

## Transgene's two innovative platforms progressing well - Financial visibility extended until end 2023

- **TG4050 (myvac® platform)** – First data expected from two Phase I trials in the second half of November 2021
- **TG4001** – First patients enrolled in a randomized Phase II clinical trial – Interim results expected around the end of 2022
- **TG6002** – Initial Phase I data provide clinical proof of concept for the intravenous administration of Transgene's patented oncolytic virus (Invir.IO™ platform)
- **BT-001 (lead Invir.IO™ candidate)** – First patients enrolled in Phase I/IIa trial and US IND clearance received – First data expected in H1 2022
- **€48.1 million** in cash and cash equivalents as of June 30, 2021, following a successful €34.1 million private placement – Financial visibility extended to the end of 2023

Conference call scheduled today at 6:00 p.m. CET (in English). See details below.

Strasbourg, France, September 22, 2021, 5:45 p.m. CET – **Transgene (Euronext Paris: TNG), a biotech company that designs and develops virus-based immunotherapies for the treatment of cancer**, today publishes its financial results for the six-month period ended June 30, 2021, and provides an update on the progress of its portfolio of clinical-stage drug candidates.

*“In the first half of 2021, Transgene has demonstrated its ability to advance its entire clinical portfolio, in line with forecasts. We launched the randomized Phase II trial of TG4001 in the patient population that was previously identified as better responding to treatment in the Phase Ib/II trial. TG6002 provided the clinical proof of concept of the intravenous route supporting the development of this innovative mode of administration for the product and for the Invir.IO™ platform. The Phase I/IIa trial of BT-001 has enrolled its first patients”, commented Hedi Ben Brahim, Chairman and CEO of Transgene. “The first results of TG4050, our personalized therapeutic vaccine based on the myvac® platform, will be released in the second half of November 2021. With these results, we are looking to demonstrate the ability of this individualized immunotherapy to induce a strong and specific immune response in patients. I am confident that as we progress our clinical studies and generate data demonstrating the benefits of our novel immunotherapies for both patients and clinicians, Transgene will increasingly be recognized as a leading innovator in the immuno-oncology space.”*



## FIRST CLINICAL DATA WITH TG4050 (*myvac*<sup>®</sup> PLATFORM) EXPECTED IN THE SECOND HALF OF NOVEMBER 2021

Transgene is developing an individualized immunotherapy platform (*myvac*<sup>®</sup>) based on multiple advanced genetic engineering technologies.

TG4050 is the first drug candidate leveraging these technologies. Together with NEC, Transgene has set up a patient-specific approach that combines its proprietary expertise in viral vector engineering with NEC's artificial intelligence (AI) capabilities. The treatment with TG4050 is customized for each patient, as it integrates the most relevant tumor targets (patient-specific neoantigens) selected by NEC's AI.

The Phase I clinical trials assessing TG4050 are enrolling patients in the US and in Europe (UK and France) with:

- ovarian cancer, and
- head and neck cancers.

The first patients were dosed in the US during the second half of 2020, while European patients have been treated since January 2021.

The first data from the two ongoing Phase I clinical trials are expected in the second half of November 2021. Transgene expects to communicate safety and immunogenicity (T cell induction) data.

## FIRST PATIENTS ENROLLED IN THE RANDOMIZED PHASE II TRIAL OF TG4001 IN HPV-POSITIVE ANOGENITAL CANCERS

TG4001 is a therapeutic vaccine targeting HPV-positive tumors. Based on promising Phase Ib/II<sup>[1,2]</sup> data, Transgene is progressing the development of TG4001 in combination with avelumab, via a randomized Phase II trial. This study is being conducted via an extension of the collaboration with the alliance of Merck KGaA, Darmstadt, Germany, and Pfizer, which is supplying avelumab.

