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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 9, 2021

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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:

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Form 40-F



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INFORMATION CONTAINED IN THIS REPORT ON FORM 6-K

**Immatics Reports Clinical Responses across Multiple Solid Tumor Types  
in Ongoing ACTengine® IMA203 Phase 1a Trial Targeting PRAME**

*Company to host conference call on Tuesday, November 9 at 8:30 am EST*

- Dose escalation for cell therapy candidate ACTengine® IMA203 ongoing; dose level 3 completed at doses below 1 billion transduced cells
- Objective responses (RECIST 1.1) observed in 8/16 patients (50%) across multiple solid cancer types, with 8/13 responders (62%) treated at dose levels 2 and 3
- High T cell engraftment and persistence; clinical response associated with tumor infiltration
- Transient and manageable treatment-emergent adverse events; no higher-grade cytokine release syndrome or neurological toxicities observed
- **IMA203 clinical data will be presented as late-breaking oral presentation at the SITC Annual Meeting on Saturday, November 13 at 12:00 pm EST**

On November 9, 2021, Immatics N.V. (the “Company”) announced an interim clinical data update from its TCR-engineered cell therapy (TCR-T) approach ACTengine® IMA203 targeting PRAME, preclinical proof-of-concept data for its next-generation IMA203CD8 candidate and an overall update on all IMA200 programs including IMA201 (MAGEA4/A8) and IMA202 (MAGEA1).

**Key clinical findings from IMA203 Phase 1a trial**

In the ongoing ACTengine® IMA203 trial, Immatics is treating advanced solid cancer patients utilizing TCR-T cells directed against an HLA-A\*02-presented peptide derived from preferentially expressed antigen in melanoma (PRAME). PRAME is homogenously expressed and highly prevalent across several solid cancer indications. The chosen PRAME target peptide has been identified by Immatics’ proprietary mass spectrometry-based target discovery platform XPRESIDENT®, demonstrating natural and specific occurrence of the target on tumors at high copy numbers.

**Clinical and biological activity:** IMA203 demonstrates objective responses (RECIST 1.1.) at low cellular doses across several solid cancer types

- At data cut-off on October 5, 2021, 18 patients received ACTengine® IMA203 T cells across dose level 1 (DL1) to dose level 4 (DL4).
- All patients were heavily pretreated with a median of 4 lines of prior systemic treatment.
- 16 patients were evaluable for tumor response analysis according to RECIST 1.1 with at least one post-treatment tumor assessment at the time of data cut-off. All 16 patients received dose levels 1 to 3 - below 1 billion total transduced cells. For the remaining 2 patients, the first tumor response assessment is still pending.
  - o 15 out of 16 patients (94%) achieved disease control. Tumor shrinkage was observed in 14 patients (88%).
  - o 8 out of 16 patients (50%) showed objective responses; onset of responses in all cases was detected within 6 weeks following infusion of IMA203 T cells.
  - o All responses occurred above DL1; 8 out of 13 patients (62%) treated at DL2<sup>1</sup> and DL3 receiving up to 0.59 billion total transduced cells had objective partial responses. Responses were observed in patients with synovial sarcoma, malignant melanoma, uveal melanoma, and head and neck cancer.
  - o As of data cut-off, partial responses were confirmed in subsequent scans in two synovial sarcoma patients and one uveal melanoma patient.
- Longer follow-up is required for patients infused at higher dose levels DL3 and DL4 are required to assess response durability and response rate at target dose.
- IMA203 continues to show high levels of T cell engraftment, persistence, and tumor infiltration at first three dose levels. Clinical response was associated (p=0.016) with infiltration of IMA203 T cells into the tumor tissue and showed an emerging trend towards higher peak vector copies of IMA203 T cells in blood (p=0.065) – supporting the mechanism-of-action.
- The ACTengine® IMA203 trial is currently recruiting patients to the 4<sup>th</sup> and highest dose level (up to approximately 2.5 billion total transduced cells) of the Phase 1a dose escalation cohort.

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<sup>1</sup> DL2 here includes patients dosed with DL2, EC1 and EC2 (EC1: Enrichment cohort with intermediate dose level between DL1 and DL2 , EC2: between DL2 and DL3)

**Preliminary Objective Response Rates (ORR; RECIST 1.1, confirmed and unconfirmed)**

| Dose Level       | ORR        |
|------------------|------------|
| DL1              | 0/3 (0%)   |
| DL2 <sup>1</sup> | 6/10 (60%) |
| DL3              | 2/3 (67%)  |

|                    | All dose levels   | DL2 <sup>1</sup> & DL3 |
|--------------------|-------------------|------------------------|
| <b>All comers</b>  | <b>8/16 (50%)</b> | <b>8/13 (62%)</b>      |
| Melanoma           | 3/3 (100%)        | 3/3 (100%)             |
| Head & Neck Cancer | 1/3 (33%)         | 1/1 (100%)             |
| Synovial Sarcoma   | 3/5 (60%)         | 3/5 (60%)              |
| Uveal Melanoma     | 1/2 (50%)         | 1/2 (50%)              |

**Safety:** IMA203 treatment was well tolerated with transient and manageable treatment-emergent adverse events (TEAEs)

- At data cut-off on October 5, 2021, 19 patients were evaluable for safety analysis.
- Most frequent TEAEs included expected transient cytopenia (Grade 1-4) associated with lymphodepletion and transient low to moderate (Grade 1-2) cytokine release syndrome (CRS) or immune effector cell associated neurotoxicity syndrome (ICANS).
- No additional dose limiting toxicities (DLT) were observed since the previous data release on March 17, 2021.

Following the completion of the dose escalation portion of the study (Phase 1a) and the determination of the recommended Phase 2 dose (RP2D), Immatics plans to expand the IMA203 study to multiple Phase 1b (dose expansion) study cohorts:

- IMA203 as a monotherapy
- IMA203 in combination with an immune checkpoint inhibitor
- IMA203CD8, next-generation TCR-T where IMA203 cells are co-transduced with a CD8 co-receptor

Preclinical update on next-generation ACTengine<sup>®</sup> IMA203CD8

IMA203CD8 consists of IMA203-engineered T cells targeting PRAME co-transduced with CD8ab, a T cell co-receptor that plays an important role during T cell antigen recognition and T cell activation. The IMA203CD8 product candidate has the potential to harness the potency of CD4 T cells. Engagement of CD4 T cells, in addition to CD8 T cells, might further enhance depth and durability of anti-tumor response and clinical outcome of TCR-T in solid cancer patients.

- Immatics has exclusively licensed the CD8ab technology from Baylor College of Medicine in Houston, Texas.

- IMA203CD8 product candidate demonstrates enhanced anti-tumor activity in preclinical proof-of-concept data, which will be presented on-site at the SITC Annual Meeting on Friday, November 12, 2021 between 7 am - 8:30 pm EST as well as virtually throughout the duration of the conference. The poster will also be available on Immatics' website following the poster presentation.
- IND submission for IMA203CD8 cohort is expected in the first half of 2022.

#### Further updates on the ACTengine® IMA200 Programs

##### *IMA201 (MAGEA4/A8) and IMA202 (MAGEA1)*

- The dose escalation Phase 1a study with ACTengine® IMA201 and IMA202 product candidates directed at MAGEA4/8 and MAGEA1 HLA-A\*02 peptides respectively, continue to advance with IMA202 at dose level 3 and IMA201 at dose level 2.
- At data cut-off on September 17, 2021, 12 heavily pretreated patients have been treated; 8 out of 12 patients showed disease control. Tumor shrinkage was observed in 6 patients.
- All treatment-emergent adverse events (TEAEs) for both IMA201 and IMA202 continue to be transient and manageable. No dose limiting toxicities (DLT) or higher grade CRS/ICANS have been observed.
- The next step in the IMA201 and IMA202 trials is to complete dose escalation including target dose (DL3).

##### *IMA204 (COL6A3 exon 6)*

- ACTengine® IMA204 is a potential first-in-class TCR-T directed against COL6A3 exon 6, a novel tumor stroma target highly expressed in several solid cancers. IMA204 utilizes a next-generation CD8-independent TCR with full functionality in both CD4 and CD8 T cells.
- IND-enabling studies are close to completion. Submission of the IND application for IMA204 is now expected in 2022 to allow accelerated initiation of the multiple ACTengine® IMA203 Ph1b cohorts.

<sup>1</sup>DL2 here includes patients dosed with DL2, EC1 and EC2 (EC1: Enrichment cohort with intermediate dose level between DL1 and DL2, EC2: between DL2 and DL3)

#### **Immatics conference call**

Immatics will host a conference call on Tuesday, November 9, 2021 at 8:30 am EST / 2:30pm CET to discuss these clinical data and the company's comprehensive strategy to target PRAME via different programs. Participants may access the slides and the webcast on the Immatics website in the Investors section under "Presentations". A replay of the webcast will be made available shortly after the conclusion of the call and archived on the Company's website for at least 90 days.

#### **About Immatics' PRAME Programs**

Immatics' PRAME programs are directed against an HLA-A\*02-presented peptide derived from preferentially expressed antigen in melanoma (PRAME), a protein frequently expressed in a large variety of solid cancers – such as uterine carcinoma, synovial sarcoma, melanoma, ovarian carcinoma, uveal melanoma, squamous NSCLC, breast carcinoma and HNSCC – thereby supporting the programs' potential to address a broad cancer patient population. Immatics' PRAME peptide demonstrates a high copy number per tumor cell and is homogeneously and specifically expressed in tumor tissue. 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®, the Company has then generated a highly specific T cell receptor (TCR) against this target for its TCR-based cell therapy approach, ACTengine® IMA203, and its TCR Bispecifics pipeline, TCER® IMA402. Both therapeutic modalities have distinct attributes and mechanisms of actions suitable for cancer patients at different disease stages and tumor types.

ACTengine® IMA203 is currently being evaluated in an ongoing Phase 1a dose escalation cohort utilizing a 3+3 design with four increasing IMA203 dose levels to determine the Recommended Phase 2 Dose (RP2D). Immatics plans to expand the IMA203 study to multiple Phase 1b study cohorts including (1) IMA203 as a monotherapy, (2) IMA203 in combination with an immune checkpoint inhibitor and (3) IMA203CD8, a next-generation cell therapy where IMA203 engineered T cells are co-transduced with a CD8ab co-receptor.

TCER® IMA402 is a PRAME-specific “off-the-shelf” biologic that leverages the body’s immune system by redirecting and activating T cells towards cancer cells. TCER® IMA402 has previously demonstrated anti-tumor activity against PRAME-positive cancer cells in an *in vivo* mouse model leading to consistent tumor regression including complete responses.

#### **About ACTengine® programs**

ACTengine® is a personalized approach for patients with advanced solid tumors. The patient’s own T cells are genetically engineered to express a novel, proprietary TCR directed against a defined cancer target. The modified T cells are then reinfused into the patient to attack the tumor, an approach also known as TCR-T. ACTengine® programs IMA201 (NCT03247309), IMA202 (NCT03441100) and IMA203 (NCT03686124) are currently in clinical development in the US and in Germany. The objective of the three Phase 1 clinical trials is to evaluate safety, tolerability and initial signs of clinical and biological efficacy in target-positive solid cancer patients. IMA204 is currently in pre-clinical development. All ACTengine® product candidates can be rapidly manufactured utilizing a proprietary manufacturing process designed to enhance T cell engraftment and persistence *in vivo*.

The ACTengine® T cell products are manufactured at the Evelyn H. Griffin Stem Cell Therapeutics Research Laboratory in collaboration with UTHealth. The ACTengine® IMA200 Programs are co-funded by the Cancer Prevention and Research Institute of Texas (CPRIT).

#### **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.

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In connection with the announcement above, the Company made available its presentation at the SITC Annual Meeting as well as an updated investor presentation. A copy of the presentations is attached hereto as Exhibit 99.1 and Exhibit 99.2, respectively. The fact that these presentations are being made available and furnished herewith is not an admission as to the materiality of any information contained in the presentations. The information contained in the presentations is being provided as of November 9, 2021 and the Company does not undertake any obligation to update the presentations in the future or to update forward-looking statements to reflect subsequent actual results.

#### INCORPORATION BY REFERENCE

This Report on Form 6-K (other than Exhibits 99.1 and 99.2) shall be deemed to be incorporated by reference into the registration statements on Form F-3 (Registration Nos. 333-258351 and 333-240260) 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

| <b>Exhibit No.</b> | <b>Description</b>   |
|--------------------|--|
| 99.1               | ACTengine <sup>®</sup> IMA200 TCR-T Programs Interim Phase 1a Update |
| 99.2               | Corporate presentation dated November 2021                           |

**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 9, 2021

**IMMATICS N.V.**

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

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

**Cedrik Britten, Chief Medical Officer**  
**Harpreet Singh, Chief Executive Officer**  
**November 09, 2021**



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

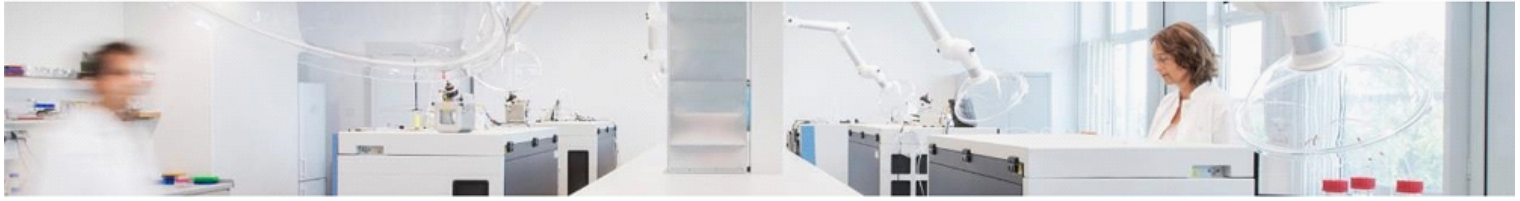
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**Forward-Looking Statements.** Certain statements in this presentation may be considered forward-looking statements. Forward-looking statements generally relate to future events or the Company's future financial or operating performance. For example, statements concerning timing of data read-outs for product candidates, the timing of IND or CTA filing for pre-clinical stage 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", "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, 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 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.

**No Offer or Solicitation.** This communication is for informational purposes only and does not constitute, or form a part of, an offer to sell or the solicitation of an offer to sell or an offer to buy or the solicitation of an offer to buy any securities, and there shall be no sale of securities, in any jurisdiction in which such offer, solicitation or sale would be unlawful prior to registration or qualification under the securities laws of any such jurisdiction. No offer of securities shall be made except by means of a prospectus meeting the requirements of Section 10 of the Securities Act of 1933, as amended, and otherwise in accordance with applicable law.

Certain information contained in this Presentation relates to or is based on studies, publications, surveys and the Company's own internal estimates and research. In addition, all of the market data included in this presentation involves a number of assumptions and limitations, and there can be no guarantee as to the accuracy or reliability of such assumptions. Finally, while the Company believes its internal research is reliable, such research has not been verified by any independent source. All the scientific and clinical data presented within this presentation 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.



