
- ECOG status 0-2
- Received or not eligible for all available indicated standard of care treatments

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

IMA401

¹Efficacy 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; ²Patients 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.

52

IMA401 Demonstrates Manageable Tolerability in N=35 Patients

Most Frequent Related AEs were Lymphopenia, CRS and Neutropenia

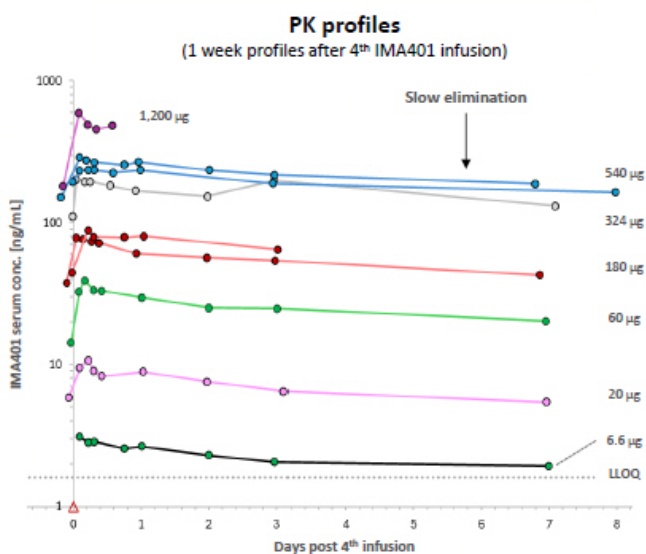
Treatment-related AEs ¹ , n [%]	All Grades	≥ Grade 3
Lymphopenia	12 [34]	11 [31]
Cytokine release syndrome	11 [31]	0
Neutropenia	8 [23]	5 [14]
Facial pain	6 [17]	2 [6]
Anaemia	5 [14]	4 [11]
Thrombocytopenia	5 [14]	2 [6]
Headache	5 [14]	1 [3]
Hypertension	4 [11]	2 [6]
Leukopenia	4 [11]	2 [6]
Fatigue	4 [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]

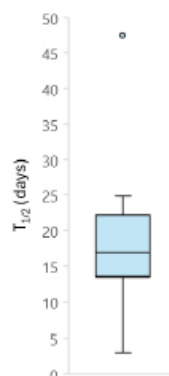
- Overall **manageable tolerability** profile
- **Most frequent/relevant related AEs** were
 - transient lymphopenia,
 - mild to moderate CRS (23% Grade 1, 9% Grade 2, **no Grade ≥ 3**), majority at first dose
 - neutropenia² occurred mostly at initial target dose and fully resolved in all cases except one (see below)
 - one possibly related death (pneumonia in the context of lung tumor progression and concurrent neutropenia) as previously reported³
- **MTD not reached** based on the BLRM

IMA401 Pharmacokinetics

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



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* data²
- Supports exploring increased dosing intervals of up to q4w and pursuing alignment with typically applied CPI dosing regimens

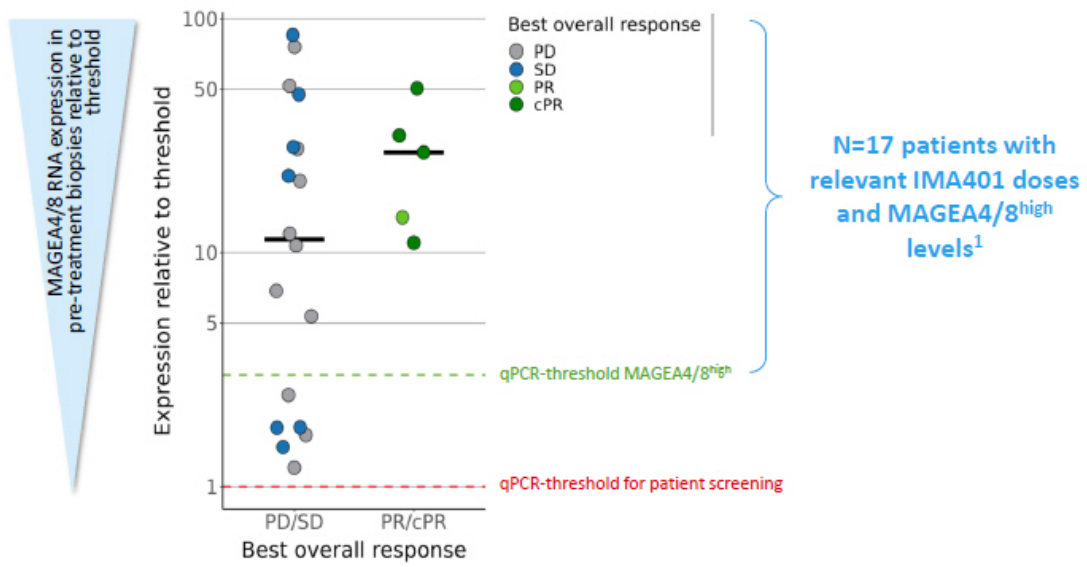
IMA401

¹Half-lives 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; ²Data 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