This expanded randomized Phase II trial will enroll up to 150 patients in Europe and in the US with recurrent or metastatic HPV16-positive anogenital cancer, including cervical, vulvar, vaginal, penile, and anal cancer. The trial will focus on patients without liver metastases, as this patient population was seen to derive the most benefit in the Phase Ib/II study with TG4001 and avelumab. The Phase II trial aims to show the superiority of TG4001 + avelumab over avelumab monotherapy. The trial protocol has been authorized by the US FDA, and the French and Spanish regulatory agencies. **The first patient was enrolled in France in June 2021** and the trial is actively enrolling further patients.

An interim analysis will be performed after the enrollment of approximately 50 patients. **Transgene expects to communicate interim analysis data around the end of 2022.**



## **INITIAL PHASE I DATA WITH TG6002 PROVIDE CLINICAL PROOF OF CONCEPT OF IV ADMINISTRATION OF THE ONCOLYTIC VIRUS BACKBONE**

Initial data from the ongoing Phase I clinical trial of TG6002 demonstrated that this *Vaccinia Virus*, which is the same viral backbone on which the Invir.IO™ platform is based, can reach the tumor, replicate within these cancer cells and induce the production of 5-FU when administered intravenously. These data have been presented at the AACR<sup>[3]</sup> (April 2021) and ESMO<sup>[4]</sup> (September 2021) meetings.

These initial data obtained with the Phase I trial of TG6002 support the feasibility of IV administration of Transgene's oncolytic virus. TG6002 is also being evaluated in a Phase I/IIa clinical trial where it is being given by intrahepatic artery infusion in patients with advanced colorectal cancer with liver metastases.

Transgene aims to enlarge the number of solid tumors that could be addressed by an oncolytic virus by developing the administration of TG6002 via the intravenous and intrahepatic artery routes.

Our collaboration with AstraZeneca continues to develop new innovative oncolytic viruses. Under the terms of the agreement, AstraZeneca can exercise an option to further develop each of these novel drug candidates in the clinic.

## **FIRST PATIENTS ENROLLED IN THE PHASE I/IIA CLINICAL TRIAL OF BT-001, AN INNOVATIVE ONCOLYTIC VIRUS FROM THE INVIR.IO™ PLATFORM**

BT-001 is a patented oncolytic virus (OV), with high antitumor potential. It is Transgene's first OV based on the proprietary Invir.IO™ platform (VV<sub>copTKRR</sub>). It has been engineered to encode both a Treg-depleting human recombinant anti-CTLA4 antibody generated by BioInvent and the human GM-CSF cytokine. It is being co-developed with BioInvent.

By selectively targeting the tumor microenvironment, BT-001 is expected to elicit a much stronger and more effective antitumoral response. Delivering the anti-CTLA4 antibody directly to the tumor microenvironment will allow a local therapeutic activity and will thus greatly increase the safety and tolerability profile of the monoclonal antibody by reducing systemic exposure.

A Phase I/IIa trial targeting solid tumors has started in France and Belgium. The first patient was enrolled in February 2021. Transgene received IND clearance from US FDA in May 2021.

Initial Phase I data are expected in the first half of 2022.

## SUMMARY OF KEY ONGOING CLINICAL TRIALS

myvac®

### TG4050

Phase I

NCT03839524

#### Targets: tumor neoantigens

Ovarian cancer – after surgery and first-line chemotherapy

- ✓ Trial ongoing in the US and in France
- ✓ Inclusions and patient dosing progressing in line with forecast
- ➔ **First data expected in the second half of November 2021**

myvac®

### TG4050

Phase I

NCT04183166

HPV-negative head and neck cancer – after surgery and adjuvant therapy

- ✓ Trial ongoing in the UK and in France
- ✓ Inclusions and patient dosing progressing in line with forecast
- ➔ **First data expected in the second half of November 2021**

### TG4001

+ avelumab

Phase II

NCT03260023

#### Targets: HPV16 E6 and E7 oncoproteins

Recurrent/metastatic anogenital HPV-positive – 1<sup>st</sup> and 2<sup>nd</sup> line