## Agenda

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



## Introduction & Summary

# Immatics' Proprietary PRAME Peptide-HLA/TCR Pair

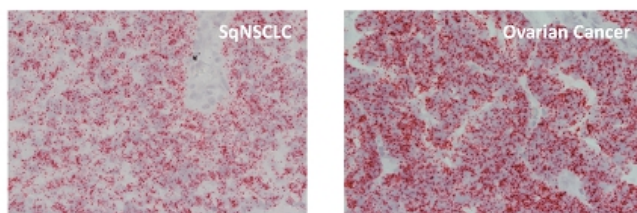
## Broadly Expressed Target on Multiple Solid Cancers Combined with Highly Specific TCR

### Peptide Target PRAME:

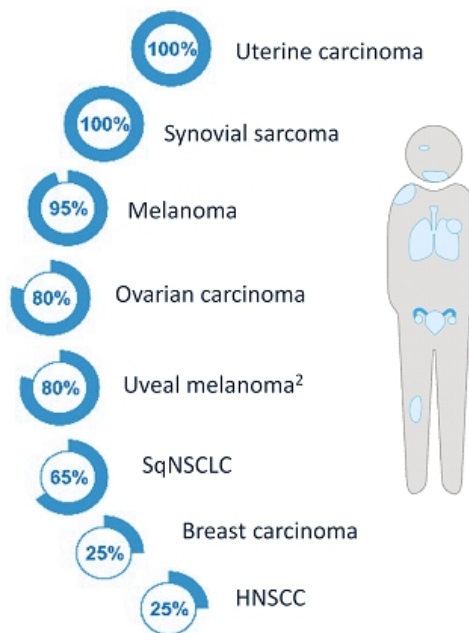
- HLA-A\*02-restricted peptide identified by XPRESIDENT® quant. mass spec
- Naturally and specifically presented at high levels (100-1000 copies/cell)
- Homogenously expressed at high prevalence across multiple solid tumors<sup>1</sup>

### PRAME T cell Receptor (TCR):

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



PRAME RNA expression in native tumor samples (ISH analysis)



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

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

**SAFETY**

- 3** Dose levels completed, all below 1 bn cells
- 0** Additional DLTs<sup>1</sup>
- 0** Grade ≥3 CRS or ICANS<sup>2</sup>
- 4<sup>th</sup>** Dose level (target dose) commenced, first DL >1 bn cells

**CLINICAL ACTIVITY**

- 50%** ORR<sup>3</sup> across all doses and multiple solid cancers (8/16 patients)
- 62%** ORR<sup>3</sup> at DL2\* & DL3 (8/13 patients) – all still dosed below 1 bn cells

**BIOLOGICAL ACTIVITY**

- Blood** High T cell engraftment and persistence
- Tumor** High T cell infiltration associated with clinical response

Data cut-off – 05-Oct-2021

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

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

### PRAME TCR-T (IMA203 Ph1a)

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

### PRAME TCR-T (IMA203 Ph1b)

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

### PRAME BISPECIFIC (IMA402)

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



## IMA203 Phase 1a Interim Update

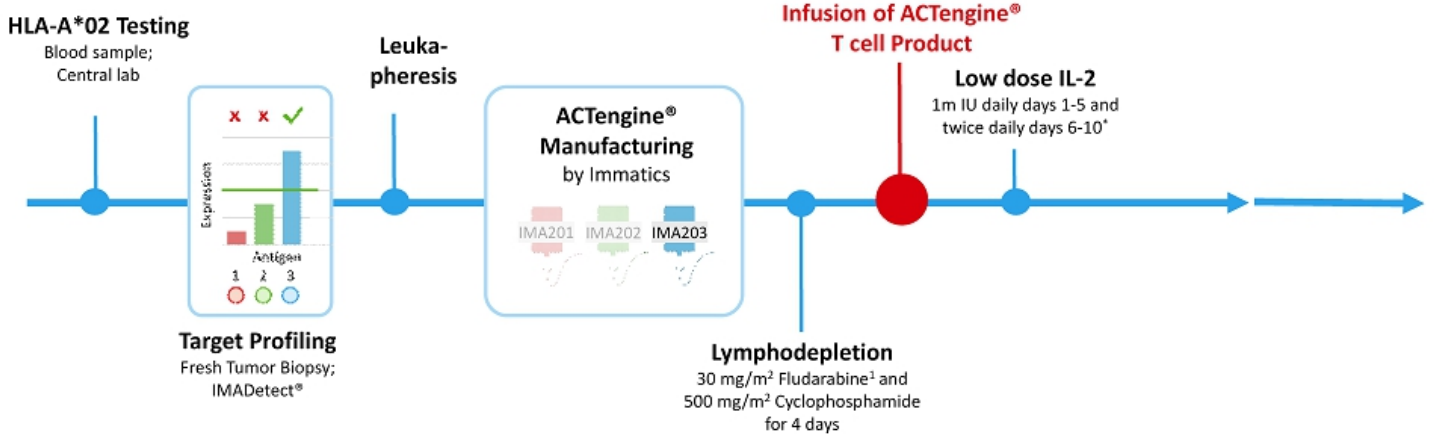


## Screening & Manufacturing Phase

## Treatment & Observation Phase

## Long Term Follow-up

Safety and efficacy monitoring for 12 months



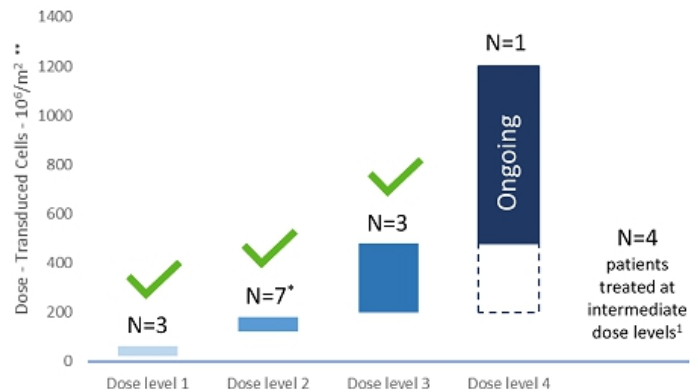
<sup>4</sup> IL-2 dose reduction from twice daily to daily for the first 5 days and dosing duration from 14 to 10 days introduced prior to treatment of first patients on dose level 3;

<sup>1</sup> Dose reduction of Fludarabine (from 40mg/m<sup>2</sup> to 30mg/m<sup>2</sup>) was introduced prior to treatment of the first patient on dose level 3

## Key Study Objectives

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

## Trial Design & Recruitment Status



**18 patients<sup>1</sup> infused with PRAME-directed T cells at 5 clinical sites –  
 Highest Dose Level 4 has commenced**

Data cut-off – 05-Oct-2021

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

# ACTengine® IMA203 – Patient Characteristics & Manufacturing

## Heavily Pre-Treated Patients Across Multiple Solid Cancers Were Infused

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

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

### Manufacturing

|                                     |      |
|-------------------------------------|------|
| Manufacturing duration <sup>3</sup> | 6-7d |
| Overall manufacturing success rate  | 92%  |

**16 patients (all dosed below 1 bn transduced cells)  
evaluable for clinical and biological activity assessment**  
For remaining 2 treated patients first tumor assessment pending as of data cut-off

Data cut-off – 05-Oct-2021

<sup>1</sup> Patients that started lymphodepletion, one patient died from sepsis of unknown origin and did not receive IMA203 T cells;

<sup>2</sup> Patients with at least one tumor assessment post treatment, 2 patients infused but pending first tumor assessment; <sup>3</sup> Plus currently 14d release testing, expected to be reduced to 7d in 2022

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

TEAEs by maximum severity (N=19)<sup>1</sup>

| Adverse event   | All grades |       | ≥ Grade 3      |       | Adverse event             | All grades |   | ≥ Grade 3 |   |
|---|------------|-------|----------------|-------|---------------------------|------------|---|-----------|---|
|   | No.        | %     | No.            | %     |                           | No.        | % | No.       | % |
| <b>Patients with any adverse event</b>                      | 19         | 100.0 | 19             | 100.0 | <b>table continued...</b> |            |   |           |   |
| <b>Adverse Events of Special Interest</b>                   |            |       |                |       |                           |            |   |           |   |
| Cytokine release syndrome                                   | 17         | 89.5  | 0              | 0.0   |                           |            |   |           |   |
| ICANS <sup>2</sup>  | 4          | 21.1  | 0              | 0.0   |                           |            |   |           |   |
| <b>Blood and lymphatic system disorders</b>                 |            |       |                |       |                           |            |   |           |   |
| Neutropenia*  | 16         | 84.2  | 15             | 78.9  |                           |            |   |           |   |
| Anaemia   | 16         | 84.2  | 9              | 47.4  |                           |            |   |           |   |
| Thrombocytopenia  | 15         | 78.9  | 7              | 36.8  |                           |            |   |           |   |
| Lymphopenia*  | 14         | 73.7  | 14             | 73.7  |                           |            |   |           |   |
| Leukopenia*   | 12         | 63.2  | 11             | 57.9  |                           |            |   |           |   |
| Cytopenia   | 1          | 5.3   | 1              | 5.3   |                           |            |   |           |   |
| <b>Infections and infestations</b>                          |            |       |                |       |                           |            |   |           |   |
| Enterococcal infection                                      | 1          | 5.3   | 1              | 5.3   |                           |            |   |           |   |
| COVID-19  | 1          | 5.3   | 1              | 5.3   |                           |            |   |           |   |
| Appendicitis  | 1          | 5.3   | 1              | 5.3   |                           |            |   |           |   |
| Sepsis <sup>3</sup>   | 1          | 5.3   | 1              | 5.3   |                           |            |   |           |   |
| <b>Respiratory, thoracic and mediastinal disorders</b>      |            |       |                |       |                           |            |   |           |   |
| Hypoxia   | 2          | 10.5  | 1              | 5.3   |                           |            |   |           |   |
| Pleural effusion  | 2          | 10.5  | 1              | 5.3   |                           |            |   |           |   |
| Bronchial obstruction                                       | 1          | 5.3   | 1              | 5.3   |                           |            |   |           |   |
| <b>Metabolism and nutrition disorders</b>                   |            |       |                |       |                           |            |   |           |   |
| Hyponatraemia   | 7          | 36.8  | 1              | 5.3   |                           |            |   |           |   |
| Hypokalaemia  | 5          | 26.3  | 1              | 5.3   |                           |            |   |           |   |
| Decreased appetite  | 3          | 15.8  | 0              | 0.0   |                           |            |   |           |   |
| <b>Cardiac or vascular disorders</b>                        |            |       |                |       |                           |            |   |           |   |
| Hypertension  | 3          | 15.8  | 2              | 10.5  |                           |            |   |           |   |
| Atrial fibrillation   | 2          | 10.5  | 1 <sup>4</sup> | 5.3   |                           |            |   |           |   |
| <b>General disorders and administration site conditions</b> |            |       |                |       |                           |            |   |           |   |
| Fatigue   | 7          | 36.8  | 1              | 5.3   |                           |            |   |           |   |
| Pyrexia   | 5          | 26.3  | 0              | 0.0   |                           |            |   |           |   |
| Oedema peripheral   | 3          | 15.8  | 0              | 0.0   |                           |            |   |           |   |
| <b>Gastrointestinal disorders</b>                           |            |       |                |       |                           |            |   |           |   |
| Nausea  | 12         | 63.2  | 0              | 0.0   |                           |            |   |           |   |
| Vomiting  | 7          | 36.8  | 0              | 0.0   |                           |            |   |           |   |
| Diarrhoea   | 7          | 36.8  | 0              | 0.0   |                           |            |   |           |   |
| Constipation  | 6          | 31.6  | 0              | 0.0   |                           |            |   |           |   |
| <b>Investigations</b>                                       |            |       |                |       |                           |            |   |           |   |
| Aspartate aminotransferase increased                        | 5          | 26.3  | 0              | 0.0   |                           |            |   |           |   |
| Alanine aminotransferase increased                          | 4          | 21.1  | 0              | 0.0   |                           |            |   |           |   |
| Blood creatinine increased                                  | 4          | 21.1  | 0              | 0.0   |                           |            |   |           |   |
| <b>Other</b>  |            |       |                |       |                           |            |   |           |   |
| Rash  | 5          | 26.3  | 0              | 0.0   |                           |            |   |           |   |
| Myalgia   | 4          | 21.1  | 0              | 0.0   |                           |            |   |           |   |
| Arthralgia  | 3          | 15.8  | 0              | 0.0   |                           |            |   |           |   |
| Alopecia  | 3          | 15.8  | 0              | 0.0   |                           |            |   |           |   |
| Rash maculo-papular   | 2          | 10.5  | 1              | 5.3   |                           |            |   |           |   |
| Orchitis  | 1          | 5.3   | 1              | 5.3   |                           |            |   |           |   |
| Contrast media allergy                                      | 1          | 5.3   | 1              | 5.3   |                           |            |   |           |   |

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

Most Adverse Events were associated with lymphodepletion

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

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

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



## Multiple Objective Responses in Various Solid Cancer Indications During Dose Escalation

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

Data cut-off – 05-Oct-2021

DL: Dose level; EC1: Enrichment cohort with intermediate dose level between DL1 and DL2; EC2: Enrichment cohort with intermediate dose level between DL2 and DL3; SD: Stable disease; PR: Partial response.

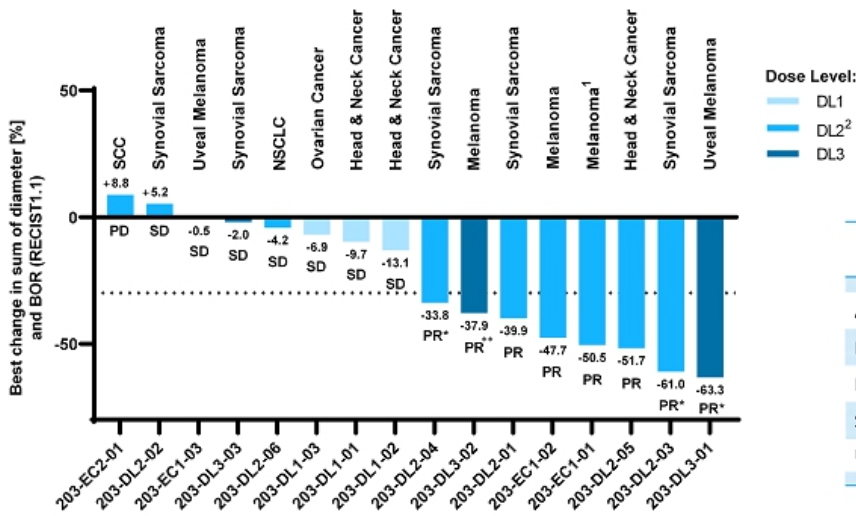
<sup>1</sup> Total infused dose of transduced viable CD8 T cells; <sup>2</sup> Immune checkpoint inhibitor; <sup>3</sup> PR confirmed at subsequent scan; <sup>4</sup> Pending confirmation

# ACTengine® IMA203 – Change in Target Lesions



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

Best Overall Response (RECIST1.1)