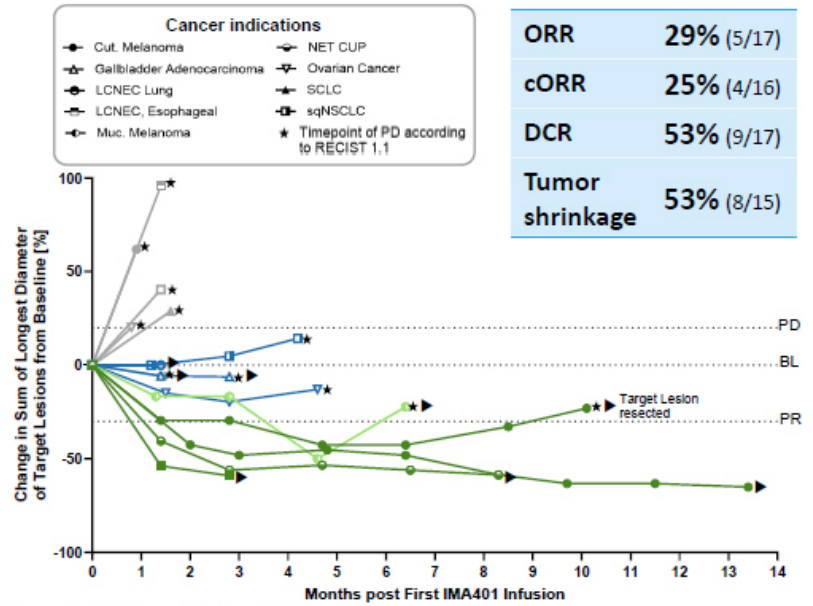
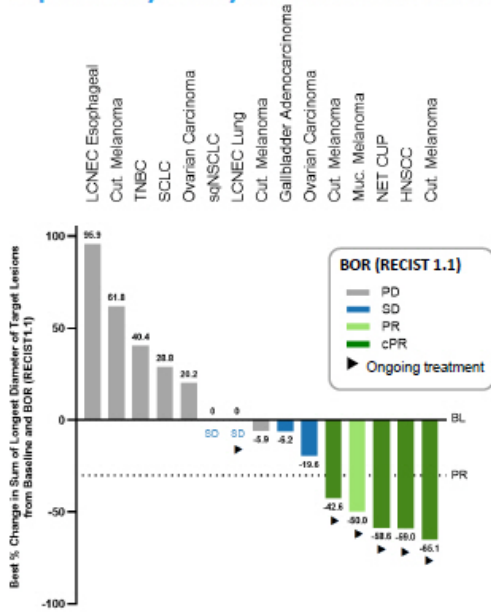
Objective Responses are Associated with Target Expression

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



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)

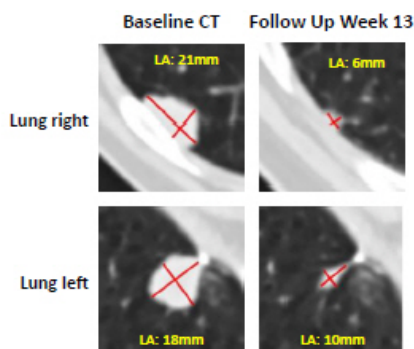
Cancer Indications: Cut.: Cutaneous; HNSCC: Head & Neck Squamous Cell Carcinoma; LCNEC: Large Cell Neuroendocrine Carcinoma; Muc.: Mucosal; NET CUP: Neuroendocrine Tumor, Cancer of Unknown Primary; SCLC: Small Cell Lung Cancer; sqNSCLC: Squamous Non-small Cell Lung Cancer; TNBC: Triple Negative Breast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

IMA401

* 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.