- ✓ **A Phase II randomized trial** comparing the efficacy of TG4001 + avelumab versus avelumab single-agent benefits from the extended clinical collaboration with Merck KGaA and Pfizer, for the supply of avelumab
- ✓ Regulatory authorizations received in the US, Spain, and France
- ✓ First patient enrolled in June 2021 – Inclusions and patient dosing progressing in line with forecast
- ➔ **Interim analysis data expected around the end of 2022**

### TG6002

Phase I/IIa

NCT03724071

#### Payload: FCU1 for the local production of a 5-FU chemotherapy

Gastro-intestinal cancer (colorectal cancer for Phase II) – Intravenous (IV) administration

- ✓ Multicenter trial ongoing in Spain, France and Belgium – New sites have been opened since January 2021
- ✓ **Posters presented at AACR 2021 and ESMO 2021 on initial data, demonstrating the clinical proof of concept of IV administration**
- ✓ Dose escalation has been completed with a weekly schedule of administration and new schedules are being explored
- ➔ **End of Phase I expected in 1H 2022**

### TG6002

Phase I/IIa

NCT04194034

Colorectal cancer with liver metastasis – Intrahepatic artery (IHA) administration

- ✓ Multicenter trial enrolling patients in the UK and France
- ✓ French sites recently enrolled patients following ANSM approval (March 2021)
- ➔ **First Phase I data expected mid-2022**

Invir.IO™

### BT-001

Phase I/IIa

NCT04725331

#### Payload: anti-CTLA4 antibody and GM-CSF cytokine

Solid tumors

- ✓ Co-development with BioInvent
- ✓ Trial ongoing in France and Belgium – US IND received from FDA in May 2021
- ✓ First patient enrolled in February 2021 – Inclusions and dose escalation progressing
- ➔ **Poster on additional preclinical data accepted for presentation at an upcoming congress**
- ➔ **First Phase I data expected in 1H 2022**

## CAPITAL INCREASE OF €34.1M THROUGH A PRIVATE PLACEMENT

In June 2021, Transgene raised approximately €34.1 million via a private placement. The capital increase resulted in the issuance of 13,930,000 new ordinary shares representing 16.6% of the share capital of the Company. The subscription price of €2.45 (including issue premium) represented a discount of 6.5% compared to the closing price of Transgene on June 21, 2021.

Institut Mérieux and SITAM Belgium subscribed for a total amount of 25 million euros and 1.67 million euros, respectively. Several specialized healthcare investors, including Invus, also participated in the Offering.

Transgene extended its financial visibility until the end of 2023 as a result of the transaction.

## KEY FINANCIALS

The Board of Directors of Transgene met on September 22, 2021, and approved the financial statements for the six-month period ended June 30, 2021. The Statutory Auditors have conducted a limited review of the interim consolidated financial statements.

The half-year financial report is available on Transgene's website, [www.transgene.fr](http://www.transgene.fr).

## KEY ELEMENTS OF THE INCOME STATEMENT

<i>(in thousands of euros)</i>	June 30, 2021	June 30, 2020
<b>Operating income</b>	<b>4,989</b>	<b>5,731</b>
Research and development expenses	(15,339)	(13,831)
General and administrative expenses	(3,080)	(3,297)
Other expenses	(2)	-
<b>Operating expenses</b>	<b>(18,421)</b>	<b>(17,128)</b>
<b>Operating income/(loss)</b>	<b>(13,432)</b>	<b>(11,397)</b>
<b>Financial income/(loss)</b>	<b>1,632</b>	<b>9,183</b>
<b>Net income/(loss)</b>	<b>(11,800)</b>	<b>(2,214)</b>

**Operating income** amounted to €5.0 million for the first six months of 2021 compared to €5.7 million for the same period in 2020.