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

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

Data cut-off – 05-Oct-2021

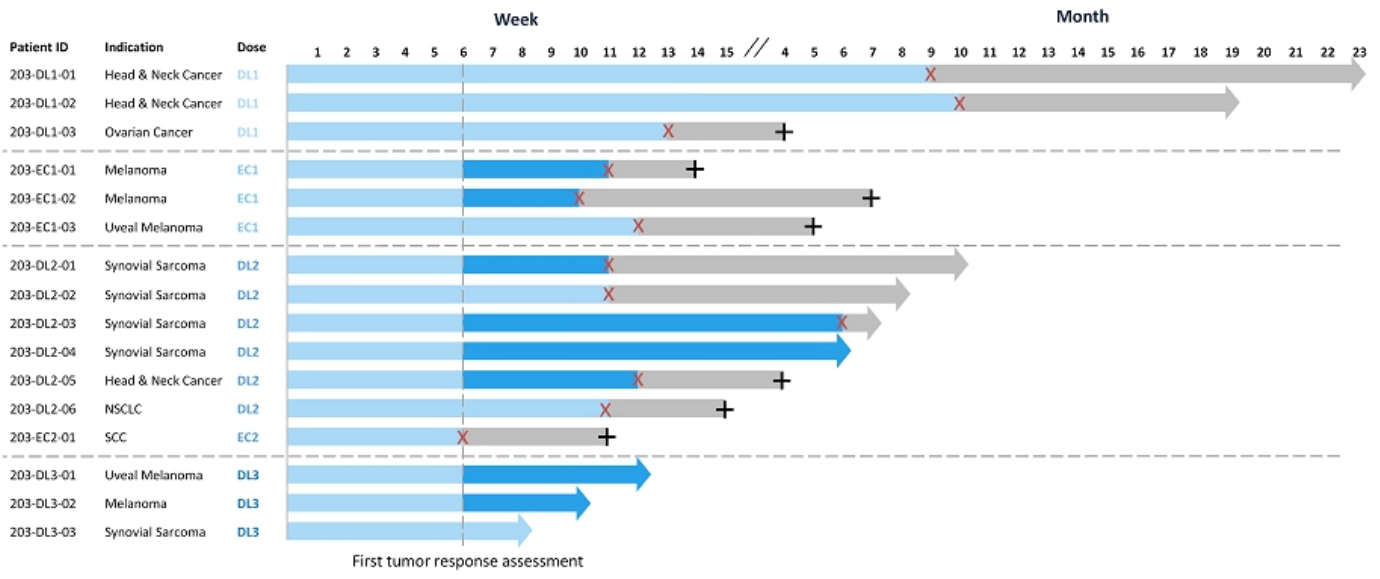
<sup>1</sup> RECIST1.1 response at the timepoint of maximum change of target lesions (week 12); PD due to new lesions (leptomeningeal disease) at week 12

<sup>2</sup> Patients dosed with DL2, EC1 and EC2; \* Confirmed at subsequent scan; \*\* Confirmation pending as of data cut-off

# ACTengine® IMA203 – Response Over Time

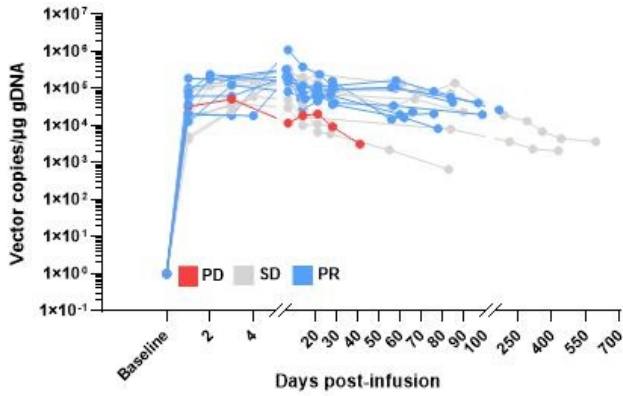


## Objective Responses across Multiple Tumor Types at Doses below 1 billion Transduced Cells



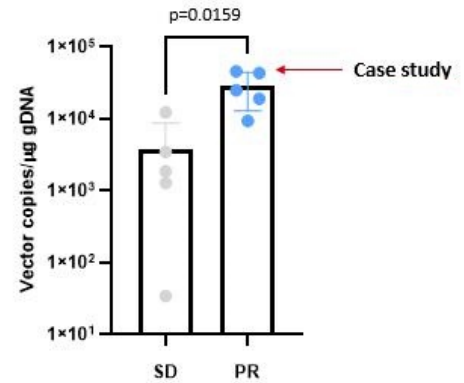
According to RECIST1.1 Data cut-off – 05-Oct-2021

### T cell Engraftment & Persistence



High T cell engraftment and persistence with trend for association of peak vector copies with clinical response<sup>1</sup>

### Tumor Infiltration post Infusion<sup>2</sup>



High T cell infiltration observed through serial biopsies associated with clinical response<sup>3</sup>

Data cut-off – 05-Oct-2021

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



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

## Confirmed Partial Response with Deepening Tumor Regression in Multiple Lesions

62-year-old female patient

Metastatic uveal melanoma with high tumor burden in multiple organs

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

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

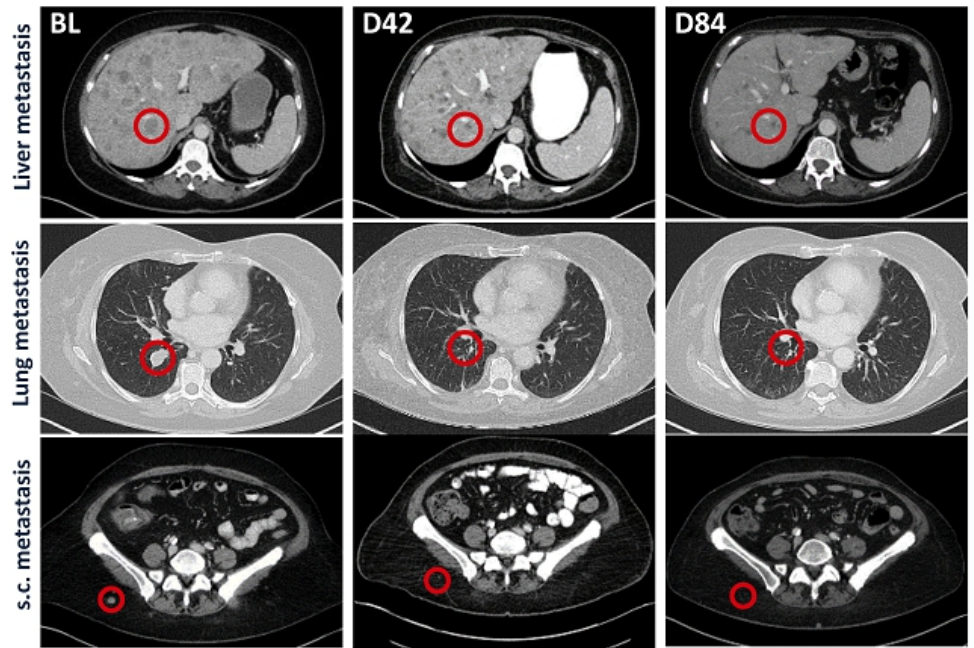
### Tumor Response

**Best response (RECIST1.1):**

**PR (confirmed; ongoing as of data cut-off)**

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

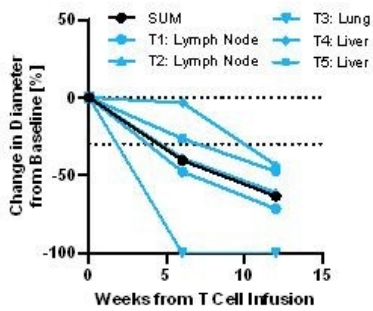
Data cut-off – 05-Oct-2021



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

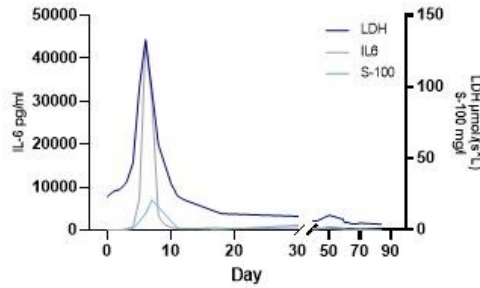
## Partial Response Consistent with Biological Data

### Change in Size of Target Lesions



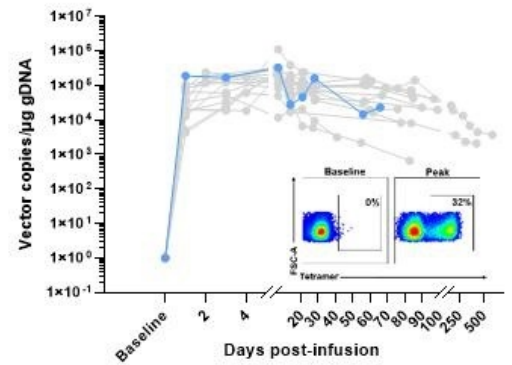
- Target Lesions decreased at week 6 post treatment to -40%
- Response deepened at week 12 to -63% (RECIST1.1)

### Serum Biomarkers in Blood<sup>1</sup>



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

### T cell Engraftment, Persistence & Tumor Infiltration



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

Data cut-off – 05-Oct-2021

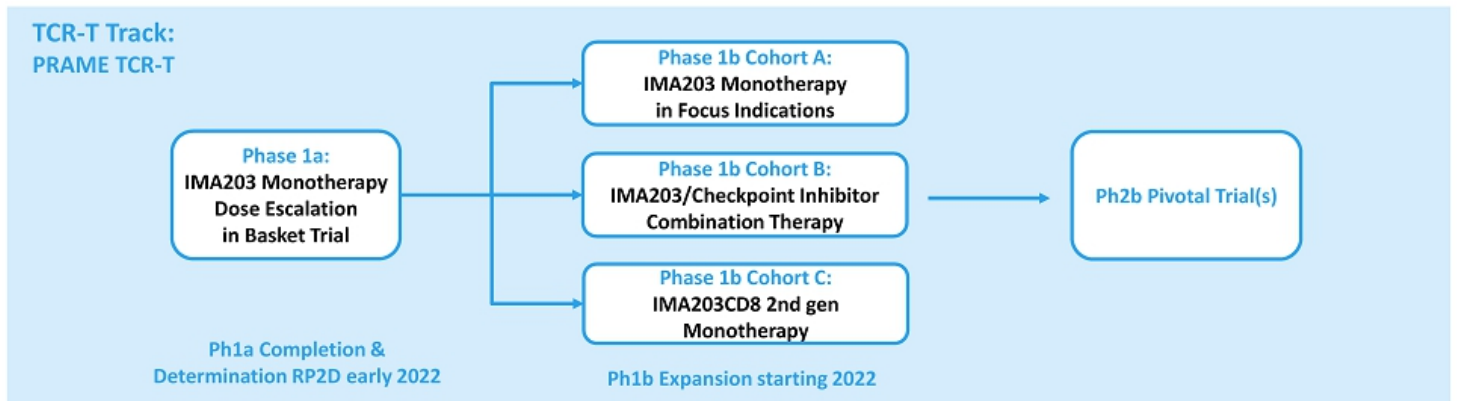
<sup>1</sup> Serum biomarker data courtesy of Dr. Wermke



## Comprehensive Strategy to Target PRAME

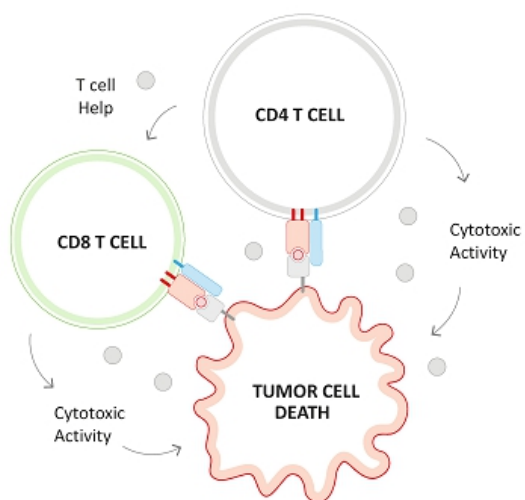
# Comprehensive Strategy to Target PRAME


## Maximizing PRAME Mediated Clinical Benefit Through ACT and TCR Bispecifics



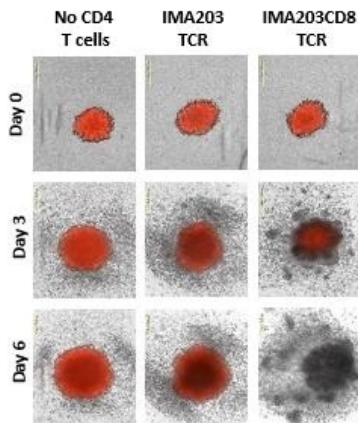
# ACTengine® IMA203CD8 – Second-generation TCR-T

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

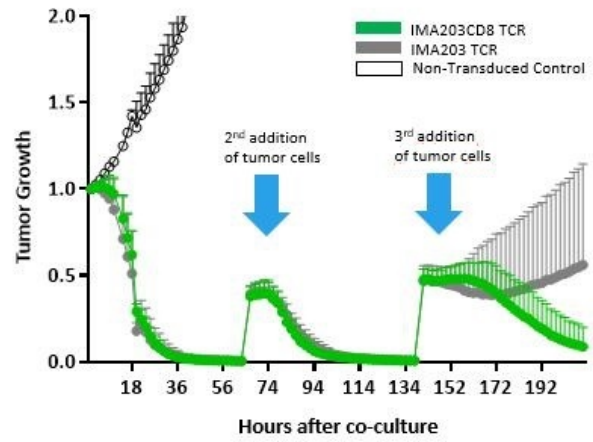


- Engagement of CD4 T cells by CD8 co-transduction reported to boost anti-tumor activity in TCR-T trials
- Functional superiority of a **CD8 $\alpha\beta$  IMA203** construct (IMA203CD8) over multiple other CD8 constructs in preclinical experiments
  - Poster presentation at SITC, Nov 12, 2021 
- Secured access to CD8 $\alpha\beta$  technology through exclusive license from Baylor College of Medicine
- IND filing for IMA203CD8 lead candidate targeted in 1H2022

3D Spheroid Killing – CD4 T cells



Serial Killing Assay – CD8 & CD4 T cells

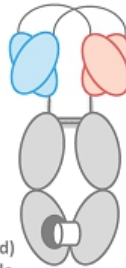


Engagement of CD4 T cells may enhance depth and durability of anti-tumor response and clinical outcome of TCR-T in solid cancer patients

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

**T cell recruiting antibody**

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



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

**pHLA targeting TCR**

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

**Next-generation TCER® format**

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

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



## ACTengine® IMA200 TCR-T Programs Update



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

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

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

<sup>1</sup> One DLT in DL2 previously reported in March 2021, fully resolved

|   | IMA201                       | IMA202                       | IMA203                            | IMA204                       |
|---|------------------------------|------------------------------|-----------------------------------|------------------------------|
|   | MAGEA4/8                     | MAGEA1                       | PRAME                             | COL6A3 exon 6                |
| <b>Selected solid cancer indications with significant target prevalence<sup>1</sup></b> | Sarcoma Subtypes – up to 80% | HCC– 40%                     | Uterine Carcinoma – 100%          | Pancreatic Carcinoma – 80%   |
|   | Squamous NSCLC – 50%         | Squamous NSCLC – 35%         | Sarcoma Subtypes – up to 100%     | Breast Carcinoma – 75%       |
|   | HNSCC – 35%                  | Sarcoma Subtypes – up to 30% | Melanoma – 95%                    | Stomach Carcinoma – 65%      |
|   | Bladder Carcinoma – 30%      | Melanoma – 30%               | Uveal Melanoma – 80% <sup>2</sup> | Sarcoma – 65%                |
|   | Esophageal Carcinoma – 25%   | Bladder Carcinoma – 20%      | Ovarian Carcinoma – 80%           | Esophageal Carcinoma – 60%   |
|   | Uterine Carcinosarcoma – 25% | Esophageal Carcinoma – 20%   | Squamous NSCLC – 65%              | Squamous NSCLC– 55%          |
|   | Ovarian Carcinoma – 20%      |                              | Kidney Carcinoma – up to 45%      | Adeno NSCLC– 55%             |
|   | Melanoma – 20%               |                              | Cholangiocarcinoma – 35%          | HNSCC – 55%                  |
|   |                              |                              | Adeno NSCLC – 25%                 | Uterine Carcinosarcoma – 55% |
|   |                              |                              | Breast Carcinoma– 25%             | Colorectal Carcinoma – 45%   |
|   |                              | HNSCC – 25%                  | Mesothelioma – 45%                |                              |
|   |                              | Esophageal Carcinoma – 20%   | Cholangiocarcinoma – 40%          |                              |
|   |                              | HCC– 20%                     | Ovarian Carcinoma – 40%           |                              |
|   |                              | Bladder Carcinoma – 20%      | Melanoma – 35%                    |                              |
|   |                              |                              | Bladder Carcinoma – 35%           |                              |