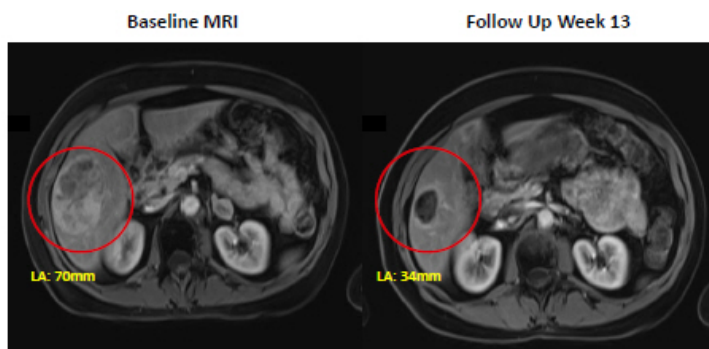
Data cut-off
Jul 23, 2024

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	

First-in-human Data of IMA401 TCER® Targeting MAGEA4/8

Presentation at ESMO on September 16, 2024

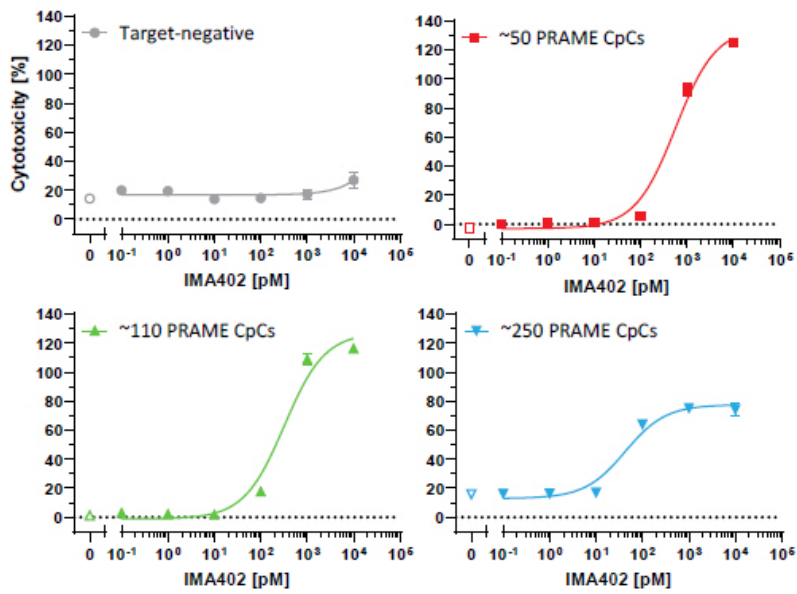
- **Tolerability:** Most common treatment-related AEs are low-grade CRS, transient lymphopenia and neutropenia
- **Pharmacokinetics:** Median terminal half-life of 16.9 days supporting potential further flexibility in future dosing schedules incl. combination with CPI and increased dosing intervals up 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 $\geq 50\%$) 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**



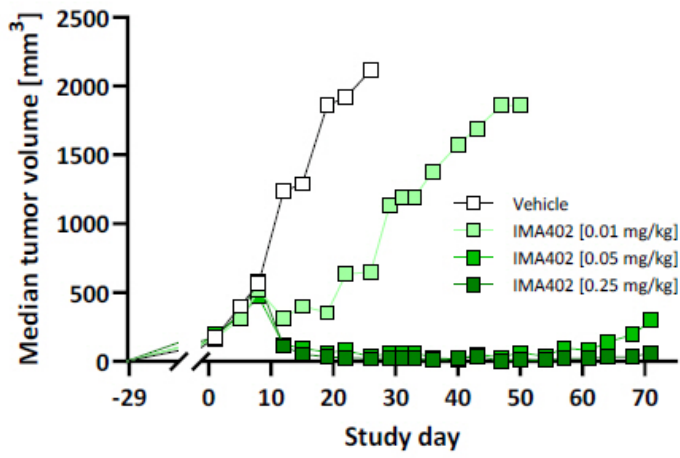
TCER[®] IMA402 Targeting PRAME

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

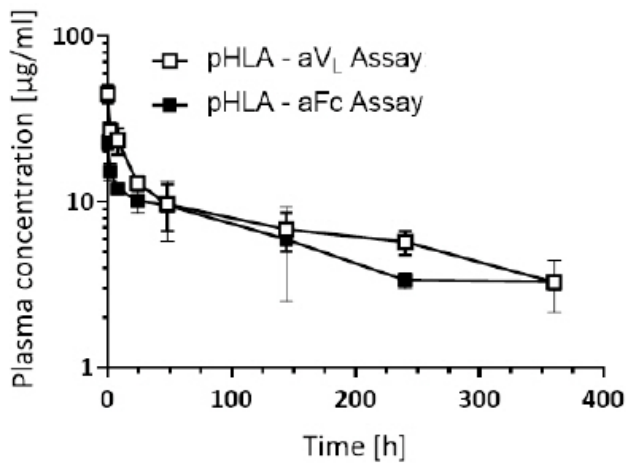
Tumor Cell Killing at Low Physiological PRAME Peptide Levels



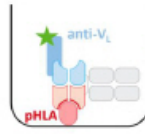
- TCER® IMA402 induces killing of tumor cells with PRAME target copies as low as 50 CpCs
- Physiological PRAME levels detected in majority of cancer tissues from patients are 100 – 1000 CpCs
- Preclinical activity profile enables targeting of a broad variety of tumor indications, such as lung cancer,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



