

Transgene Presents New Pre-Clinical Data at AACR on (i) the Combination of TG4010 with Immune Checkpoint Inhibitors; (ii) TG3003, an Anti-CD115 Monoclonal Antibody

Strasbourg, France, April 21, 2015 – Transgene SA (Euronext: TNG) today announced that new pre-clinical data for two of its programs – TG4010 and TG3003 – were presented at the Annual Meeting of the American Association for Cancer Research (AACR) in Philadelphia, PA USA.

New pre-clinical data support potential combinations of TG4010 and immune checkpoint inhibitors

Immune checkpoints constitute a pool of inhibitory pathways that are essential for preserving tolerance to self and controlling the extent and breadth of normal immune responses to prevent collateral tissue damage. Tumors can corrupt some of these checkpoint inhibitors to escape immune-surveillance and proliferate. Immune checkpoint inhibitors (ICIs) targeting CTLA4 and PD-1 represent a major advance in treating several forms of cancer. Transgene has conducted pre-clinical experiments to evaluate the combination of MVA (modified vaccinia, Ankara strain) viruses - including its TG4010 MUC1 targeted cancer immunotherapy - with ICIs in different tumor models. The combination of MVA with anti-CTLA4 resulted in prolonged overall survival in a lung metastasis tumor model. More importantly, the combination of TG4010 and anti PD-1 showed an additive effect on the control of tumor growth in a MUC1-positive tumor model. Further studies evaluating combinations with ICIs and Transgene's immunotherapy candidates are ongoing.

Data with TG3003 anti-CD115 monoclonal antibody support biological activity and differentiated mode of action

CD115 is the cell surface receptor for CSF-1 and is an important anti-cancer target. TG3003 is a humanized monoclonal antibody targeting CD115. Data were presented from pre-clinical proof-of-concept experiments with TG3003, supporting its mechanism of action and immune-modulatory properties. Based on its distinct mode of binding to CD115, Transgene's antibody works as a modulator rather than as a blocker of CD115. This differentiates TG3003 from other anti-CD115 antibodies in several important ways. Firstly, TG3003 does not increase the level of serum CSF1 and thus may have a better safety profile than other anti-CD115 monoclonal antibodies currently in development. Secondly, in the data presented, TG3003 was shown to decrease the number of immune-suppressive M2-type tumor-associated macrophages, which are often associated with a poor prognosis in cancer patients. Importantly, TG3003 did not eliminate immune-stimulating M1-type macrophages, thus preserving these immune-stimulatory antigen-presenting cells.

A third poster reviewing the clinical experience with Transgene's MVA platform was also presented.

Copies of these posters can be found on Transgene's website in the "Our Pipeline/Publications" section at http://www.transgene.fr/?page_id=10487#TG1050.

“The new pre-clinical data presented at AACR support our plans to initiate clinical trials evaluating TG4010 in combination with immune checkpoint inhibitors” said Nathalie Adda, MD, Chief Medical Officer. “To explore the full potential of TG4010 to treat non-small cell lung cancer, we plan to develop TG4010 not only in combination with traditional chemotherapy but also with novel immunotherapies, particularly the promising class of immune checkpoint inhibitors.”

“The new data with TG3003 that we have presented further differentiate this antibody from other anti-CD115 antibodies in development” said Eric Quéméneur, Executive Vice President and Vice President, Research & Development. “We now have a strong pre-clinical package for this product, entirely designed at Transgene. This is an important achievement that supports advancing TG3003 towards the clinic.”

About TG4010:

TG4010, a novel MUC1 targeting immunotherapy, is in development for the treatment of metastatic NSCLC in combination with first-line chemotherapy. TG4010 is a recombinant vaccinia virus of the Ankara strain (MVA) expressing the coding sequences of the MUC1 antigen and of the cytokine, Interleukin-2 (IL2). In healthy cells, the MUC1 protein is normally found on the surface of epithelial cells in many types of tissue and works to protect these cells. In tumor cells, several modifications of MUC1 can occur: over expression, hypoglycosylation and changes in cellular localization. These changes transform the MUC1 protein into a highly immunogenic tumor associated antigen (TAA) and make it an attractive target for cancer immunotherapy. Thus, the strategy is to induce MUC1 antigen expression in a non-tumor environment, i.e., where the immune system is fully functional, in order to induce both innate and MUC1 specific adaptive immunity. In addition to NSCLC, the MUC1 TAA is expressed in many other solid tumor types, such as lung, breast, colorectal, kidney and prostate cancers.

About TG3003:

TG3003 is a humanized monoclonal antibody that was discovered and is being developed by Transgene. TG3003 is directed against human CD115, the CSF-1 cell-surface receptor expressed by all types of myeloid cells, including macrophages. The tumor microenvironment often contains high numbers of M2-type macrophages, often associated with a poor prognosis. M2-macrophages can dampen anti-tumor immune responses, promote tumor growth and metastasis, while M1-macrophages are generally associated with a good prognosis. TG3003 has been shown to inhibit the formation of M2-macrophages and to favor the generation of M1-macrophages and dendritic cells, which play a key role in stimulating the immune response against cancer. TG3003 has also been shown to target another type of myeloid cell, osteoclasts, which are responsible for metastasis-induced bone degradation and pain in cancer patients. TG3003 is currently in pre-clinical development.

About Transgene:

Transgene (Euronext: TNG), part of Institut Mérieux, is a publicly traded French biopharmaceutical company focused on discovering, developing and manufacturing targeted immunotherapies for the treatment of cancer and infectious diseases. Transgene’s programs utilize viral vector technology with the goal of indirectly or directly killing infected or cancerous cells. The Company’s two lead clinical-stage programs are: TG4010 for non-small cell lung cancer and Pexa-Vec for liver cancer. The Company has several other programs in clinical and pre-clinical development that are based on its core viral vector technology.

Transgene is based in Strasbourg, France, and has additional operations in Lyon, as well as satellite offices in China and the U.S. Additional information about Transgene is available at www.transgene.fr.

Disclaimer:

This press release contains forward-looking statements about the future development of TG4010 and TG3003. Although the Company believes its expectations are based on reasonable assumptions, these forward-looking statements are subject to numerous risks and uncertainties, which could cause actual results to differ materially from those anticipated. There can be no guarantee that (i) the results of the Phase 2b part of the TIME trial will be predictive of future results with TG4010, (ii) regulatory authorities will agree with the Company's plans for the Phase 3 part of the trial, or (iii) the Company will find a development and commercialization partner for TG4010 or TG3003 in a timely manner and on satisfactory terms and conditions, if at all. The occurrence of any of these risks could have a significant negative outcome for the Company's activities, perspectives, financial situation, results and development. The Company's ability to commercialize its products depends on but is not limited to the following factors: positive pre-clinical data may not be predictive of human clinical results, the success of clinical studies, the ability to obtain financing and/or partnerships for product development and commercialization, and marketing approval by government regulatory authorities. For a discussion of risks and uncertainties which could cause the Company's actual results, financial condition, performance or achievements to differ from those contained in the forward-looking statements, please refer to the Risk Factors ("Facteurs de Risque") section of the Document de Référence, which is available on the AMF website (<http://www.amf-france.org>) or on Transgene's website (www.transgene.fr).

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