**IMA200 targets show relevant expression in multiple solid cancers**

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

# ACTengine® IMA201 & IMA202 – Patient Characteristics

## Heavily Pre-Treated Patients Were Infused during Dose Escalation

| Patient Distribution                         | Number | Characteristics in Efficacy Population         | Median (range)     |
|--|--------|--|--------------------|
| Patients in Safety Population <sup>1</sup>   | 12     | Age [years]                                    | 60 (27 – 68)       |
| Patients in Efficacy Population <sup>2</sup> | 12     |  |                    |
| Thereof IMA201 infused                       | 2      | Prior lines of systemic therapies              | 5 (3-7)            |
| Thereof at target dose                       | 0      |  |                    |
| Thereof IMA202 infused                       | 10     | Years from diagnosis                           | 4 (1-8)            |
| Thereof at target dose                       | 1      |  |                    |
|  |        | Transduced T cells infused [x10 <sup>9</sup> ] | 0.46 (0.09 - 1.90) |

**IMA201 study currently enrolls patients at dose level 2 (0.3 x 10<sup>9</sup>/m<sup>2</sup>)**  
**IMA202 study is infusing patients at target dose (1 x 10<sup>9</sup>/m<sup>2</sup>)**

Data cut-off – 17-Sep-2021

<sup>1</sup> Patients that started lymphodepletion; <sup>2</sup> Patients with at least one tumor assessment post treatment

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

TEAEs by maximum severity (N=12)<sup>1</sup>

| Adverse event  | All grades |       | ≥ Grade 3 |       | Adverse event   | All grades |      | ≥ Grade 3 |     |
|--|------------|-------|-----------|-------|---|------------|------|-----------|-----|
|  | No.        | %     | No.       | %     |   | No.        | %    | No.       | %   |
| Patients with any adverse event                        | 12         | 100.0 | 12        | 100.0 | table continued...  |            |      |           |     |
| <b>Adverse Events of Special Interest</b>              |            |       |           |       | <b>Cardiac or vascular disorders</b>                        |            |      |           |     |
| Cytokine release syndrome                              | 11         | 91.7  | 0         | 0.0   | Hypotension   | 4          | 33.3 | 0         | 0.0 |
| ICANS <sup>2</sup>                                     | 1          | 8.3   | 0         | 0.0   | Hypertension  | 1          | 8.3  | 1         | 8.3 |
| <b>Blood and lymphatic system disorders</b>            |            |       |           |       | <b>General disorders and administration site conditions</b> |            |      |           |     |
| Lymphopenia*   | 10         | 83.3  | 10        | 83.3  | Pyrexia   | 6          | 50.0 | 0         | 0.0 |
| Neutropenia**  | 10         | 83.3  | 10        | 83.3  | Chills  | 4          | 33.3 | 0         | 0.0 |
| Anaemia  | 8          | 66.7  | 6         | 50.0  | Fatigue   | 3          | 25.0 | 1         | 8.3 |
| Thrombocytopenia                                       | 8          | 66.7  | 6         | 50.0  | Oedema peripheral   | 2          | 16.7 | 0         | 0.0 |
| Leukopenia*  | 6          | 50.0  | 5         | 41.7  | <b>Gastrointestinal disorders</b>                           |            |      |           |     |
| Febrile Neutropenia                                    | 1          | 8.3   | 1         | 8.3   | Nausea  | 5          | 41.7 | 0         | 0.0 |
| <b>Infections and infestations</b>                     |            |       |           |       | Vomiting  | 2          | 16.7 | 0         | 0.0 |
| Candida infection                                      | 1          | 8.3   | 1         | 8.3   | Constipation  | 2          | 16.7 | 0         | 0.0 |
| Infection  | 1          | 8.3   | 1         | 8.3   | Diarrhoea   | 2          | 16.7 | 0         | 0.0 |
| Pneumonia <sup>3</sup>                                 | 1          | 8.3   | 1         | 8.3   | <b>Investigations</b>                                       |            |      |           |     |
| Urinary tract infection                                | 1          | 8.3   | 1         | 8.3   | Alanine aminotransferase increased                          | 2          | 16.7 | 0         | 0.0 |
| <b>Respiratory, thoracic and mediastinal disorders</b> |            |       |           |       | International normalised ratio increased                    | 2          | 16.7 | 0         | 0.0 |
| Hypoxia  | 2          | 16.7  | 0         | 0.0   | Aspartate aminotransferase increased                        | 2          | 16.7 | 0         | 0.0 |
| Dyspnoea <sup>3</sup>                                  | 1          | 8.3   | 1         | 8.3   | Blood alkaline phosphatase increased                        | 1          | 8.3  | 1         | 8.3 |
| <b>Metabolism and nutrition disorders</b>              |            |       |           |       | <b>Other</b>  |            |      |           |     |
| Hypocalcaemia  | 3          | 25.0  | 0         | 0.0   | Rash  | 3          | 25   | 0         | 0.0 |
| Decreased appetite                                     | 2          | 16.7  | 1         | 8.3   | Insomnia  | 2          | 16.7 | 0         | 0.0 |
|  |            |       |           |       | Muscular weakness   | 1          | 8.3  | 1         | 8.3 |
|  |            |       |           |       | Tumour pain   | 1          | 8.3  | 1         | 8.3 |

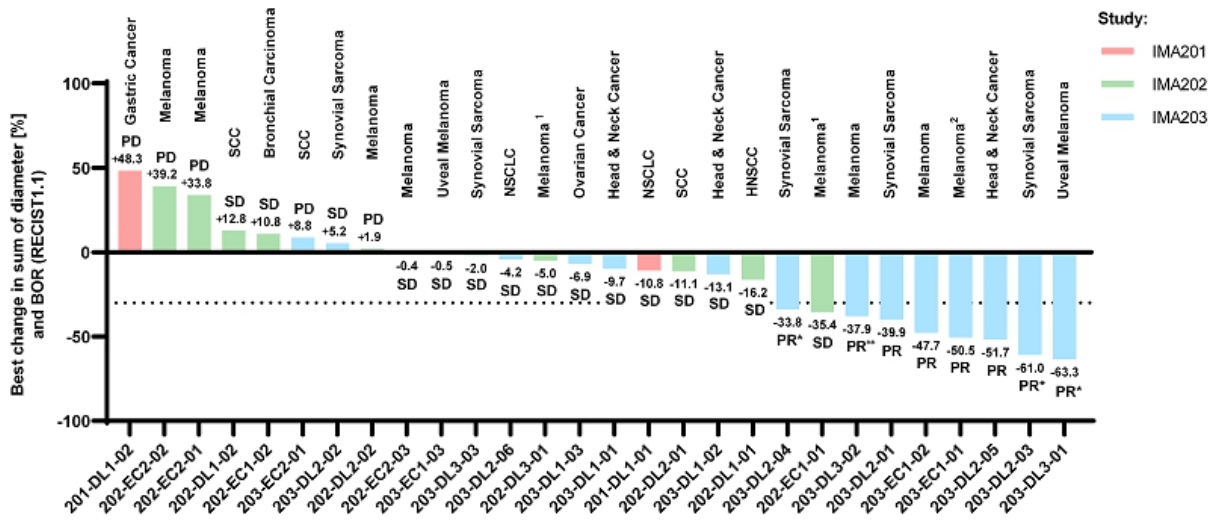
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No ≥ Grade 3 CRS  
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Most Adverse  
Events were  
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lymphodepletion

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

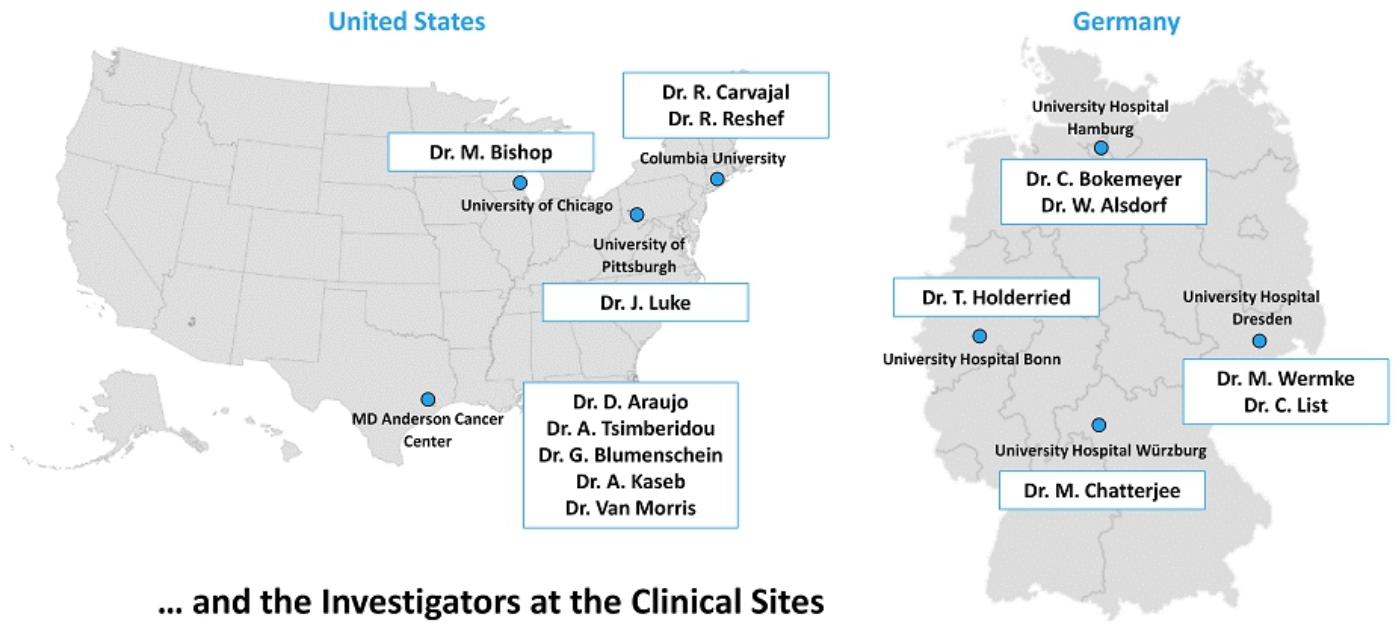
# ACTengine® IMA201, IMA202, IMA203 – Change in Target Lesions

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



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

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



... and the Investigators at the Clinical Sites



## Summary



## IMA201, IMA202, IMA203

Interim Data from ongoing Dose Escalation

**82%** Disease Control Rate

**0** Grade  $\geq 3$  CRS or ICANS<sup>1</sup>

**<1bn** T cells infused in almost all patients

## IMA203 - PRAME

Objective responses observed across multiple tumor types

**50%** ORR<sup>2</sup> across all doses and multiple solid cancers (8/16 patients)

**62%** ORR<sup>2</sup> at DL2\* & DL3 (8/13 patients) – all still dosed below 1 bn cells

## PRAME STRATEGY

Maximizing the therapeutic potential of targeting PRAME

**TCR-T** Multiple Ph1b cohorts

- Monotherapy at RP2D
- Checkpoint Inhibitor Combo
- 2<sup>nd</sup> gen IMA203CD8

**TCER<sup>®</sup>** Focused development of half-life-extended Bispecific (TCER<sup>®</sup> IMA402)

<sup>1</sup> CRS: cytokine release syndrome, ICANS: Immune effector cell-associated neurotoxicity syndrome, both graded by CARTOX criteria (Neelapu et al., 2018);

<sup>2</sup> Objective response rate according to RECIST 1.1 including confirmed and unconfirmed partial responses; \* Includes patients treated at enrichment cohorts EC1 and EC2

# Updated Immatics Pipeline



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

<sup>1</sup> Phase 1a: Dose escalation, Phase 1b: Dose expansion



[www.immatics.com](http://www.immatics.com)





# Unlocking Immunotherapies for Solid Cancer Patients

Immatics Corporate Presentation, November 2021

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# Unlocking Immunotherapies for Solid Cancer Patients



**Building a leading TCR Therapeutics Company with a Pipeline in Cell Therapies and Bispecifics**



**Highly Differentiated Technologies to Identify True Cancer Targets and the Right TCRs**

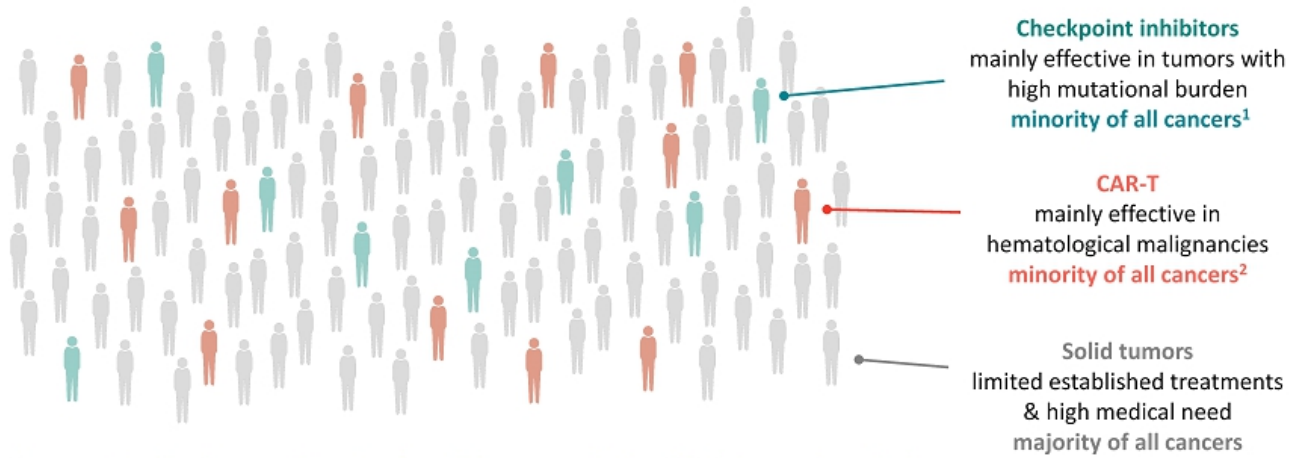


**Strategic Collaborations with World-leading Industry Players**

# Limitations of Current Immunotherapies in Solid Cancer Patients

## ... Driven by a Lack of Known Cancer-specific Targets

Most cancer patients do not benefit from current immuno-oncology approaches



We are unlocking immunotherapies for solid cancer patients with high unmet medical need by accessing intracellular cancer targets with TCR-based therapeutics

| Modality                                 | Product Candidate                     | Status               | Preclinical | Phase 1a <sup>1</sup> | Phase 1b <sup>1</sup> | Phase 2/3 |
|--|---------------------------------------|----------------------|-------------|-----------------------|-----------------------|-----------|
| <b>ACTengine®<br/>Autologous<br/>ACT</b> | IMA201 (MAGEA4/8)                     | Proprietary          |             |                       |                       |           |
|  | IMA202 (MAGEA1)                       | Proprietary          |             |                       |                       |           |
|  | IMA203 (PRAME)                        | Proprietary          |             |                       |                       |           |
|  | IMA203 (PRAME) + Checkpoint Inhibitor | Proprietary          |             |                       |                       |           |
|  | IMA203CD8 (PRAME)                     | Proprietary          |             |                       |                       |           |
|  | IMA204 (COL6A3)                       | Proprietary          |             |                       |                       |           |
| <b>Autologous<br/>ACT</b>                | 3 ACT programs (Undisclosed)          | Bristol Myers Squibb |             |                       |                       |           |
|  | 2 ACT programs (Undisclosed)          |                      |             |                       |                       |           |
| <b>Allogeneic<br/>ACT</b>                | ACTallo® IMA30x (Undisclosed)         | Proprietary          |             |                       |                       |           |
| <b>TCER®<br/>Bispecifics</b>             | IMA401 (MAGEA4/8)                     | Proprietary          |             |                       |                       |           |
|  | IMA402 (PRAME)                        | Proprietary          |             |                       |                       |           |
|  | IMA40x (Undisclosed)                  | Proprietary          |             |                       |                       |           |
| <b>Bispecifics</b>                       | 3 Bispecific programs (Undisclosed)   | Genmab               |             |                       |                       |           |