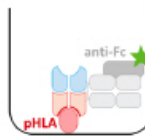
- Dose-dependent efficacy of IMA402 in cell line-derived *in vivo* mouse model
- Durable shrinkage of large tumors including complete responses over prolonged period
- Sufficiently high drug doses are key to achieving desired anti-tumor effect



pHLA – aV_L Assay



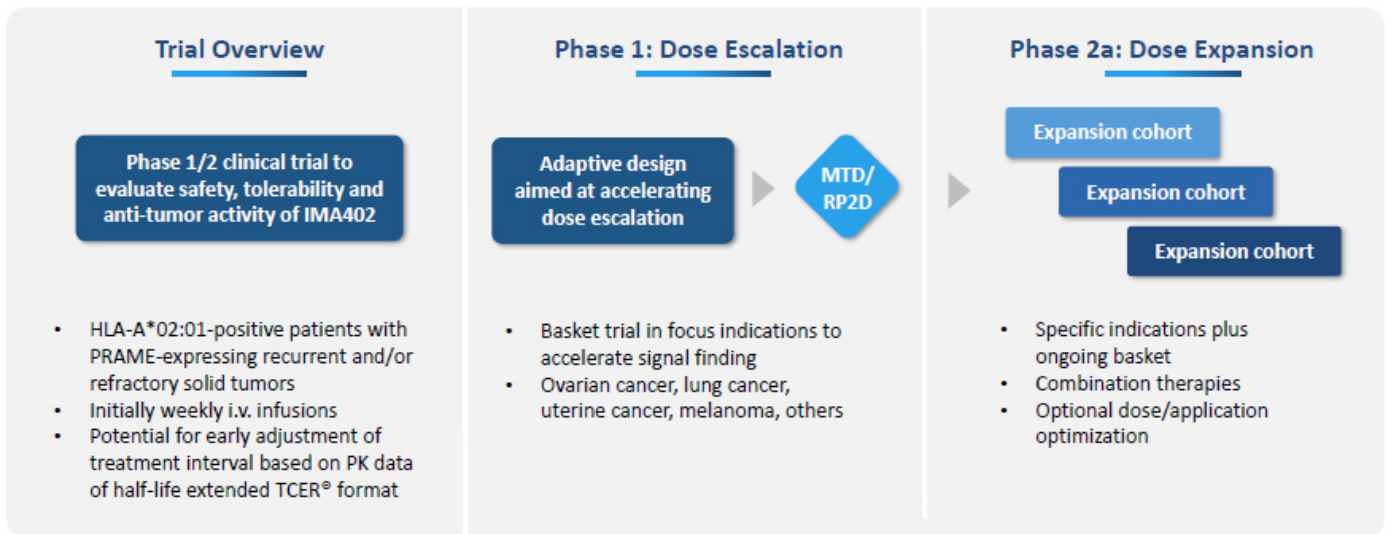
pHLA – aFc Assay



- IMA402 shows a terminal serum half-life of \approx 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

