PRESS RELEASE

Immatics Presents Preclinical Proof-of-Concept Data for TCR Bispecifics Program IMA401 Targeting MAGEA4/8

- Immatics' first TCR Bispecific program IMA401 delivers preclinical proof-of-concept demonstrating complete remissions of transplanted human tumors in mice and favorable CMC characteristics
- The IMA401 target, an HLA-A*02-bound peptide derived both from MAGEA4 and MAGEA8, shows >5-fold higher target peptide levels on cancer cells than a commonly used target peptide derived from MAGEA4
- Immatics continues to anticipate submission of an IND application for IMA401 by the end of 2021

Tuebingen, Germany and Houston, Texas, October 29, 2020 – Immatics N.V. (NASDAQ: IMTX, "Immatics"), a clinical-stage biopharmaceutical company active in the discovery and development of T cell redirecting cancer immunotherapies, today announced a preclinical data update on IMA401, its lead T cell receptor (TCR) Bispecifics Program. IMA401 is the first product candidate from Immatics' TCR Bispecifics pipeline, called TCER™ (T Cell Engaging Receptor), and directed against the cancer target MAGEA4/8. Immatics demonstrated specific targeting and T cell recruitment to target-positive tumors by its proprietary TCR Bispecific molecule, leading to complete remissions of human-derived tumors in xenograft mouse models. The data will be presented at the digital European Antibody Congress 2020 on November 2.

Preclinical data highlights:

- IMA401 TCER™ targets a peptide derived from the melanoma-associated antigen 4 or 8 ("MAGEA4/8"); the target peptide is highly prevalent in several solid tumor types including squamous non-small-cell lung carcinoma (sq NSCLC), head and neck squamous cell carcinoma (HNSCC) bladder, uterine, esophageal and ovarian carcinomas, as well as melanoma, sarcoma subtypes and other solid cancer types
- IMA401 TCER™ can kill tumor cells *in vitro* with MAGEA4/8 peptide levels similar to levels found in cancer patients
- IMA401 TCER™ shows a minimum of 1,000-fold therapeutic window between normal tissue cell reactivity and tumor cell reactivity *in vitro*

- IMA401 TCER™ demonstrates consistent tumor regression including complete responses in two tumor xenograft mouse studies (including patient-derived PDX models) treated once weekly at low doses
- IMA401 TCER™ molecule shows favorable pharmacokinetics with terminal half-life of 10-11 days in mice and positive purity and stability characteristics with high production yields
- IMA401 TCER™ targets an HLA-A*02-bound peptide, which is derived from two different cancer-associated proteins, MAGEA4 and MAGEA8 and shows a >5-fold higher peptide copy number per tumor cell than a commonly used MAGEA4 target peptide based on quantitative mass spectrometry data generated by Immatics´ XPRESIDENT® platform

Carsten Reinhardt, MD, PhD, Chief Development Officer at Immatics, commented: "We continue to be enthusiastic about our first TCR Bispecific candidate and the preclinical proof-of-concept data we have generated. We look forward to advancing this novel treatment modality towards clinical development. This represents a new therapeutic opportunity in addition to our adoptive cell therapy programs for cancer patients at different disease stages and with different types of solid tumors."

For the IMA401 TCER™ program, Immatics is continuing the manufacturing development and the generation of the IND-enabling data package. Immatics expects to submit an Investigational New Drug (IND) application to the US Food and Drug Administration (FDA) or the European Authorities for the IMA401 program by the end of 2021.

The full presentation will be available on Monday, November 2, 3.20pm CET on Immatics' website using this link.

About TCER™

Immatics' TCER™ molecules are antibody-like "off-the-shelf" biologics that leverage the body's immune system by redirecting and activating T cells towards cancer cells expressing a specific tumor target. To do so, the proprietary biologics are engineered to have two binding regions. The first region contains an affinity- and stability-improved TCR that binds specifically to the cancer target on the cell surface presented by a human leukocyte antigen (HLA) molecule. The second region is derived from an antibody domain that recruits endogenous T cells to the tumor to become activated. The design of the TCER™ molecules enables the activation of any T cell in the body to attack the tumor, regardless of the T cells' intrinsic specificity. In addition, the TCER™ molecule has a Fc-part conferring stability, half-life extension and manufacturability.

Notes to Editors

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.

For regular updates about Immatics, visit www.immatics.com. You can also follow us on Twitter and LinkedIn.

Forward-Looking Statements:

Certain statements in this press release may be considered forward-looking statements. Forward-looking statements generally relate to future events or Immatics' future financial or operating performance. For example, statements concerning the timing of product candidates and Immatics' focus on partnerships to advance its strategy 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 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 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. Immatics undertakes no duty to update these forward-looking statements.

For more information, please contact:

For media enquiries

Gretchen Schweitzer or Jacob Verghese, PhD
Trophic Communications
Phone: +49 89 2388 7731
immatics@trophic.eu

Investor Relations Contact

John Graziano
Solebury Trout
Phone: +1 646-378-2942
jgraziano@soleburytrout.com

Immatics N.V.

Anja Heuer
Corporate Communications
Phone: +49 89 540415-606
media@immatics.com

Investor Relations Contact

Jordan Silverstein
Head of Strategy
Phone: +1 281-810-7545
InvestorRelations@immatics.com