

## Transgene – Development of *myvac*<sup>™</sup> granted €5.2 million by the “Investments for the Future” programme operated by Bpifrance via the NEOVIVA project



*myvac*<sup>™</sup> is a viral-based individualized immunotherapy for the treatment of solid tumors

---

Strasbourg, France, March 13 2019, 5:45 p.m. CET - [Transgene](#) (Euronext Paris: TNG), a biotech company that designs and develops virus-based immunotherapies against cancers and infectious diseases, announces that the NEOVIVA project was selected by the “Investments for the Future” (IFP) Programme (Programme d’Investissements d’Avenir) operated by Bpifrance for the development of an industrial sector focused on Transgene’s individualized immunotherapy *myvac*<sup>™</sup>. Under the agreement, the NEOVIVA project will receive €5.2 million over the five-year duration of the program from Bpifrance, of which Transgene will receive €2.6 million.

Transgene holds the intellectual property of the *myvac*<sup>™</sup> platform and actively works to further develop this innovative technology in collaboration with its three French partners (part of the NEOVIVA project): HaliDx in Marseille, Traaser in Evry and the Curie Institute in Paris. The NEOVIVA project complements the already existing collaboration between Transgene and the Japanese company NEC focused on the development of individualized immunotherapy based on artificial intelligence.

The goal of this project is to develop and validate a manufacturing approach that would provide all solutions needed for the development of individualized immunotherapies. These are designed to stimulate the patient’s immune system to recognize and kill cancer cells by using their own genetic mutations. Two proof of concept clinical trials are being prepared in Europe and US for the treatment of HPV-negative head and neck cancer and ovarian cancer. These are expected to start in H2 2019.

“We would like to thank Bpifrance for its funding support that is anticipated to accelerate the development of *myvac*<sup>™</sup>. This funding is a further commitment to the *myvac*<sup>™</sup> platform and reinforces our ambition to stand as a world leader in the development of individualized viral-vector (MVA) based immunotherapy. We believe the synergies between our partners and their respective teams are highly complementary and harness creativity which will lead to the success of our project. We are delighted to have access to our partner’s expertise through the NEOVIVA project.”, **said Philippe Archinard, CEO and Chairman of Transgene.**

**Aïcha Douhou, Leader of the Health sector at the innovation department, Bpifrance** commented: “We are delighted to support Transgene and its partners HaliDX, Traaser and the Curie Institute in their innovative approach for the design and development of individualized immunotherapy against solid tumors. We expect this project to further boost

the development of Transgene bioproduction manufacturing unit for this individualized immunotherapy. “

This consortium which combined bio-engineering, bioIT and a recognized know-how in viral vectorisation will be led by Transgene and each partner will contribute to the project as follows:

- **Transgene** will be responsible for the project’s strategy and the clinical development plan. The product design for each patient will be generated in collaboration with NEC that will provide bioIT predictions needed to finalise the immunotherapy. Transgene will also manufacture the *myvac*<sup>™</sup> clinical batches in its pilot manufacture in delays required for the treatment.
- **Traaser** will be in charge of the interpretation of the genomic profiles determined by DNA sequencing. This will be used to facilitate, guide and secure the study of the individualized virotherapy artificial intelligence algorithms results.
- **HalioDx** will study biomarkers to monitor and maximize the clinical efficacy of *myvac*<sup>™</sup> with Immunogram, a high-tech clinical research platform that includes a suite of proprietary tests including Immunosign<sup>®</sup> and the Immunoscore<sup>®</sup> assay suite
- **The Curie Institute** (Immunotherapy Cancer centre, led by Dr Amigorena) will contribute to the project in generating translational data and characterizing the therapy’s mechanism of action.

#### **Contacts:**

##### **Transgene**

Jean-Philippe Del/ Lucie Larguier  
[investorrelations@transgene.fr](mailto:investorrelations@transgene.fr)  
+33 (0)3 88 27 11 21

##### **Bpifrance**

Laure Schlagdenhauffen  
[laure.schlagdenhauffen@bpifrance.fr](mailto:laure.schlagdenhauffen@bpifrance.fr)  
+33 (0)1 41 79 85 38

##### **Secrétariat général pour l’investissement**

Vincent Deshayes  
[Vincent.deshayes@pm.gouv.fr](mailto:Vincent.deshayes@pm.gouv.fr)  
+33 (0)1 42 75 64 29

##### **Media contacts**

##### **Citigate Dewe Rogerson**

EU: David Dible/Sylvie Berrebi  
US: Marine Perrier-Barthez  
+ 44 (0)20 7638 9571 / +1 424 341 9140  
[transgene@citigatedewerogerson.com](mailto:transgene@citigatedewerogerson.com)

### **ABOUT TRANSGENE**

Transgene (Euronext: TNG) is a publicly traded French biotechnology company focused on designing and developing 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 lead clinical-stage programs are: TG4010, a therapeutic vaccine against non-small cell lung cancer, Pexa-Vec, an oncolytic virus against liver cancer, and TG4001, a therapeutic vaccine against HPV-positive head and neck cancers. The Company has several other programs in clinical development, including TG1050 (a therapeutic vaccine for the treatment of chronic hepatitis B) and TG6002 (an oncolytic virus for the treatment of solid tumors).