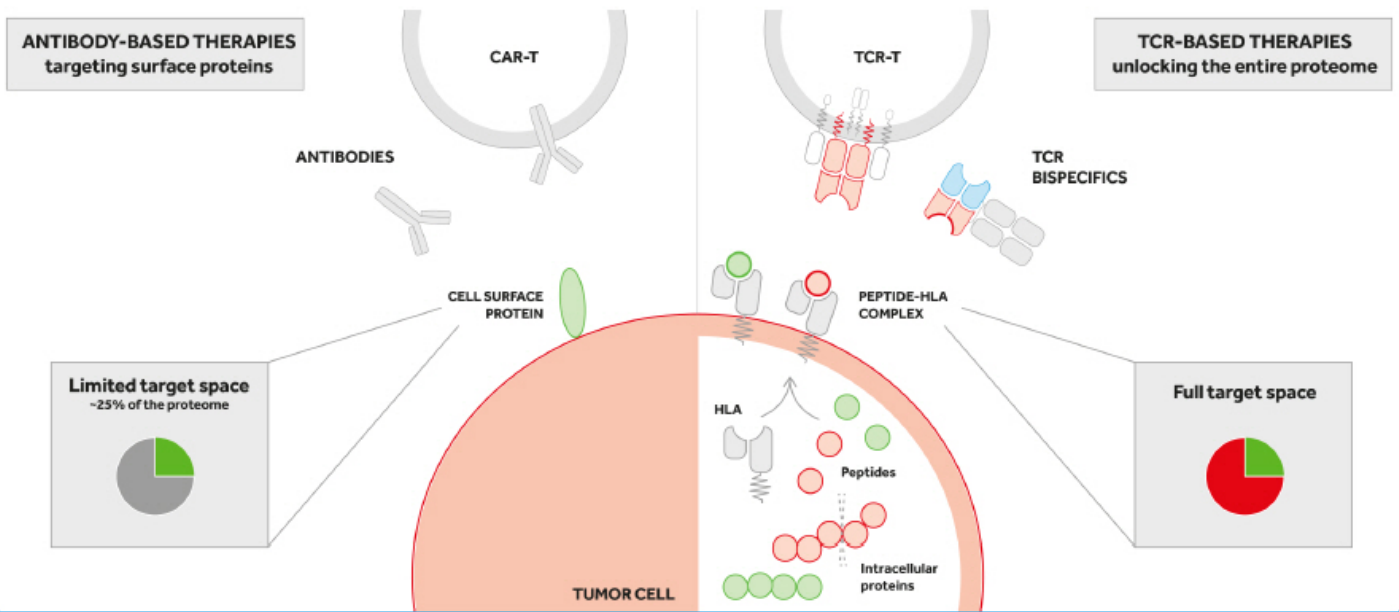
First Clinical Data Planned in 2H 2024





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

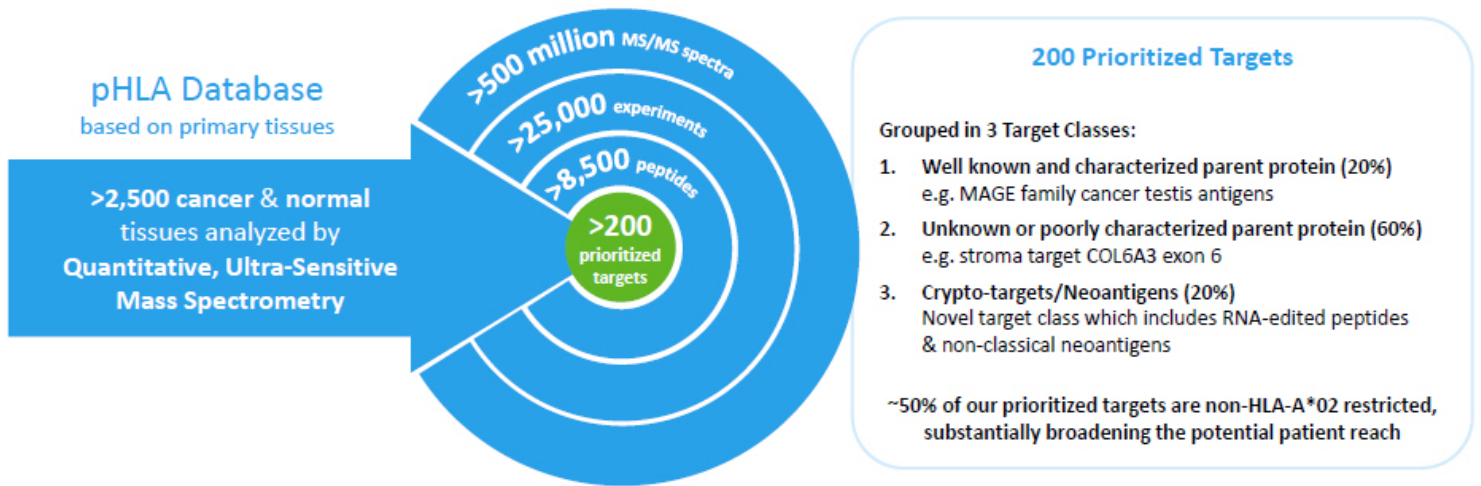
- are naturally presented on tumor tissues as identified by mass-spec
- are absent or presented at only low levels on normal tissues
- are presented at high copy numbers to trigger a pharmacological response

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



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

IMA203 / IMA402 PRAME

Uterine Carcinoma – 97%
 Uterine Carcinosarcoma – 100%
 Sarcoma Subtypes – up to 100%
 Cut. Melanoma – 95%
 Uveal Melanoma¹ – 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%

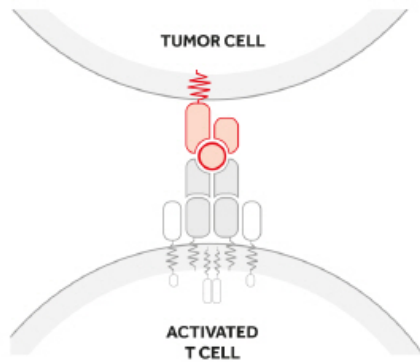
ACTEngine® and TCER® targets demonstrate high prevalence in multiple solid cancers

Technology

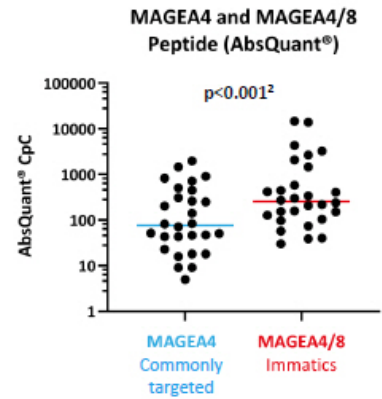
Target prevalence for selected solid cancer indications are based on TCGA (for SCLC: in-house) RNAseq data combined with a proprietary mass spec-guided RNA expression threshold;
¹ Uveal melanoma target prevalence is based on IMADetect® qPCR testing of screening biopsies from clinical trial patients (n=61)

Immatics' Unique Capability – Identification of the most Relevant Target

Example of MAGEA4/8 Peptide Target



Ranking of pHLA targets

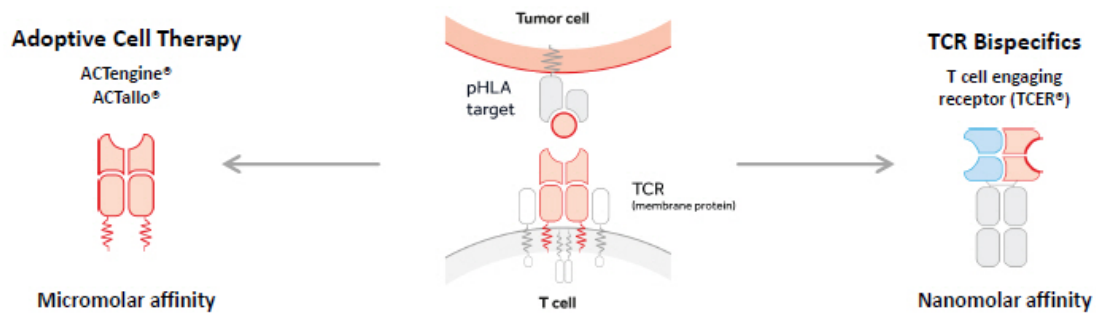


XPRESIDENT® quantitative information on target density¹ between peptides originating from the same source protein