- In 2019, the Company entered into a collaboration agreement with AstraZeneca with exclusive licensing options to co-develop oncolytic immunotherapies derived from the Invir.IO™ platform. As a result, in the first half of 2019 Transgene received €8.9 million (US\$10 million) in fees for access to its platform. This initial payment is recognized as revenue based on the stage of completion of the related activities. In the first half of 2021, the income recognized under this collaboration agreement was €1.3 million (€2.2 million in the first half of 2020). Of this amount €0.8 million reflects recognition of the initial payment for work done during the period and €0.5 million for the achievement of certain preclinical and production milestones.
- The research tax credit amounted to €3.5 million for the first half of 2021, compared to €2.9 million for the first half of 2020.

**Research and Development (R&D) expenses** amounted to €15.3 million in the first half of 2021 compared to €13.8 million for the same period in 2020, reflecting the ramp up of manufacturing activities.

**General and administrative expenses** amounted to €3.1 million for the first half of 2021 compared to €3.3 million for the same period in 2020.

**Financial income** amounted to a gain of €1.6 million in the first half of 2021 compared to a gain of €9.2 million for the same period in 2020. This change is mainly due to the increase in the fair value of Tasly BioPharmaceuticals shares: in September 2021, the sale of the shares was carried out at a higher price than the price booked in December 2020.

As a consequence, the **net loss** amounted to €11.8 million for the first half of 2021 compared to a loss of €2.2 million for the same period in 2020.

Transgene's cash burn amounted to €11.9 million in the first half of 2021, excluding the funds raised via the private placement, compared with €10.1 million for the same period in 2020.

As of June 30, 2021, the Company's **cash, cash equivalents and other financial assets** amounted to €48.1 million versus €26.3 million as of December 31, 2020.

## POST-CLOSING EVENTS

On September 22, 2021, the Company signed an agreement for the sale of 49% of the shares held in Tasly BioPharmaceuticals, representing 8.4 million shares, for a total amount of US\$20.2 million (approximately €17 million).

Following this transaction, Transgene now holds 8.7 million shares of Tasly BioPharmaceuticals, representing 0.8% of the share capital of the Chinese company.

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A conference call in **English** is scheduled today, on September 22, 2021, at 6:00 p.m. CET.

**Webcast link to English language conference call:**

[https://channel.royalcast.com/landingpage/transgene/20210922\\_1/](https://channel.royalcast.com/landingpage/transgene/20210922_1/)

**Participant telephone numbers:**

France: +33 (0) 1 70 37 71 66

Confirmation code: Transgene

United Kingdom: +44 (0) 33 0551 0200

United States: +1 212 999 6659

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A replay will be available on the Transgene website ([www.transgene.fr](http://www.transgene.fr)) following the live event.

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### 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*<sup>®</sup>

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](http://www.transgene.fr)

Follow us on Twitter: [@TransgeneSA](https://twitter.com/TransgeneSA)

## References

- [1] Le Tourneau et al. "TG4001 (Tipapkinogene sovavivec) and avelumab for recurrent/metastatic (R/M) Human Papilloma Virus (HPV)-16+ cancers: clinical efficacy and immunogenicity." 2020 [SITC Annual Meeting](#), 9–11 November 2020, Poster presentation
- [2] Le Tourneau et al. "TG4001 therapeutic vaccination combined with PD-L1 blocker avelumab remodels the tumor microenvironment (TME) and drives antitumor responses in Human PapillomaVirus (HPV)+ malignancies." 2020 ESMO IO meeting, 12 December 2020, mini-oral presentation
- [3] Bendjama et al. "Oncolytic virus TG6002 locates to tumors after intravenous infusion and induces tumor-specific expression of a functional pro-drug activating enzyme in patients with advanced gastrointestinal carcinomas." 2021 [AACR Annual Congress](#), 10–15 April 2021, Poster presentation
- [4] Cassier et al. "Bioavailability and activity of oncolytic virus TG6002 after intravenous administration in patients with advanced gastrointestinal carcinomas" [ESMO 2021](#), 16–21 September 2021, Poster presentation

## 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.*