<sup>1</sup> Phase 1a: Dose escalation, Phase 1b: Dose expansion



|   | IMA201 / IMA401              | IMA202                       | IMA203 / IMA402                   | IMA204                       |
|---|------------------------------|------------------------------|-----------------------------------|------------------------------|
|   | MAGEA4/8                     | MAGEA1                       | PRAME                             | COL6A3 exon 6                |
| <b>Selected solid cancer indications with significant target prevalence<sup>1</sup></b> | Sarcoma Subtypes – up to 80% | HCC– 40%                     | Uterine Carcinoma – 100%          | Pancreatic Carcinoma – 80%   |
|   | Squamous NSCLC – 50%         | Squamous NSCLC – 35%         | Sarcoma Subtypes – up to 100%     | Breast Carcinoma – 75%       |
|   | HNSCC – 35%                  | Sarcoma Subtypes – up to 30% | Melanoma – 95%                    | Stomach Carcinoma – 65%      |
|   | Bladder Carcinoma – 30%      | Melanoma – 30%               | Uveal Melanoma – 80% <sup>2</sup> | Sarcoma – 65%                |
|   | Esophageal Carcinoma – 25%   | Bladder Carcinoma – 20%      | Ovarian Carcinoma – 80%           | Esophageal Carcinoma – 60%   |
|   | Uterine Carcinosarcoma – 25% | Esophageal Carcinoma – 20%   | Squamous NSCLC – 65%              | Squamous NSCLC– 55%          |
|   | Ovarian Carcinoma – 20%      |                              | Kidney Carcinoma – up to 45%      | Adeno NSCLC– 55%             |
|   | Melanoma – 20%               |                              | Cholangiocarcinoma – 35%          | HNSCC – 55%                  |
|   |                              |                              | Adeno NSCLC – 25%                 | Uterine Carcinosarcoma – 55% |
|   |                              |                              | Breast Carcinoma– 25%             | Colorectal Carcinoma – 45%   |
|   |                              |                              | HNSCC – 25%                       | Mesothelioma – 45%           |
|   |                              |                              | Esophageal Carcinoma – 20%        | Cholangiocarcinoma – 40%     |
|   |                              |                              | HCC– 20%                          | Ovarian Carcinoma – 40%      |
|   |                              |                              | Bladder Carcinoma – 20%           | Melanoma – 35%               |
|   |                              |                              |                                   | Bladder Carcinoma – 35%      |

## IMA200 & IMA400 programs demonstrate relevant expression in multiple solid cancers

<sup>1</sup> Solid cancer indications with 20% or more target expression, Target prevalence for selected cancer indications based on mRNA expression (TCGA and Immatics inhouse data);

<sup>2</sup> Based on metastatic uveal melanoma patients screened in IMA203 study (N=12)

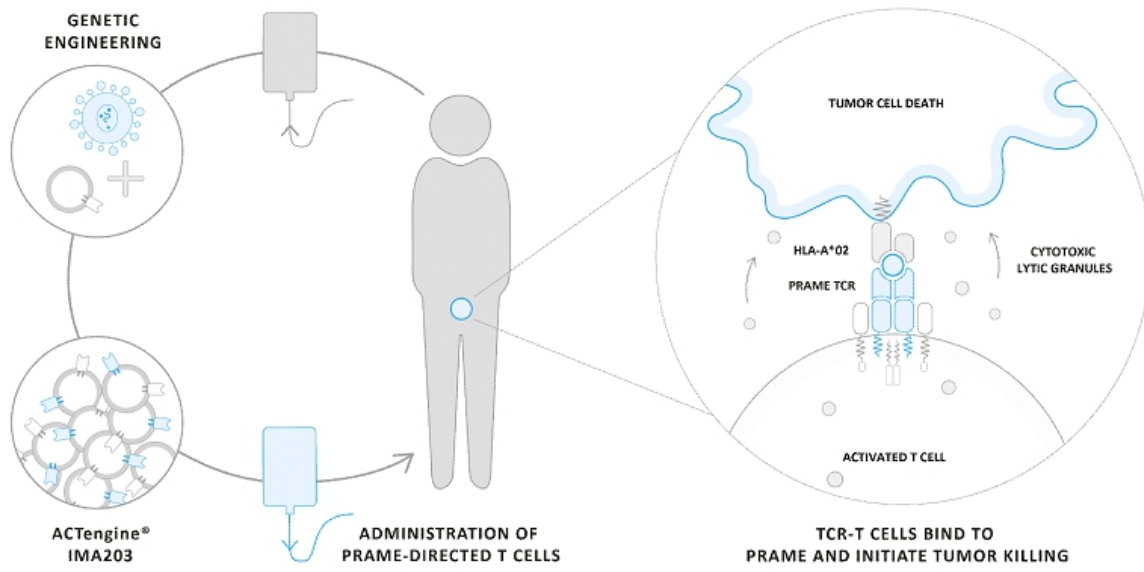
|                              | IMA201   | IMA202                   | IMA203                           | IMA204  |
|------------------------------|--|--------------------------|----------------------------------|---|
| <b>Cancer Target Peptide</b> | HLA-A*02-presented peptide derived from  |       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



## ACTengine® IMA203 – TCR-T to PRAME

# ACTengine® IMA203 to PRAME – Mechanism of Action

## Immatics' Leading TCR-T Approach

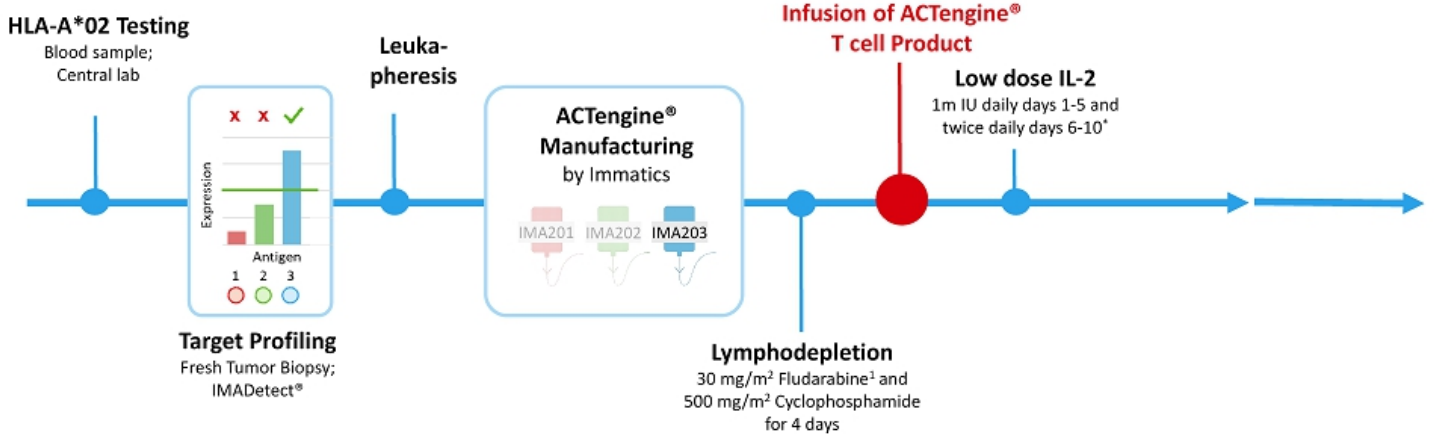


Screening & Manufacturing Phase

Treatment & Observation Phase

Long Term Follow-up

Safety and efficacy monitoring for 12 months

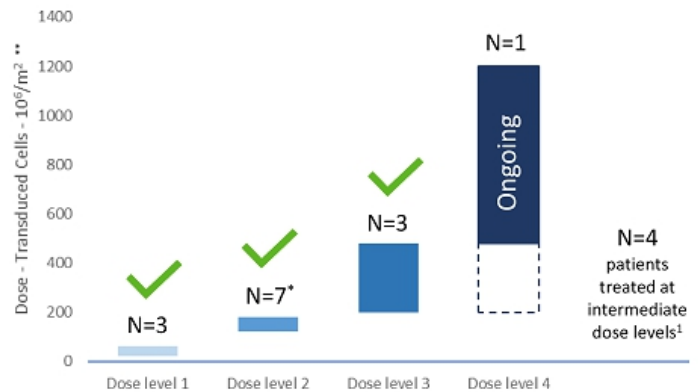


<sup>4</sup> IL-2 dose reduction from twice daily to daily for the first 5 days and dosing duration from 14 to 10 days introduced prior to treatment of first patients on dose level 3;  
<sup>1</sup> Dose reduction of Fludarabine (from 40mg/m<sup>2</sup> to 30mg/m<sup>2</sup>) was introduced prior to treatment of the first patient on dose level 3

## Key Study Objectives

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

## Trial Design & Recruitment Status



**18 patients<sup>1</sup> infused with PRAME-directed T cells at 5 clinical sites – Highest Dose Level 4 has commenced**

Data cut-off – 05-Oct-2021

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

TEAEs by maximum severity (N=19)<sup>1</sup>

| Adverse event   | All grades |      | ≥ Grade 3      |      | Adverse event             | All grades |   | ≥ Grade 3 |   |
|---|------------|------|----------------|------|---------------------------|------------|---|-----------|---|
|   | No.        | %    | No.            | %    |                           | No.        | % | No.       | % |
| <b>Patients with any adverse event</b>                      |            |      |                |      | <b>table continued...</b> |            |   |           |   |
| <b>Adverse Events of Special Interest</b>                   |            |      |                |      |                           |            |   |           |   |
| Cytokine release syndrome                                   | 17         | 89.5 | 0              | 0.0  |                           |            |   |           |   |
| ICANS <sup>2</sup>  | 4          | 21.1 | 0              | 0.0  |                           |            |   |           |   |
| <b>Blood and lymphatic system disorders</b>                 |            |      |                |      |                           |            |   |           |   |
| Neutropenia*  | 16         | 84.2 | 15             | 78.9 |                           |            |   |           |   |
| Anaemia   | 16         | 84.2 | 9              | 47.4 |                           |            |   |           |   |
| Thrombocytopenia  | 15         | 78.9 | 7              | 36.8 |                           |            |   |           |   |
| Lymphopenia*  | 14         | 73.7 | 14             | 73.7 |                           |            |   |           |   |
| Leukopenia*   | 12         | 63.2 | 11             | 57.9 |                           |            |   |           |   |
| Cytopenia   | 1          | 5.3  | 1              | 5.3  |                           |            |   |           |   |
| <b>Infections and infestations</b>                          |            |      |                |      |                           |            |   |           |   |
| Enterococcal infection                                      | 1          | 5.3  | 1              | 5.3  |                           |            |   |           |   |
| COVID-19  | 1          | 5.3  | 1              | 5.3  |                           |            |   |           |   |
| Appendicitis  | 1          | 5.3  | 1              | 5.3  |                           |            |   |           |   |
| Sepsis <sup>3</sup>   | 1          | 5.3  | 1              | 5.3  |                           |            |   |           |   |
| <b>Respiratory, thoracic and mediastinal disorders</b>      |            |      |                |      |                           |            |   |           |   |
| Hypoxia   | 2          | 10.5 | 1              | 5.3  |                           |            |   |           |   |
| Pleural effusion  | 2          | 10.5 | 1              | 5.3  |                           |            |   |           |   |
| Bronchial obstruction                                       | 1          | 5.3  | 1              | 5.3  |                           |            |   |           |   |
| <b>Metabolism and nutrition disorders</b>                   |            |      |                |      |                           |            |   |           |   |
| Hyponatraemia   | 7          | 36.8 | 1              | 5.3  |                           |            |   |           |   |
| Hypokalaemia  | 5          | 26.3 | 1              | 5.3  |                           |            |   |           |   |
| Decreased appetite  | 3          | 15.8 | 0              | 0.0  |                           |            |   |           |   |
| <b>Cardiac or vascular disorders</b>                        |            |      |                |      |                           |            |   |           |   |
| Hypertension  | 3          | 15.8 | 2              | 10.5 |                           |            |   |           |   |
| Atrial fibrillation   | 2          | 10.5 | 1 <sup>4</sup> | 5.3  |                           |            |   |           |   |
| <b>General disorders and administration site conditions</b> |            |      |                |      |                           |            |   |           |   |
| Fatigue   | 7          | 36.8 | 1              | 5.3  |                           |            |   |           |   |
| Pyrexia   | 5          | 26.3 | 0              | 0.0  |                           |            |   |           |   |
| Oedema peripheral   | 3          | 15.8 | 0              | 0.0  |                           |            |   |           |   |
| <b>Gastrointestinal disorders</b>                           |            |      |                |      |                           |            |   |           |   |
| Nausea  | 12         | 63.2 | 0              | 0.0  |                           |            |   |           |   |
| Vomiting  | 7          | 36.8 | 0              | 0.0  |                           |            |   |           |   |
| Diarrhoea   | 7          | 36.8 | 0              | 0.0  |                           |            |   |           |   |
| Constipation  | 6          | 31.6 | 0              | 0.0  |                           |            |   |           |   |
| <b>Investigations</b>                                       |            |      |                |      |                           |            |   |           |   |
| Aspartate aminotransferase increased                        | 5          | 26.3 | 0              | 0.0  |                           |            |   |           |   |
| Alanine aminotransferase increased                          | 4          | 21.1 | 0              | 0.0  |                           |            |   |           |   |
| Blood creatinine increased                                  | 4          | 21.1 | 0              | 0.0  |                           |            |   |           |   |
| <b>Other</b>  |            |      |                |      |                           |            |   |           |   |
| Rash  | 5          | 26.3 | 0              | 0.0  |                           |            |   |           |   |
| Myalgia   | 4          | 21.1 | 0              | 0.0  |                           |            |   |           |   |
| Arthralgia  | 3          | 15.8 | 0              | 0.0  |                           |            |   |           |   |
| Alopecia  | 3          | 15.8 | 0              | 0.0  |                           |            |   |           |   |
| Rash maculo-papular   | 2          | 10.5 | 1              | 5.3  |                           |            |   |           |   |
| Orchitis  | 1          | 5.3  | 1              | 5.3  |                           |            |   |           |   |
| Contrast media allergy                                      | 1          | 5.3  | 1              | 5.3  |                           |            |   |           |   |

