

Cutting-Edge **Individualized Neoantigen Cancer Therapies** as a Leading Platform

September 24, 2026

transgene

Disclaimer

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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 Universal Registration Document, available on the AMF website (http://www.amf-france.org) or on Transgene's website (www.transgene.com). 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.

Clinical-Stage Biotech Company Focused on Individualized Neoantigen Therapeutic Vaccines (INTVs)

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- Euronext Paris (TNG.PA)
- **Based in France – 160 employees**
- Market Cap. c. **€240M**
- Spanning from research to manufacturing and clinical development
- Expertise on viral vector-based immunotherapies
- Strong IP
- Experienced leadership team
- **Funded until early 2028**

Potential additional upside with earlier stage programs

- **Novel MVA-based prophylactic vaccine against mpox/smallpox (TG-MVA), integrating cell line manufacturing**

Innovative INTVs *myvac* platform

- **INTVs are emerging as clinically validated: positive Phase 3 data with a mRNA vector based vaccine** (INTerpath-001 trial in resected melanoma)
- With ***myvac*®, the most advanced viral vector-based INTV,** Transgene is building a differentiated asset leveraging AI capability that has showed proof of principle **in randomized Phase 1 in adjuvant HNSCC**
- **Strategy is to expand to additional early-stage tumors** in combination with ICIs, while **developing a Phase 3-ready manufacturing process** (scalable, automatable, transposable)

TG4050

Only INTV in adjuvant setting HNSCC

- **100% 3+ year DFS*** in randomized Phase 1
- Ongoing **randomized Ph. 2 . Data in Q1 28**
- Manufacturing: currently CEF, moving to cell line in potential Ph. 3
- **AI-based neoantigen predictive tool: license agreement signed with NEC only for resected HNSCC**

TG4070

- **Randomized Phase 1** in **resected NSCLC**
- **Combination with nivolumab** (ICI)
- **Cell line manufacturing**
- **SNIPER: proprietary AI-based neoantigen prediction tool** – developed and operated **in-house**

BROAD APPLICABILITY

Potential to expand to multiple early-stage solid tumors

Currently optimizing manufacturing, with improved process and turnaround time

INTVs (Individualized Neoantigen Therapeutic cancer Vaccines); HNSCC (Head and Neck Squamous Cell Carcinoma); NSCLC (Non-Small Cell Lung Cancer); SNIPER (Specific Neoantigen Identification and Prediction of Elicited Response); ICI (Immune Checkpoint Inhibitor); MVA (Modified Vaccinia Ankara); CEF (Chicken Embryo Fibroblast).

** C. Ottensmeier et al. A viral-based individualized neoantigen vaccine as adjuvant treatment in resected head and neck squamous cell carcinoma: a randomized Phase I trial. Nature Communications, 2026. (DOI: 10.1038/s41467-026-76667-1)*

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Focus on INTVs from myvac Platform in Early-Stage Solid Tumors

INDIVIDUALIZED NEOANTIGEN THERAPEUTIC VACCINES (INTVs)

Indication	Preclinical	Phase 1	Phase 2	Phase 3
TG4050 *Head & Neck Squamous Cell Carcinoma* (adjuvant)		Randomized Phase 1/2		
TG4070 *Non-Small Cell Lung Cancer* (adjuvant)		Phase 1 with nivolumab		
Other viral vector-based assets				
BT-001 *Investigator-sponsored trial Rectal Cancer with pMMR**		Phase 1 with pembrolizumab**		
TG-MVA		mpox & other poxviruses		
Research & Innovation — *Viral vector-based immunotherapies*				

RANDOMIZED PHASE 1/2

- **Phase 1 part (data published in nature communications [1])**
  - ✓ **100% DFS maintained at 3+ years** (41-month median follow-up)
  - ✓ Durable immunogenicity, specific and effector CD8 T cell induction
- **Phase 2 part**
  - ✓ Randomization completed
  - ➢ Preliminary immunogenicity data (H2 2026)
  - ➢ Efficacy data (2-year DFS) by the end of Q1 2028

RANDOMIZED PHASE 1

- ➢ In combination with an ICI (nivolumab)
- ➢ Sites initiation completed

- ➢ Study open to screening

- ✓ Positive preclinical data presentation at the World Congress on Infectious Diseases (June 2026)[3]
- ✓ Working diligently to implement the next steps in alignment with Health Authorities

