PRESS RELEASE

PRAME-directed Cell Therapy Using Immatics' TCR Induces Deep and Durable Remission in Pediatric Patient with Advanced Metastatic Nephroblastoma

- Individual experimental treatment attempt at Hopp Children's Cancer Center Heidelberg (KiTZ) and Heidelberg University Hospital (UKHD) using a TCR T-cell therapy engineered with a PRAME-directed TCR provided by Immatics

- 17-year-old adolescent with bulky, rapidly progressing nephroblastoma and no remaining treatment options achieved deep remission, including marked regression of liver, lung and brain metastases; response ongoing at 6 months of follow-up

- PRAME is a multi-pediatric cancer target, and findings highlight the therapeutic potential of PRAME TCR T-cell therapy in pediatric patients with solid tumors

- Data will be presented in a late-breaking poster at the AACR Annual Meeting 2026 by Dr. med. Christian M. Seitz, Group Leader at KiTZ

Houston, Texas and Tuebingen, Germany, April 17, 2026 – Immatics N.V. (NASDAQ: IMTX, "Immatics" or the "Company"), the global leader in precision targeting of PRAME with multiple clinical-stage programs spanning cell therapies and bispecifics, today announced that an abstract highlighting a pediatric patient treated with a PRAME-directed cell therapy using Immatics' PRAME T-cell receptor (TCR) has been accepted for a late-breaking poster presentation at the American Association for Cancer Research (AACR) Annual Meeting 2026 in San Diego, California, USA. The patient case will be presented on April 21, 2026, at 2:00 pm PDT (Late-Breaking Research: Clinical Research 3; Poster Section 52; Poster Board Number 7; Abstract Number LB326) by the treating physician, Dr. med. Christian M. Seitz, Group Leader at the Hopp Children's Cancer Center Heidelberg (KiTZ).

The abstract highlights the case of a 17-year-old adolescent with PRAME-positive advanced nephroblastoma, a malignant kidney cancer that predominantly occurs in children. The patient had rapidly progressing disease with metastases to the lung, liver and brain with an abdominal lesion measuring 16 cm in longest diameter. After exhausting all available treatment options and being ineligible for any ongoing clinical trial, the treating physician requested Immatics' PRAME-directed TCR (encoded by the IMA203CD8 lentiviral vector) for an individual experimental treatment attempt (named-patient use; "Individueller Heilversuch" in Germany) at KiTZ, where a TCR T-cell therapy was manufactured. Following treatment, the patient experienced a deep anti-tumor response, with remission observed three months post-infusion and ongoing at six months of follow-up. PET scan and MRI imaging demonstrated marked tumor regression across all lesion sites. Additionally, liquid biopsy monitoring showed no more tumor-derived DNA, indicating molecular remission. Safety events reported in the abstract by the treating physician included cytokine release syndrome, which was manageable and resolved under multi-modal anti-cytokine therapy and corticosteroids. At six months of follow-up, the patient is in excellent physical condition.

"We are very grateful to Immatics for providing the PRAME-directed TCR that enabled us to reprogram the pediatric patient's cells. We hope that possible further clinical evaluation may demonstrate the potential of PRAME-targeted cellular immunotherapies in helping other children and adolescents with cancer, as seen in this patient," said Christian M. Seitz, M.D., treating physician and Group Leader of the Translational Immunotherapy group at KiTZ, German Cancer Research Center (DKFZ) and Heidelberg University Hospital (UKHD).

Cedrik Britten, M.D., Ph.D., Chief Medical Officer at Immatics, added, "Seeing such a profound response in a pediatric patient who had no treatment options left is both remarkable and deeply encouraging for everyone dedicated to making a meaningful impact on the lives of patients with cancer. It reinforces our belief in PRAME as a powerful target and highlights the potential of cell therapy for pediatric cancers, where tumors often show high PRAME expression. These results support continued evaluation of PRAME-directed cell therapies in pediatric cancers while exploring new therapeutic options for children facing such devastating diseases."

PRAME is a tumor target present on the cell surface of more than 50 cancers and can be targeted by TCR T-cell therapies. Based on the high PRAME expression across multiple different pediatric tumors in combination with the potential benefit of particularly strong immune responses in young patients, PRAME TCR T-cell therapies may offer a promising new treatment option for these patients. Immatics is planning to evaluate the potential of its PRAME TCR T-cell therapy candidates in pediatric patients with cancer and is assessing multiple options for clinical development including a potential first-in-pediatrics Phase 1/2 basket study in pediatric patients with HLA-A*02:01-positive, PRAME-expressing relapsed or refractory solid tumors at KiTZ in Heidelberg.

About Immatics' PRAME-Directed Cell Therapies

Immatics is developing PRAME-directed TCR T-cell therapies engineered to recognize an intracellular PRAME-derived peptide presented by HLA-A*02:01 on the surface of tumor cells and to initiate a potent and specific anti-tumor response.

Immatics' PRAME-directed cell therapies are being evaluated in clinical trials across multiple PRAME-positive solid tumors in adult patients. Its lead PRAME cell therapy candidate, anzu-cel (anzutresgene autoleucel, IMA203) is currently being evaluated in a registration-enabling Phase 3 trial "SUPRAME" in previously treated advanced cutaneous melanoma and a Phase 2 trial in metastatic uveal melanoma. In addition, Immatics is evaluating its second-generation PRAME cell therapy, IMA203CD8, in a Phase 1a dose escalation trial in patients with PRAME-positive solid tumors, with a focus on gynecologic cancers.

About PRAME

PRAME is a target expressed in more than 50 cancers. Immatics is the global leader in precision targeting of PRAME and has the broadest PRAME franchise with the most PRAME indications and modalities. The Immatics PRAME franchise currently includes three product candidates, two therapeutic modalities and two combination therapies that target PRAME: anzu-cel (anzutresgene autoleucel, IMA203) PRAME cell therapy, IMA203CD8 PRAME cell therapy (GEN2), IMA402 PRAME bispecific as monotherapy and in combination with an immune

checkpoint inhibitor as well as anzu-cel in combination with Moderna's PRAME mRNA designed to enhance cell therapy.

About Immatics

Immatics is committed to making a meaningful impact on the lives of patients with cancer. We are the global leader in precision targeting of PRAME, a target expressed in more than 50 cancers. Our cutting-edge science and robust clinical pipeline form the broadest PRAME franchise with the most PRAME indications and modalities, spanning TCR T-cell therapies and TCR bispecifics.

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

Forward-Looking Statements

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

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