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

Most Adverse Events were associated with lymphodepletion

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

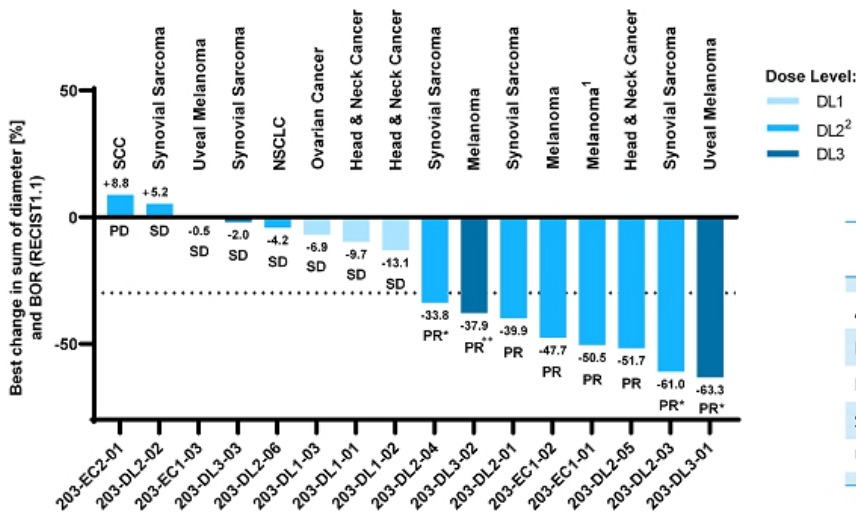
<sup>1</sup> All treatment-emergent adverse events (TEAEs) with grade 1-2 occurring in at least 3 patients (incidence ≥15.8%) and additionally all events with grade 3-5 regardless of relatedness to study treatment are presented. Data source: clinical database. Adverse events were coded using the Medical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

# ACTengine® IMA203 – Change in Target Lesions



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

Best Overall Response (RECIST1.1)



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

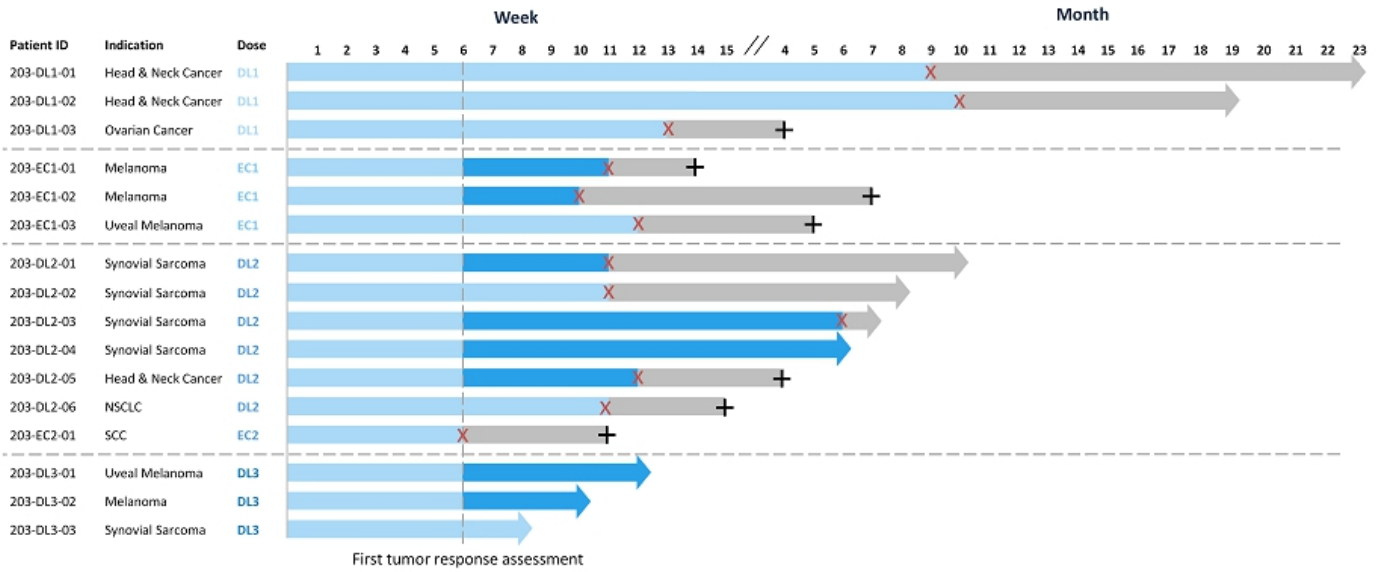
|                    | All doses         | Dosed above DL1   |
|--------------------|-------------------|-------------------|
| <b>All comers</b>  | <b>8/16 (50%)</b> | <b>8/13 (62%)</b> |
| Melanoma           | 3/3 (100%)        | 3/3 (100%)        |
| Head & Neck Cancer | 1/3 (33%)         | 1/1 (100%)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

Data cut-off – 05-Oct-2021



# ACTengine® IMA203 – Response Over Time

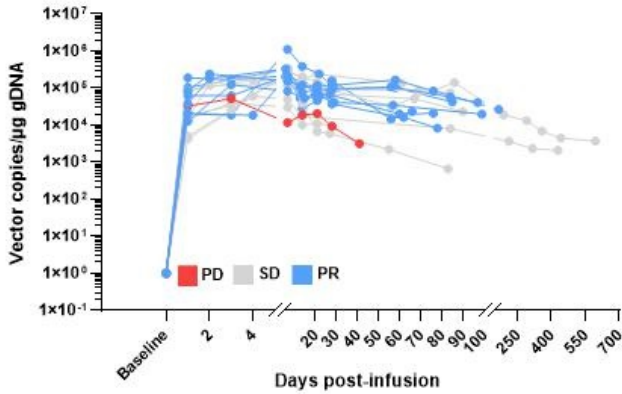
## Objective Responses across Multiple Tumor Types at Doses below 1 billion Transduced Cells



■ SD    ■ PR    X PD    + Deceased    → Alive (time from infusion to data cut-off or death)    → PR ongoing at data cut-off  
 According to RECIST1.1

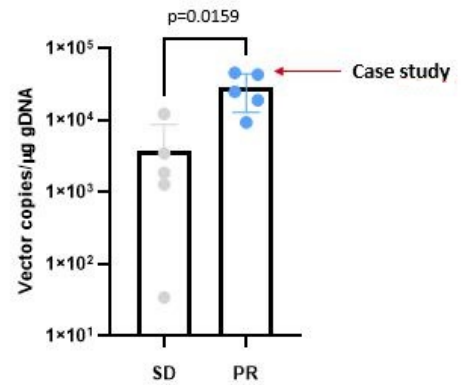
Data cut-off – 05-Oct-2021

**T cell Engraftment & Persistence**



High T cell engraftment and persistence with trend for association of peak vector copies with clinical response<sup>1</sup>

**Tumor Infiltration post Infusion<sup>2</sup>**

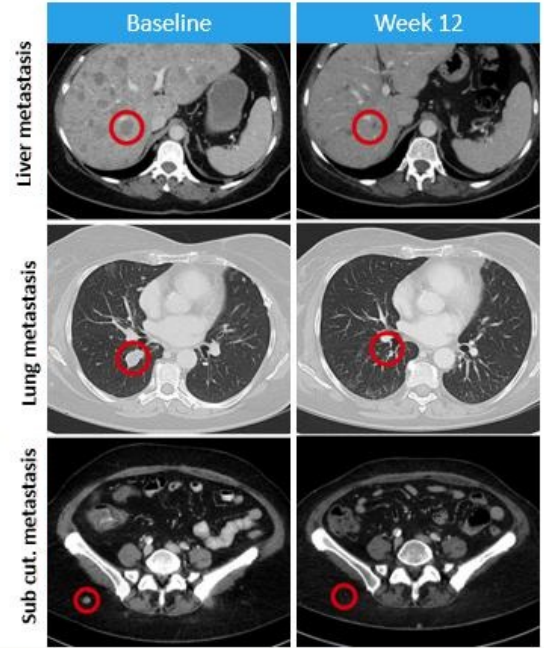
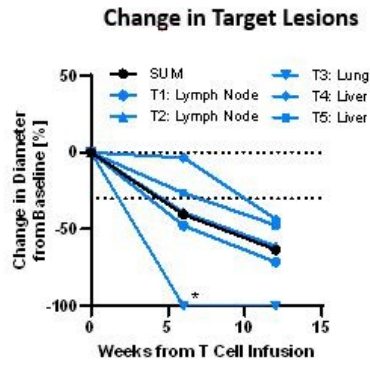
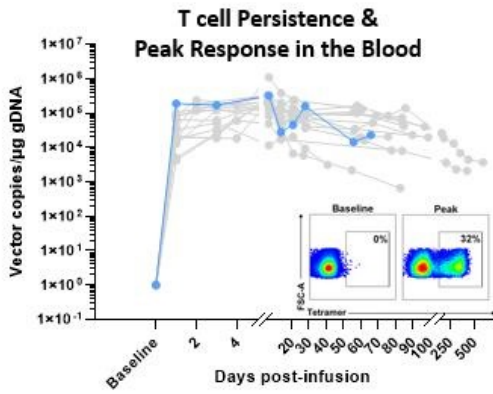


High T cell infiltration observed through serial biopsies associated with clinical response<sup>3</sup>

Data cut-off – 05-Oct-2021

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

## Confirmed Partial Response with Deepening Tumor Regression in Multiple Lesions



- 62-year-old female; metastatic uveal melanoma
- High tumor burden in multiple organs
- Infused at refractory disease after failing 4 prior lines of therapy including 2 lines of CPI<sup>1</sup>
- Patient received total dose of 0.59 billion transduced T cells following lymphodepletion

- T cell persistence until end of observation & detection in the tumor
- All lesions decreased at week 6 - 40% decrease in target lesions response deepened at week 12 to 63% decrease
- Best Response (RECIST1.1): PR (confirmed & ongoing)

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

**SAFETY**

- 3** Dose levels completed, all below 1 bn cells
- 0** Additional DLTs<sup>1</sup>
- 0** Grade ≥3 CRS or ICANS<sup>2</sup>
- 4<sup>th</sup>** Dose level (target dose) commenced, first DL >1 bn cells

**CLINICAL ACTIVITY**

- 50%** ORR<sup>3</sup> across all doses and multiple solid cancers (8/16 patients)
- 62%** ORR<sup>3</sup> at DL2\* & DL3 (8/13 patients) – all still dosed below 1 bn cells

**BIOLOGICAL ACTIVITY**

- Blood** High T cell engraftment and persistence
- Tumor** High T cell infiltration associated with clinical response

Data cut-off – 05-Oct-2021



## Comprehensive Strategy to Target PRAME

# Immatics' Proprietary PRAME Peptide-HLA/TCR Pair

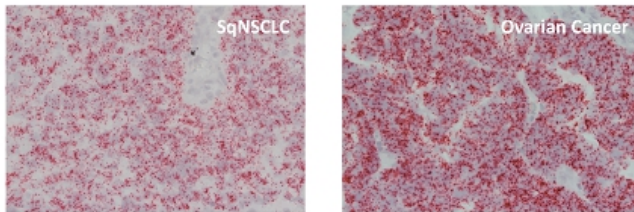
## Broadly Expressed Target on Multiple Solid Cancers Combined with Highly Specific TCR

### Peptide Target PRAME:

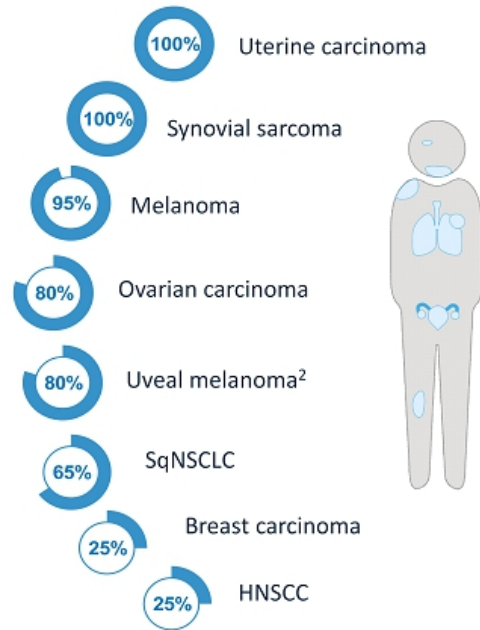
- HLA-A\*02-restricted peptide identified by XPRESIDENT® quant. mass spec
- Naturally and specifically presented at high levels (100-1000 copies/cell)
- Homogenously expressed at high prevalence across multiple solid tumors<sup>1</sup>

### PRAME T cell Receptor (TCR):

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

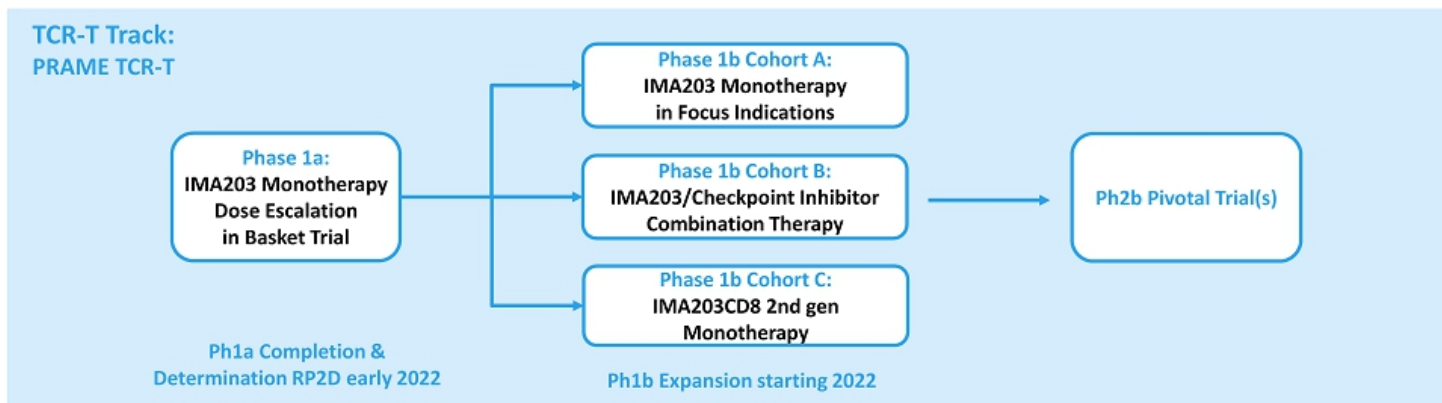


PRAME RNA expression in native tumor samples (ISH analysis)



