PRESS RELEASE

Transgene to Present New Positive Preliminary Phase I Clinical Data at AACR 2022, Reinforcing the Potential of TG4050

Transgene will discuss new immunogenicity and clinical data generated with TG4050 that reinforce the strong potential of this individualized immunotherapy:

- *Relevant neoantigens could be identified in all evaluable patients and TG4050 induced tumor specific T cell responses against multiple of these patient-specific neoantigen targets.*
- *Early signs of clinical activity were observed with encouraging ongoing anti-tumor activity in the first patients under neoantigen vaccine treatment.*
- *Manufacturing time and drug release were compatible with the clinical treatment protocols.*

Strasbourg, France, April 8, 2022, 7:00 pm CEST - **Transgene (Euronext Paris: TNG), a biotech company that designs and develops virus-based immunotherapies for the treatment of cancer, will present additional positive immunogenicity and clinical data on TG4050, its individualized neoantigen cancer vaccine. TG4050 is currently being evaluated in two ongoing multicenter Phase I trials in patients with ovarian cancer and head and neck cancer. In a poster presentation, Transgene will discuss how these new data further demonstrate the ability of this neoantigen cancer vaccine to induce strong immune responses, targeting patient-specific mutations, that are expected to translate into clinical benefit for patients.**

These results will be presented during a late-breaking poster session at the American Association for Cancer Research (AACR) meeting on April 12, 2022, in New Orleans, Louisiana, USA.

New immune cell response data confirm the ability of this individualized vaccine to effectively prime the immune system

Transgene is presenting a comprehensive set of immunological data. Circulating immune cells quantification (in particular monocytes, DC, NK cells, subcells of CD8, CD4, Treg) and expression of immune checkpoints (ICOS and PD1) suggest that the vaccine is able to effectively induce innate and adaptive immune responses in patients.

All evaluable patients developed a robust T-cell responses against multiple targeted neoantigens (median of 10 positive responses per patient). T-cell responses were observed for class I and class II epitopes, they consisted of *de novo* responses and amplifications of preexisting responses.

New clinical data obtained from patients treated with TG4050 provide a positive update on the two ongoing trials

In the head and neck trial, patients have been randomized to immediatly receive vaccination with TG4050 (early treatment arm, arm A) or at relapse (delayed vaccination arm, arm B). **All patients randomized to arm A (n=7) are stable** as of mid-March 2022. In arm B (n=6), two patients have recently experienced relapse.

In the ovarian trial (n=4), one patient treated after an elevation of CA-125 experienced a normalization of CA-125 without clinical progression for 9 months until death from an unrelated chronic illness. **Another patient was treated upon onset of radiological evidence of relapse and was stable for 11.4 months.**

To date, the vaccine has been well tolerated and no related Serious Adverse Events have been reported across the two studies.

In both clinical studies, enrollment and patient dosing are progressing in line with our expectations. Overall, Transgene plans to treat 13 patients in the ovarian cancer trial and 30 patients in the head and neck trial.

Poster title: ***Phase I trials of personalized cancer vaccine TG4050 in surgically treated high-risk head and neck squamous cell carcinoma (HNSCC) and relapsing ovarian cancer (OvC) patients***

- Session title: Phase I Clinical Trials 2
- Poster and abstract number: CT182
- Date, time, location: Tuesday, April 12, 2022, 9:00 AM - 12:30 PM CDT, Board 7, Section 33
- Authors: M. Block, JP Delord, C. Ottensmeier, C. Le Tourneau, A. Lalanne, O. Lantz, K. Knutson, G. Lacoste, A. Tavernaro, M. Brandely, N. Silvestre, B. Grellier, Y. Yamashita, O. Kousuke, N. Yamagata, E. Quemeneur, K. Bendjama

The abstract and the poster can be accessed on the AACR and Transgene websites.

First positive preliminary clinical data generated in the first patients treated with TG4050 were announced in November 2021 and can be found here.

Transgene is also presenting preclinical data obtained with BT-001 at the AACR meeting. BT-001 is an Invir.IO™ based oncolytic virus, encoding a Treg-depleting human recombinant anti-CTLA-4 antibody generated by BioInvent and the human GM-CSF cytokine.
Poster title: "*Comprehensive preclinical studies of BT-001: an oncolytic vaccinia virus armed with Treg-depleting @CTLA4 and GM-CSF*"
Poster and abstract number: 3567
More information can be found here.
The abstract and the poster can be accessed on the AACR and Transgene websites.

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About the clinical trials

TG4050 is being evaluated in two Phase I clinical trials for patients with ovarian cancer (NCT03839524) and HPV-negative head and neck cancers (NCT04183166).