With its proprietary Invir.IO™, Transgene builds on its expertise in viral vectors engineering to design a new generation of multifunctional oncolytic viruses.

myvac™, an individualized MVA-based immunotherapy platform designed to integrate neoantigens, completes this innovative research portfolio. TG4050 is the first candidate selected from the myvac™ platform.

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

Follow us on Twitter: @TransgeneSA

### **ABOUT THE PROGRAMME D'INVESTISSEMENTS D'AVENIR**

With €57 billion, the Programme d'Investissements d'Avenir (PIA), led by the Secrétariat général pour l'investissement was founded by the government to finance innovative projects in France. Six national priorities were identified to allow the country to increase its growth and employment potential:

- Higher education, research and course program,
- Research appreciation and transfer to the economic world,
- Durable development,
- Industry and small-medium companies,
- Digital economy,
- Health and biotechnology.

The third part of the PIA, the PIA 3, is part of the Grand Plan d'Investissement (GPI) that was presented by the prime minister in September 25, 2017.

Additional information is available at [www.gouvernement.fr/secretariat-general-pour-l-investissement-sgpi](http://www.gouvernement.fr/secretariat-general-pour-l-investissement-sgpi).

Twitter : @SGPI\_avenir.



### **ABOUT BPIFRANCE**

Bpifrance is the French national investment bank: it finances businesses – at every stage of their development – through loans, guarantees, equity investments and export insurances.

Bpifrance also provides extrafinancial services (training, consultancy..). to help entrepreneurs meet their challenges (innovation, export...).

For more information, please visit: [www.bpifrance.fr](http://www.bpifrance.fr) and [presse.bpifrance.fr](http://presse.bpifrance.fr)

Follow us on Twitter: @Bpifrance -@BpifrancePresse

### **ABOUT TRAASER**

Traaser ([www.traaser.com](http://www.traaser.com)) is an innovative digital health company, specialized in the development of software services for personalized medicine. Traaser, located at Genopole in Evry (France) and winner of the 2016 World Innovation Contest, uses artificial intelligence (AI) tools for the collection, management and interpretation of sequencing data in their clinical and therapeutic context in order to meet crucial needs of modern genomic analysis. Diagen™, its comprehensive, scalable, medical-grade expert system based on an industry-leading proprietary methodology, provides a rapid access to patient's genome information, improving diagnosis and patient care. Data organized by the system lead to the improvement and potential discovery of new therapeutic options for patients.

Please contact : Célia Ringeval, Amalthea : 01 76 21 67 55, [cringeval@amalthea.fr](mailto:cringeval@amalthea.fr) or [contact@traaser.com](mailto:contact@traaser.com)

#### **ABOUT HALIODX**

HaliuDx is an immuno-oncology diagnostic company providing oncologists with first-in-class Immune-based diagnostic products and services to guide cancer care and contribute to precision medicine in the era of immuno-oncology and combination therapies. Immunoscore® proprietary technology, pioneered by Jérôme Galon at the Cordeliers Research Center, Paris, France, integrates immunohistochemistry combined with sophisticated algorithm and advanced imaging analysis enabling extraction of spatially-organized tissue molecular information.

Immunoscore® is a platform for many cancers, as immune response to tumor is a key hallmark of disease progression. HaliuDx collaborates with renowned international clinical groups to support clinical utility and ensure rigorous performance validation of its assays in selected cancer indications.

HaliuDx has an experienced team of more than 135 employees, CLIA-certified laboratories and compliant facilities in Europe and in the US to develop, manufacture, register and market in vitro diagnostic (IVD) products. HaliuDx executes biomarker studies and companion diagnostic assay development in conformity with regulations and in partnership with biopharmaceutical companies. The company co-founded the European immunology cluster Marseille Immunopôle (MI).

For more information, please visit our websites [www.haliodx.com](http://www.haliodx.com) and [www.immunoscore-colon.com](http://www.immunoscore-colon.com) and follow the company on Twitter @HaliuDx.

#### **ABOUT INSTITUT CURIE & CARNOT CURIE CANCER**

Institut Curie, a leading player in the fight against cancer, combines a leading French research center in oncology and a state-of-the-art hospital group that treat all types of cancer, including the rarest. Founded in 1909 by Marie Curie, the Institut Curie brings together more than 3,500 researchers, physicians and healthcare professionals around its three missions: care, research and teaching. As a private foundation recognized for public utility, Institut Curie is authorized to receive donations and bequests and can, thanks to the support of its donors, accelerate discoveries and thus improve the treatment and the quality of life of the patients. For more information: [www.institut-curie.org](http://www.institut-curie.org)



Since 2011, Institut Curie is certified "Institut Carnot Curie Cancer". The Carnot label is a label of excellence granted to academic research structures with proven high quality and involvement in partnership research. Curie

Cancer offers industrial partners the opportunity to set up research collaborations, benefiting from the expertise of the Institut Curie teams, for the development of innovative therapeutic solutions against cancers from the therapeutic target to clinical validation.

For more information: [www.instituts-carnot.eu/fr/institut-carnot/curie-cancer](http://www.instituts-carnot.eu/fr/institut-carnot/curie-cancer)

#### **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. There can be no guarantee that (i) the results of preclinical work and prior clinical trials will be predictive of the results of the clinical trials currently underway, (ii) regulatory authorities will agree with the Company's further development plans for its therapies, or (iii) the Company will find development and commercialization partners for its therapies 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.*

*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 Risques") section of the Document de Référence, 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.*