MAGEA4/8 target is presented at >5-fold higher target density¹ than a commonly targeted MAGEA4 target peptide

Development of the Right TCR – XCEPTOR® Technology

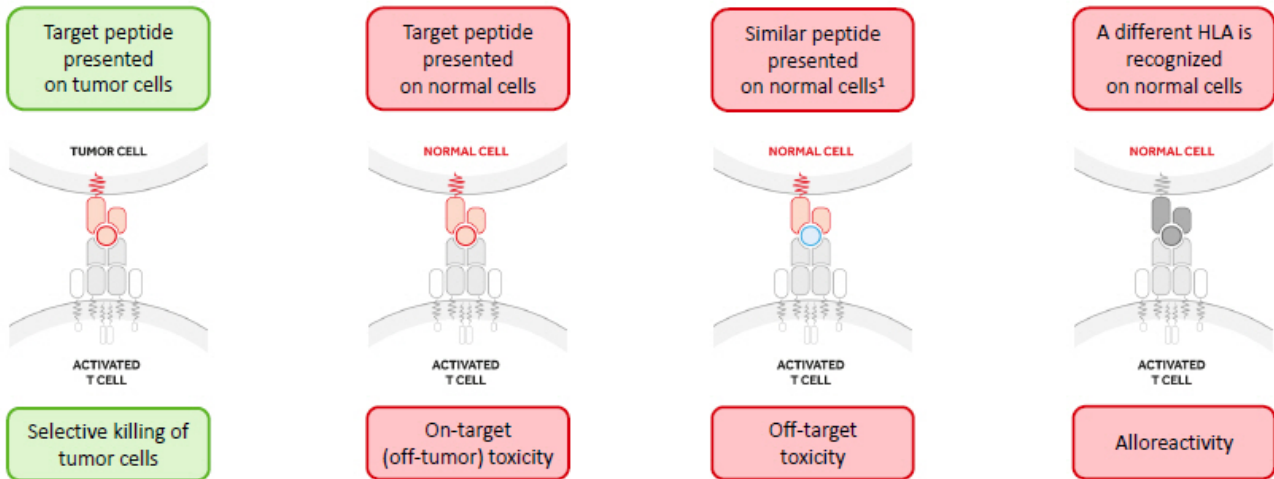
TCR Discovery and Engineering for ACT and TCR Bispecifics



- Fast, efficient and highly sensitive discovery of highly specific, natural TCRs
- Protein engineering capabilities to design and mature 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 discovery¹ and TCR maturation² (empowered by our bioinformatics & AI-platform XCUBE™)

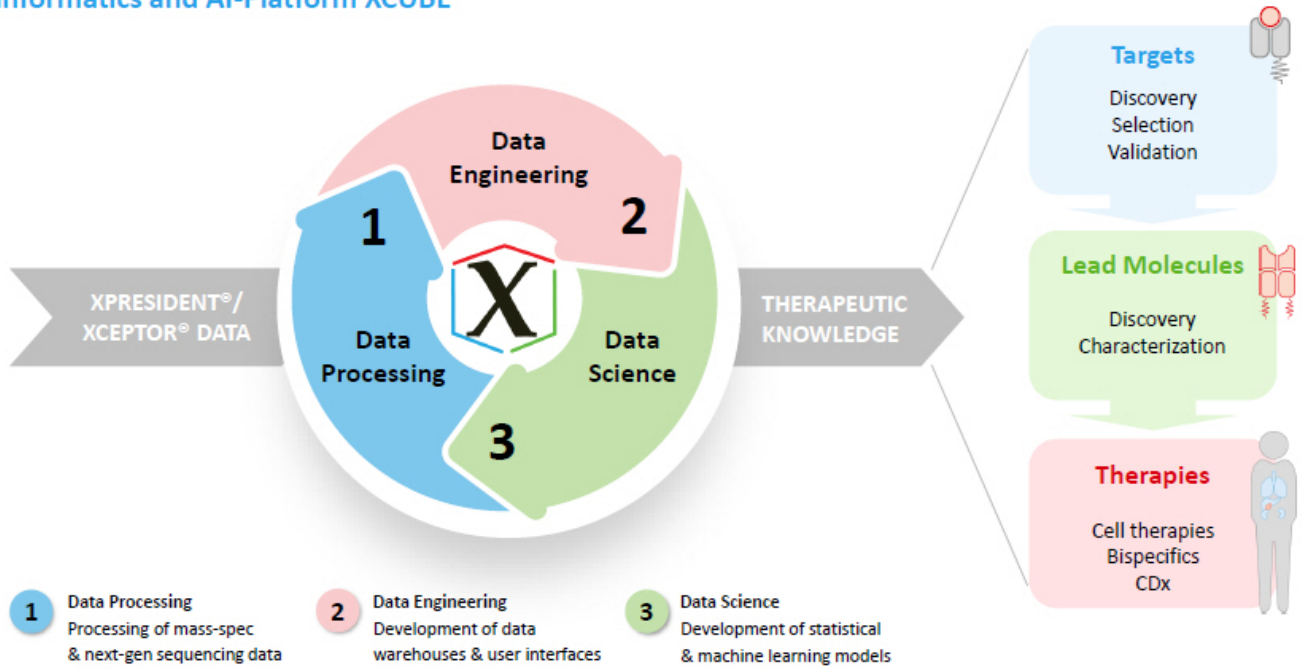
Optimal Target Selection & TCR Specificity for Minimizing Safety Risks