In a first Phase I trial, TG4050 is being administered to patients with HPV-negative head and neck cancer. A personalized treatment is created for each patient after they complete surgery and while they receive an adjuvant therapy. Half of the participants receive their vaccine immediately after they complete their adjuvant treatment. The other half is given TG4050 as an additional treatment at the time of recurrence of the disease. This randomized study is evaluating the treatment benefits of TG4050 in patients who have a high risk of relapse. Up to 30 patients will receive TG4050 in France, in the UK and in the USA. The principal investigator of the trial is Prof. Christian Ottensmeier, MD, PhD, Consultant Medical Oncologist at the Clatterbridge Cancer Centre and Professor of Immuno-Oncology at the University of Liverpool. In France, the clinical trial is being conducted at Institut Curie, Paris by Prof. Christophe Le Tourneau, MD, PhD, Head of the Department of Drug Development and Innovation (D3i), and at the IUCT-Oncopole, Toulouse by Prof. Jean-Pierre Delord. In the USA, the trial is being led by Dr. Yujie Zhao, MD, PhD, at the Mayo Clinic. Endpoints of the trial include safety, feasibility and biological activity of the therapeutic vaccine.

In parallel, a Phase I clinical trial of TG4050 is enrolling patients with ovarian cancer. This second trial is including patients at the time of asymptomatic relapse after surgery and first-line chemotherapy. Dr. Matthew Block, MD, PhD, Consultant Medical Oncology, Consultant Immunology and Associate Professor of Oncology at the Mayo Clinic (USA) is the principal investigator of the trial; in France, the trial is being conducted by Prof. Le Tourneau, MD, PhD, at Institut Curie and by Dr. Alexandra Martinez, MD, Associate Head of Surgical Department, at IUCT-Oncopole. Endpoints of the trial include safety, feasibility and biological activity of the therapeutic vaccine.

First positive preliminary clinical data generated in the first patients treated with TG4050 were announced in November 2021. More information here or in this video here.

About *myvac®*

myvac® is a viral vector (MVA – *Modified Vaccinia Ankara*) based, individualized immunotherapy platform that has been developed by Transgene to target solid tumors. *myvac®*-derived products are designed to stimulate the patient's immune system, recognize and destroy tumors using the patient's own cancer specific genetic mutations. Transgene has set up an innovative network that combines bioengineering, digital transformation, established vectorization know-how and unique manufacturing capabilities. Transgene has been awarded "Investment for the Future" funding from Bpifrance for the development of its platform *myvac®*. TG4050 is the first *myvac®*-derived product being evaluated in clinical trials.
Click **here** to watch a short video on *myvac®*.

About TG4050

TG4050 is an individualized immunotherapy being developed for solid tumors that is based on Transgene's *myvac®* technology and powered by NEC's longstanding artificial intelligence (AI) expertise. This virus-based therapeutic vaccine encodes neoantigens (patient-specific mutations) identified and selected by NEC's Neoantigen Prediction System. The prediction system is based on more than two decades of expertise in AI and has been trained on proprietary data allowing it to accurately prioritize and select the most immunogenic sequences.
TG4050 is designed to stimulate the immune system of patients in order to induce a T-cell response that is able to recognize and destroy tumor cells based on their own neoantigens. This individualized immunotherapy is developed and produced for each patient.

About Transgene

Transgene (Euronext: TNG) is a biotechnology company focused on designing and developing targeted immunotherapies for the treatment of cancer. Transgene's programs utilize viral vector technology with the goal of indirectly or directly killing cancer cells.
The Company's clinical-stage programs consist of two therapeutic vaccines (TG4001 for the treatment of HPV-positive cancers, and TG4050, the first individualized therapeutic vaccine based on the *myvac®* platform) as well as two oncolytic viruses (TG6002 for the treatment of solid tumors, and BT-001, the first oncolytic virus based on the Invir.IO™ platform).
With Transgene's *myvac®* platform, therapeutic vaccination enters the field of precision medicine with a novel immunotherapy that is fully tailored to each individual. The *myvac®* approach allows the generation of a virus-based immunotherapy that encodes patient-specific mutations identified and selected by Artificial Intelligence capabilities provided by its partner NEC.
With its proprietary platform Invir.IO™, Transgene is building on its viral vector engineering expertise to design a new generation of multifunctional oncolytic viruses. Transgene has an ongoing Invir.IO™ collaboration with AstraZeneca.
Additional information about Transgene is available at: www.transgene.fr. Follow us on Twitter: @TransgeneSA

Transgene disclaimer

This press release contains forward-looking statements, which are subject to numerous risks and uncertainties, which could cause actual results to differ materially from those anticipated. The occurrence of any of these risks could have a significant negative outcome for the Company's activities, perspectives, financial situation, results, regulatory authorities' agreement with development phases, 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 manufacturing, 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 Universal Registration Document, available on the AMF website (http://www.amf-france.org) or on Transgene's website (www.transgene.fr). Forward-looking statements speak only as of the date on which they are made, and Transgene undertakes no obligation to update these forward-looking statements, even if new information becomes available in the future.