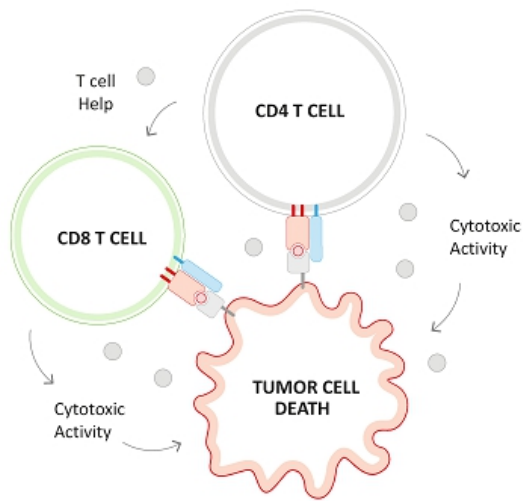
# Comprehensive Strategy to Target PRAME


## Maximizing PRAME Mediated Clinical Benefit Through ACT and TCR Bispecifics



# ACTengine® IMA203CD8 – Second-generation TCR-T

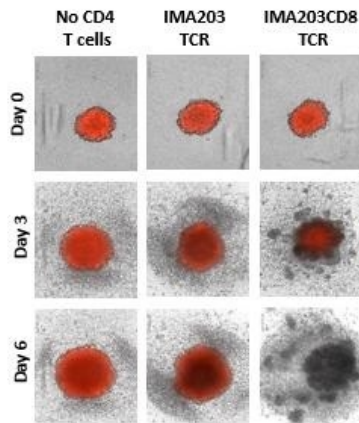
Building on First-Gen IMA203 Success to Further Improve Anti-Tumor Activity



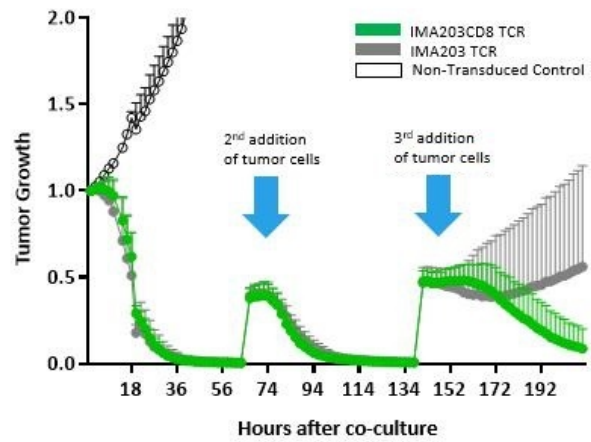
- Engagement of CD4 T cells by CD8 co-transduction reported to boost anti-tumor activity in TCR-T trials
- Functional superiority of a **CD8 $\alpha\beta$  IMA203** construct (IMA203CD8) over multiple other CD8 constructs in preclinical experiments
  - Poster presentation at SITC, Nov 12, 2021 
- Secured access to CD8 $\alpha\beta$  technology through exclusive license from Baylor College of Medicine
- IND filing for IMA203CD8 lead candidate targeted in 1H2022



3D Spheroid Killing – CD4 T cells



Serial Killing Assay – CD8 & CD4 T cells



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

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

### PRAME TCR-T (IMA203 Ph1a)

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

### PRAME TCR-T (IMA203 Ph1b)

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

### PRAME BISPECIFIC (IMA402)

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



## ACTengine® IMA200 TCR-T Programs Update

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

ACT <sup>1</sup> One DLT in DL2 previously reported in March 2021, fully resolved

## IMA201, IMA202, IMA203

Interim Data from ongoing Dose Escalation

**82%** Disease Control Rate

**0** Grade  $\geq 3$  CRS or ICANS<sup>1</sup>

**<1bn** T cells infused in almost all patients

## IMA203 - PRAME

Objective responses observed across multiple tumor types

**50%** ORR<sup>2</sup> across all doses and multiple solid cancers (8/16 patients)

**62%** ORR<sup>2</sup> at DL2\* & DL3 (8/13 patients) – all still dosed below 1 bn cells

## PRAME STRATEGY

Maximizing the therapeutic potential of targeting PRAME

**TCR-T** Multiple Ph1b cohorts

- Monotherapy at RP2D
- Checkpoint Inhibitor Combo
- 2<sup>nd</sup> gen IMA203CD8

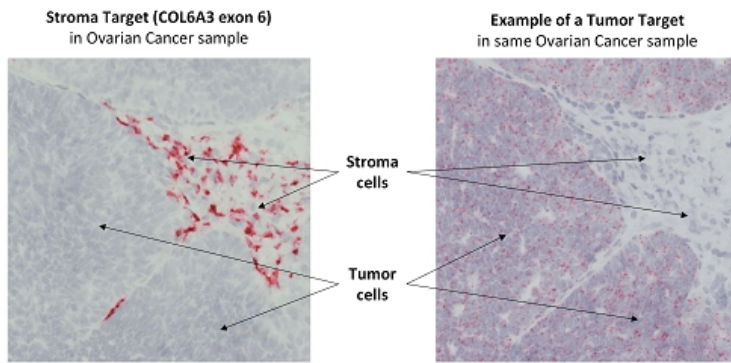
**TCER**<sup>®</sup> Focused development of half-life-extended Bispecific (TCER<sup>®</sup> IMA402)

<sup>1</sup> CRS: cytokine release syndrome, ICANS: Immune effector cell-associated neurotoxicity syndrome, both graded by CARTOX criteria (Neelapu et al., 2018);

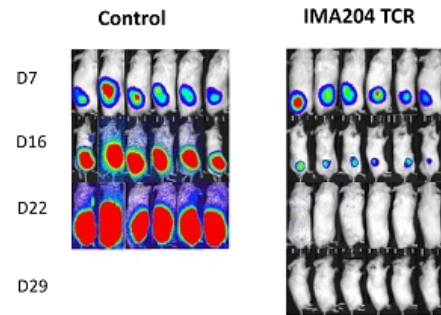
<sup>2</sup> Objective response rate according to RECIST 1.1 including confirmed and unconfirmed partial responses; \* Includes patients treated at enrichment cohorts EC1 and EC2

# ACTengine® IMA204 – A Novel TCR-T Program Targeting Tumor Stroma

## Complete Tumor Eradication *in vitro* & *in vivo*<sup>1</sup> by Affinity-enhanced IMA204 TCR



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

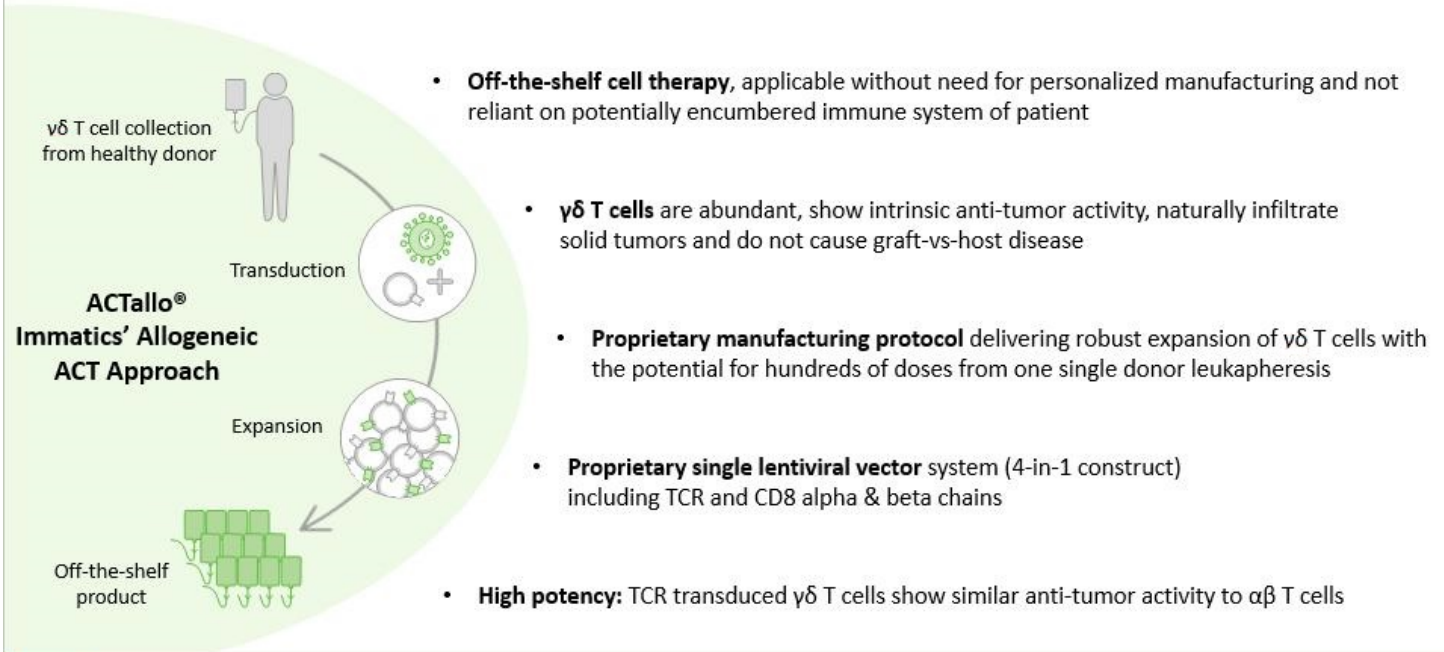


CD8-independent TCR leads to tumor eradication in all mice treated

- **CD8-independent, next-generation TCR activates CD8 and CD4 T cells**
- **Final preclinical safety evaluation ongoing**

# Outlook: ACTallo<sup>®</sup> IMA301 – Immatics' Allogeneic Cell Therapy Approach

## Effective Redirection of $\gamma\delta$ T cells Using $\alpha\beta$ TCR





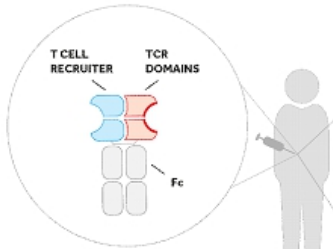
## TCER<sup>®</sup> – TCR Bispecifics



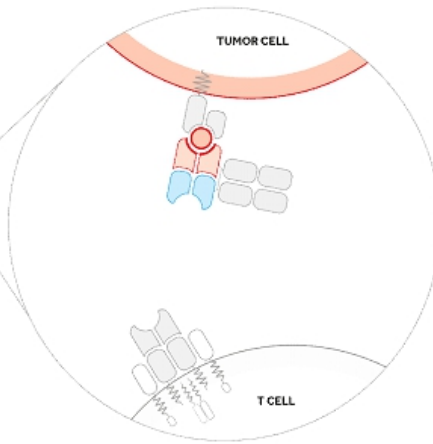
# TCER® – Mechanism of Action

## Immatics' Off-the-Shelf TCR Bispecifics Approach

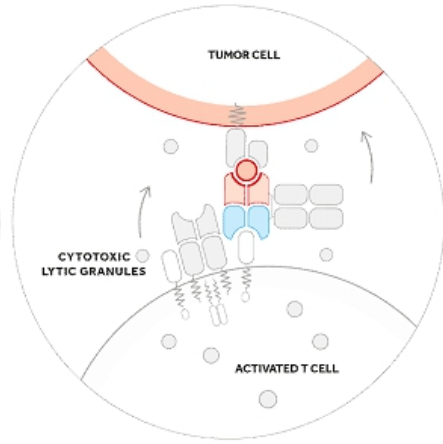
ADMINISTRATION OF TCER® (BIOLOGIC)



TCER® BINDS TO TUMOR CELL TARGET



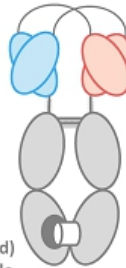
TCER® RECRUITS AND ACTIVATES T CELLS AND INITIATES TUMOR KILLING



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

**T cell recruiting antibody**

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



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

**pHLA targeting TCR**

- ✓ **High-affinity TCR** with broad therapeutic window through **XPRESIDENT®-guided** affinity maturation (>1000x)<sup>2</sup>
- ✓ Targets HLA-A\*02-restricted MAGEA4/8 (IMA401) or PRAME (IMA402) peptide with **high target density**
- ✓ **Complete tumor eradication** in mouse xenograft models at low doses

**Next-generation TCER® format**

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

|   | IMA401  | IMA402   | IMA40X  |
|---|---|--|---|
|   | MAGEA4/8  | PRAME  | Undisclosed                                       |
| <b>Status</b>   | CTA filing in Germany targeted Q4 2021<br>Phase 1 trial in 2022   | Clinical GMP batch targeted in 2022<br>Phase 1 trial in 2023 | TCER® engineering and preclinical testing ongoing |
| <b>Preclinical Proof-of-concept – Efficacy / Safety</b> | <ul style="list-style-type: none"> <li>➤ Complete remission of established tumors in xenograft mouse models at low doses</li> <li>➤ Very broad therapeutic window (reactivity tumor compared to normal cells)</li> </ul>  |  | n/a   |
| <b>Half-life</b>  | Half-life extended to several days via effector function silenced Fc part   |  |   |
| <b>Clinical Development Strategy</b>                    | <ul style="list-style-type: none"> <li>➤ First in human basket trial</li> <li>➤ Adaptive design aiming at fast dose escalation</li> <li>➤ Development strategy includes TCER® as add on to checkpoint inhibitor-based standard of care in early lines of treatment</li> </ul> |  |   |

# TCER® IMA401 Targeting MAGEA4/8

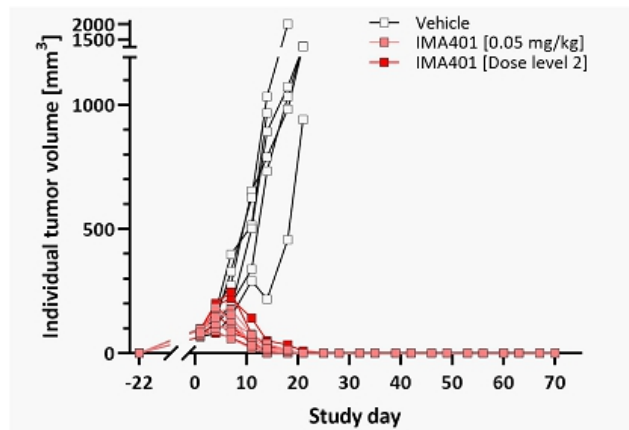
## Highly Potent Biologic Leading to Tumor Eradication at Low Concentrations

### Treatment schedule



N=6 mice per group, two PBMC donors  
Dose: two dose levels

### Tumor Model in Mice<sup>1</sup>

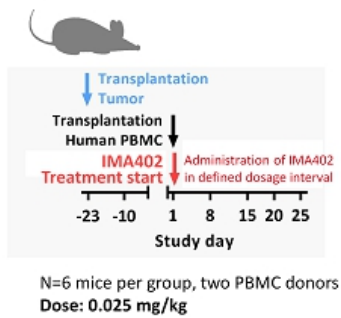


- **Complete remissions observed in all animals** even at low IMA401 dose of 0.05 mg/kg
- No detectable outgrowth of tumors during **prolonged observation period of 70 days**