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



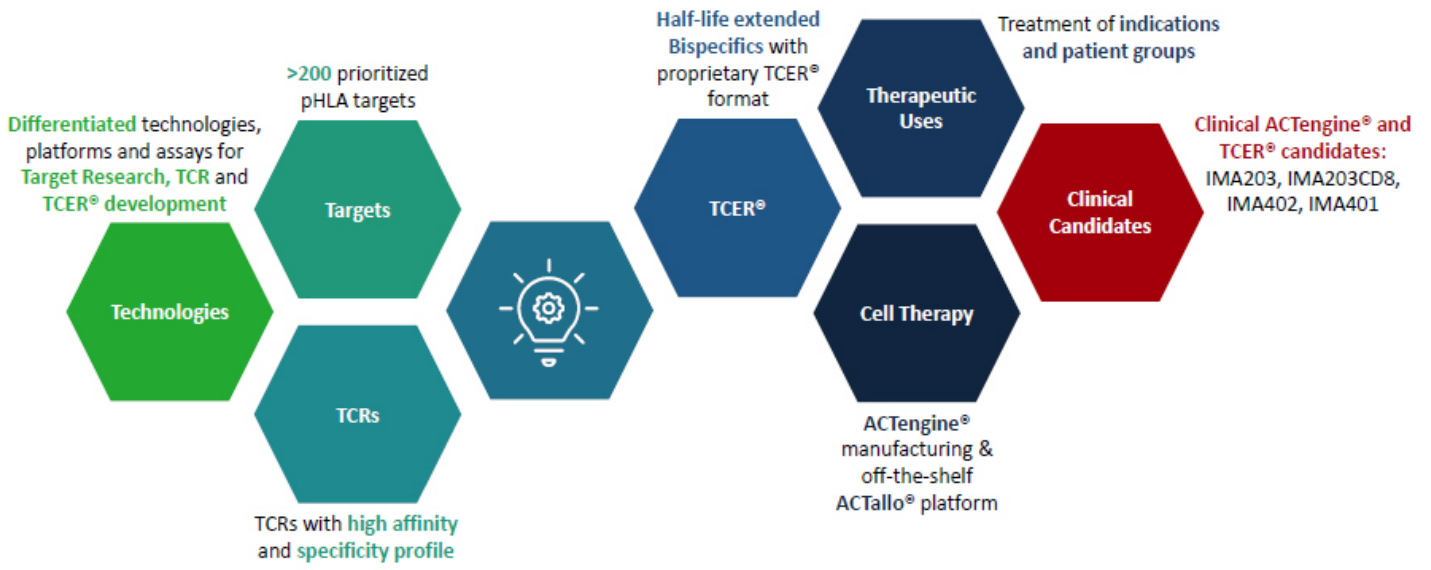
XPRESIDENT[®]-guided screening for on- and off-target toxicities of TCRs based on the extensive database of peptides presented on normal tissues

“AI Is Where the Data Is®”
Bioinformatics and AI-Platform XCUBE™



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 density¹: 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 avidity²: ~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

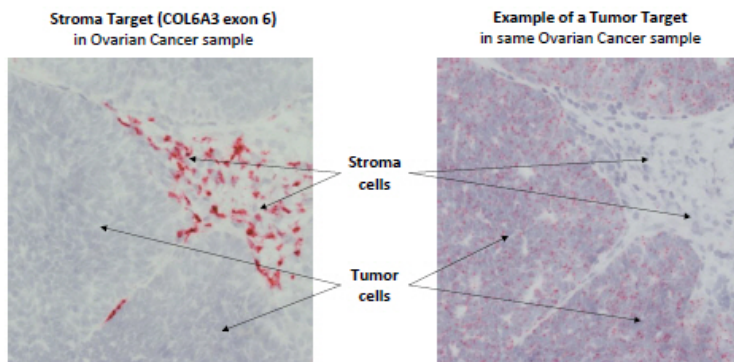
PATIENT POPULATION³

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%

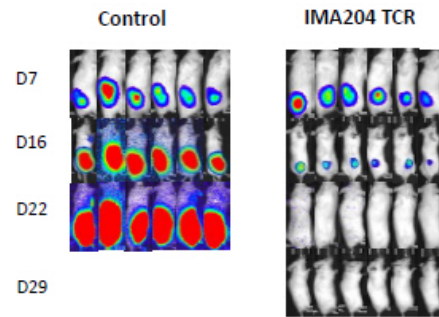
IMA204 provides a promising therapeutic opportunity for a broad patient population as monotherapy or in combination with TCR-T cells directed against tumor targets

