

## Transgene, NEC, and BostonGene Expand Collaboration for Phase I/II Clinical Trial of Neoantigen Cancer Vaccine TG4050

Strasbourg (France), Tokyo (Japan) and Waltham, Mass (USA), March 5<sup>th</sup>, 2024, 7:30 am CET - Transgene (Euronext Paris: TNG), a biotech company that designs and develops virus-based immunotherapies for the treatment of cancer, NEC Corporation (NEC; TSE: 6701), a leader in IT, network and AI technologies and BostonGene Corporation (BostonGene), a leading company in AI-based molecular and immune profiling, today announced the expansion of their collaboration for the randomized Phase I/II trial of TG4050, an individualized therapeutic vaccine for patients with head and neck cancers.

BostonGene is partnering with NEC and Transgene to continue performing tumor molecular profiling and microenvironment analysis and provide high-throughput sequencing services. The partnership with BostonGene will enable fast turnaround of next-generation sequencing (NGS) data, and sophisticated analytics will enable comprehensive profiling of patient immune contexture.

TG4050, a personalized immunotherapy designed to stimulate the immune system of patients to induce a neoantigen specific T-cell response that can recognize and destroy tumor cells, is based on Transgene's *myvac*<sup>®</sup> platform and powered by NEC's AI-driven Neoantigen Prediction System.

*"Our collaboration with BostonGene has provided in-depth information on patient phenotypes in the Phase I trial. It has allowed us to understand the baseline status of our patients and how the tumor micro-environment (TME) might evolve following treatment,"* said **Dr. Alessandro Riva, Chairman and CEO of Transgene.**

*"The combined expertise of Transgene, NEC and BostonGene will continue to provide a streamlined pipeline for the timely delivery of patient-tailored vaccines as well as data to guide the future development of new personalized treatment options, elevating the standard of care for head and neck cancer patients,"* said **Masamitsu Kitase, Corporate SVP and Head of the Healthcare and Life Sciences Division at NEC Corporation.**

*"We are committed to supporting Transgene and NEC as they advance these clinical trials,"* said **Nathan Fowler, MD, Chief Medical Officer at BostonGene.** *"Our molecular and immune profiling techniques comprehensively analyze the tumor, microenvironment, and immune system to identify key predictors of response to TG4050, ultimately improving treatment outcomes."*

\*\*\*

### **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 to recognize and destroy tumors using their 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) and machine learning (ML) 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.

Initial immunological and clinical data from the ongoing Phase I trial in the adjuvant treatment of HPV-negative head and neck cancers were presented at several conferences in 2023 and are very encouraging.

### **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 a portfolio of therapeutic vaccines and oncolytic viruses:

TG4050, the first individualized therapeutic vaccine based on the *myvac*® platform, TG4001 for the treatment of HPV-positive cancers, as well as BT-001 and TG6050, two oncolytic viruses based on the Invir.IO® viral backbone.

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.

Additional information about Transgene is available at: [www.transgene.fr](http://www.transgene.fr)

Follow us on social media: X (previously-Twitter): [@TransgeneSA](#) – LinkedIn: [@Transgene](#)

### **About NEC Corporation**

NEC Corporation has established itself as a leader in the integration of IT and network technologies while promoting the brand statement of "Orchestrating a brighter world." NEC enables businesses and communities to adapt to rapid changes taking place in both society and the market as it provides for the social values of safety, security, fairness and efficiency to promote a more sustainable world where everyone has the chance to reach their full potential. For more information, visit NEC at <https://www.nec.com> and NEC's AI Drug Development Business at <https://www.nec.com/en/global/solutions/ai-drug/>.

### ***About BostonGene Corporation***

BostonGene has a mission to provide transformative, AI-integrated molecular analytics and biomarker discovery for precision matching of therapies to improve the lives of patients living with cancer and other immune-related diseases. BostonGene's service model provides customized client solutions using a multi-omic approach prioritized for real-world impact, including optimized standard-of-care therapies, accelerated research and cost-effective, measurable results. BostonGene's tests reveal key drivers of each patient's unique disease profile, including an in-depth profile of the immune microenvironment, actionable mutations, biomarkers of response to diverse therapies, and recommended therapies. Through these comprehensive analyses, BostonGene's tests generate a personalized roadmap for therapeutic decision-making for each patient. For more information, visit BostonGene at <http://www.BostonGene.com>.

### **Contacts:**

#### **Transgene**

**Lucie Larguier**

VP, Corporate Communications & IR

+33 (0)3 88 27 91 04

[investorrelations@transgene.fr](mailto:investorrelations@transgene.fr)

**Media: MEDiSTRAVA Consulting**

**Frazer Hall/Sylvie Berrebi**

+44 (0)203 928 6900

[transgene@medistrava.com](mailto:transgene@medistrava.com)

#### **NEC**

Joseph Jasper

+81-3-3798-6511

[j-jasper@nec.com](mailto:j-jasper@nec.com)

#### **BostonGene**

Erin O'Reilly

+1-617-283-2285

[Erin.Oreilly@BostonGene.com](mailto:Erin.Oreilly@BostonGene.com)

### ***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](http://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.