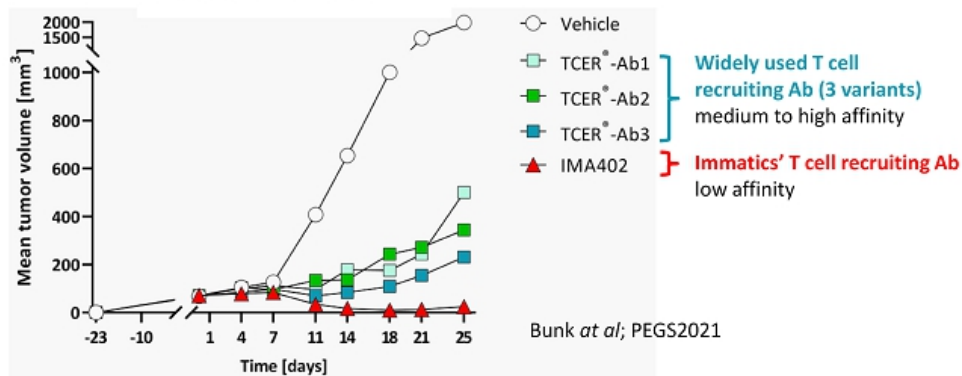
# TCER® IMA402 Targeting PRAME

## Superior Anti-Tumor Activity of IMA402 Low-Affinity Recruiter at Low Doses

### Treatment schedule



### Tumor Model in Mice<sup>1</sup>



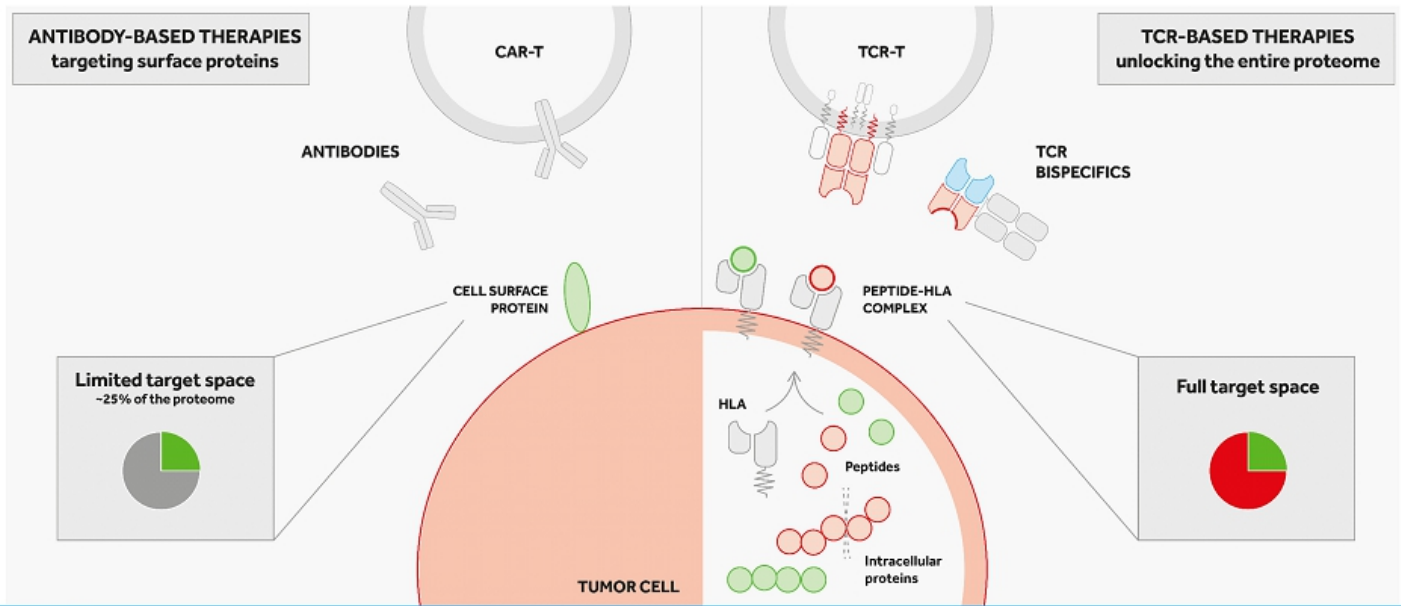
Proprietary, low-affinity T cell recruiting antibody demonstrates superior tumor control than analogous TCER® molecules designed with higher-affinity variants of a widely used recruiter

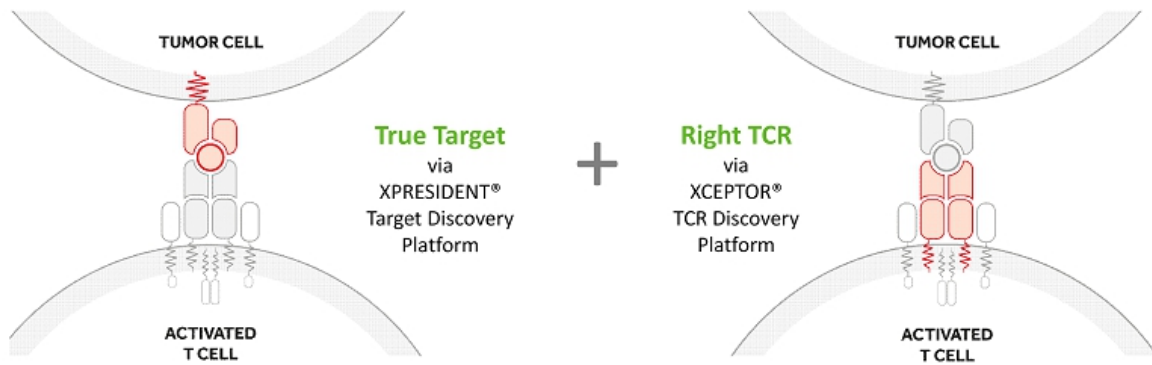


## Immatics' Proprietary Target and TCR Discovery Platforms

# Accessing Intracellular Cancer Targets with TCR-based Therapeutics

## To Unlock Immunotherapies for Solid Cancer Patients





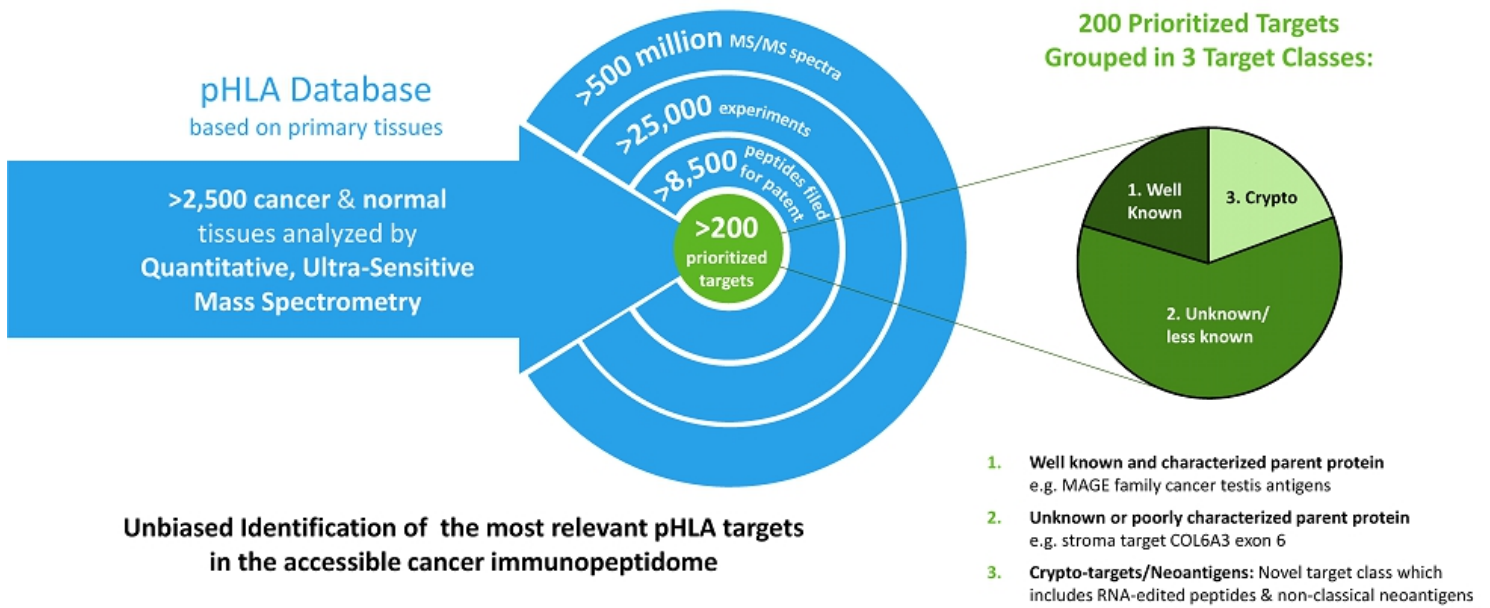
**True Targets** - expressed on cancer but not or to far lower extent on normal tissue  
**Minimizing risk for on-target toxicity**

**Right TCRs** - highly specific and high affinity as outcome of stringent development process  
**Minimizing risk for off-target toxicity** (TCR cross-reactivity)



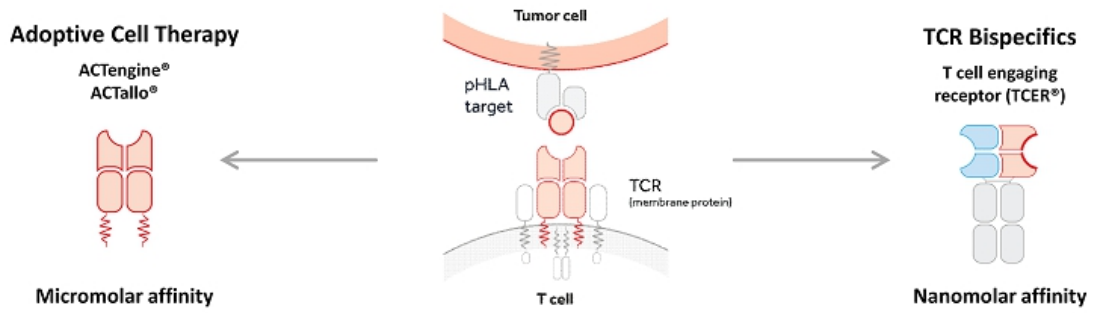
# XPRESIDENT® – Discovery of True Cancer Targets

Pool of 200 Targets as Foundation for our Future Pipeline



# 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 at discovery stage and during TCR maturation by the unique interplay between Immatics' target and TCR discovery platforms XPRESIDENT® and XCEPTOR®

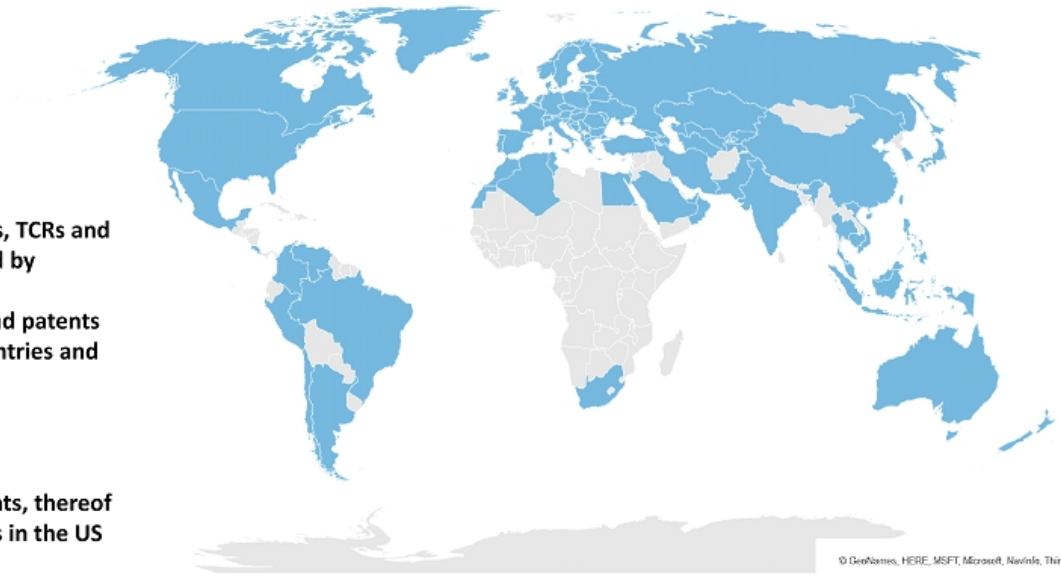


## Corporate Information & Milestones

## Robust IP Portfolio

### Immatic's Patent Estate – Territorial Coverage

- >8,000 cancer targets, TCRs and technology protected by
- 5,500 applications and patents filed in all major countries and regions
- >120 patent families
- >1,550 granted patents, thereof >450 granted patents in the US



# Strong, Focused and Highly Integrated Trans-Atlantic Organization



Senior Leadership, Research and Development (XPRESIDENT®, XCEPTOR®, TCER®), Translational Development, Clinical Operations, Finance, HR, IT, QM



Senior Leadership, Research and Development (Adoptive Cell Therapy), CMC, Clinical Operations, Regulatory Affairs, QA/QC, HR, Investor Relations



Senior Leadership, Business Development, Clinical Operations, Intellectual Property, Regulatory Affairs, Communications

## 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  
(Probiodrug, NovImmune, Medigene, InflaRx)



**Cedrik Britten**  
Chief Medical Officer  
>10 yrs pharma & biotech experience  
(BioNTech, GSK)



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



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



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



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



**Edward Sturchio**  
General Counsel  
>15 yrs pharma & biotech experience  
(Schering, Merck, Novartis, Advanced Accelerator Applications, Abeona Therapeutics)



**Jordan Silverstein**  
Head of Strategy  
>10 yrs biotech experience  
(Advanced Accelerator Applications, InflaRx)

# Upcoming R&D Milestones

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

## Immatics Key Take-Aways

### Broadly Positioned in the TCR Therapeutics Space with ACT & TCR Bispecifics

#### **ACTengine® (TCR-T) – High Objective Response Rate during ongoing dose escalation in TCR-T Ph1a trial IMA203 to PRAME**

- IMA203 (PRAME): Objective responses across multiple tumor types at dose levels below 1 billion T cells at early phases of dose escalation
- Multiple upcoming inflection points for 3 ongoing TCR-T trials in 2022
- Next wave of TCR-T entering clinical development in 2022 with IMA203CD8 and IMA204

#### **TCER® – Next-generation Bispecific platform with the lead molecule entering the clinical development in 2022**

- Optimized design for maximizing efficacy while minimizing toxicities
- Next-generation half-life extended TCER® format with off-the-shelf availability & antibody-like manufacturability
- Preclinical proof-of-concept demonstrated for IMA401 (MAGEA4/8) & IMA402 (PRAME), start of IMA401 Ph1 clinical study in 1H2022

#### **Comprehensive strategy to target PRAME and maximize opportunities for clinical benefit via TCR-T and TCR Bispecifics**

#### **Sustainable Fundamentals**

- Differentiated target and TCR discovery platforms providing the basis for future fully owned and partnered programs
- Strong cash position of approx. US\$229m (as of June 30, 2021)





DELIVERING THE POWER  
OF **T CELLS** TO  
CANCER PATIENTS

**Thank you**

[www.immatics.com](http://www.immatics.com)