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



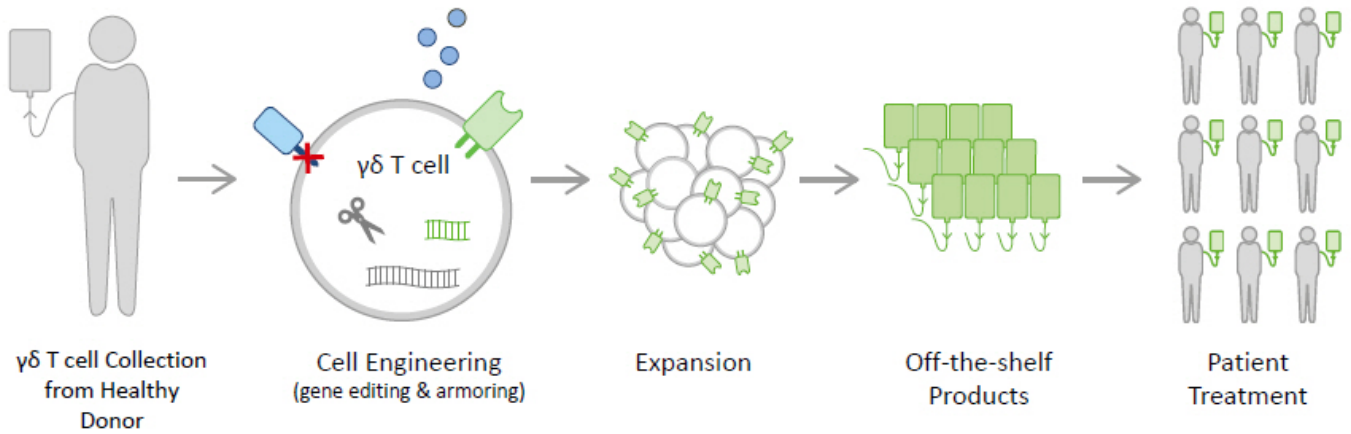
CD8-independent TCR leads to tumor eradication in all mice treated

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



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

ACTallo® – Immatics' Allogeneic Cell Therapy Approach



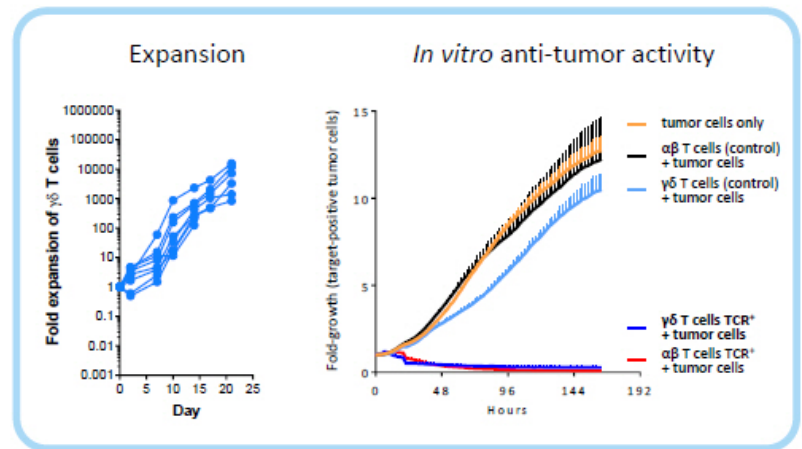
- **Off-the-shelf cell therapy**, no need for personalized manufacturing → reduced logistics and time to application
- **Potential for hundreds of doses** from one single donor leukapheresis → lower cost of goods
- **Use of healthy donor material** provides standardized quality and quantity of starting material
- Strategic collaborations combining Immatics' proprietary ACTallo® platform with Bristol Myers Squibb's next-gen technologies and Editas Medicine's CRISPR gene editing technology to develop next-gen allogeneic γδ TCR-T/CAR-T programs

Why $\gamma\delta$ T cells?

$\gamma\delta$ T cells Are Well Suited for an Off-the-shelf Cell Therapy Approach

$\gamma\delta$ 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 $\alpha\beta$ 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
(InfliRx, 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
(InfliRx, AAA)

Strong, Focused and Highly Integrated Trans-Atlantic Organization



Delivering

the Power of T cells
to Cancer Patients



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