[1] C. Ottensmeier et al. A viral-based individualized neoantigen vaccine as adjuvant treatment in resected head and neck squamous cell carcinoma: a randomized Phase I trial. Nature Communications, 2026. (DOI: 10.1038/s41467-026-76667-1)
[2] C. Lebbe, "**Updated clinical results of BT-001, an oncolytic virus expressing an anti-CTLA4 mAb, administered in combination with pembrolizumab in patients with advanced solid tumors**", ESMO – Oct. 2025, poster presentation
[3] Nathalie Silvestre, "**Robust Protection Against Monkeypox Virus Mediated By a Novel Cell-Line-Derived MVA Vaccine (TG-MVACL)**", oral presentation, WCID – June 2026

**proficient mismatch repair*
***KEYTRUDA® (pembrolizumab) is a registered trademark of Merck Sharp & Dohme LLC, a subsidiary of Merck & Co., Inc., Rahway, NJ, USA.*



The Uniqueness of Individualized Neoantigen Cancer Vaccine to Reshape the Future of Early-Stage Cancer Treatment

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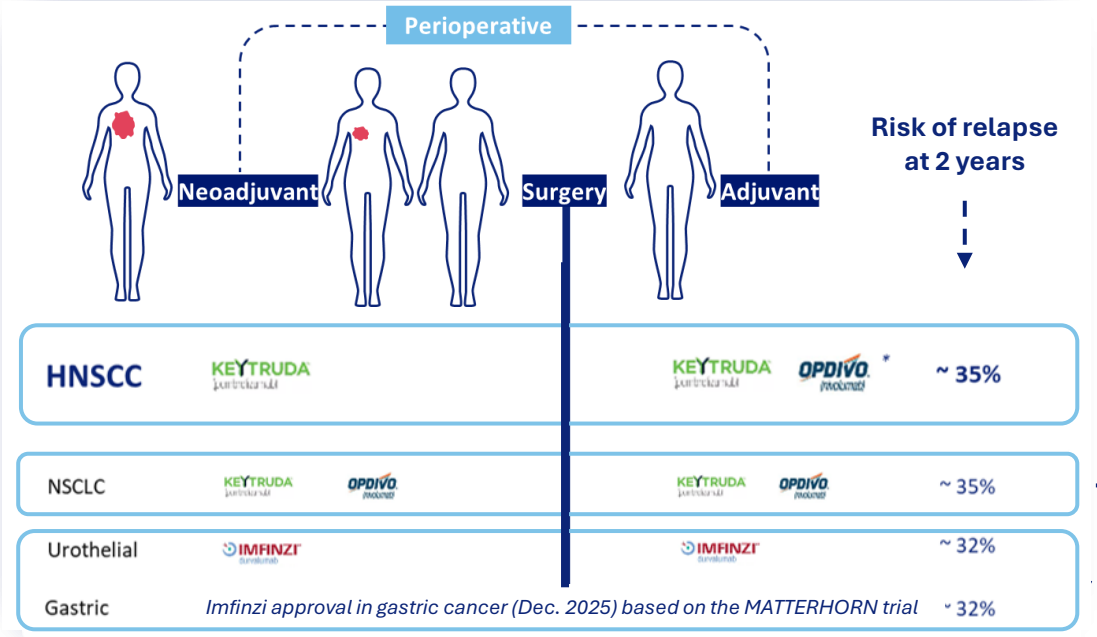
myvac

one patient • one cancer • one vaccine

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myvac® has the Potential to Further Reduce the Risk of Relapse in Early-Stage Solid Tumors

ICI-based perioperative treatment regimen are improving patient outcome but the risk of relapse remains



By further preventing relapse, the *myvac*® platform could become a multi-billion opportunity

- Strong scientific and clinical rationale for **combination with immune checkpoint inhibitors (ICI)**
- **Engineered to induce specific immune response against selected neoantigens,** whether the tumor is « cold » or « hot »

Market expected to be driven by a few players, at the crossroad of immune checkpoint inhibitors and CAR-T cells

HNSCC: current priority – Value creation opportunity

- 19K patients/year (Eur, US, Japan)
- Market size >$3 bn/year

NSCLC: new development – Additional value creation opportunity

- 25K patients/year (Eur, US, Japan)
- Market size >$6 bn/year

Potential additional indications could further increase the value of the *myvac*® platform

**Not yet approved*

Sources: KEYNOTE 689: Uppaluri R, NEJM 2025 and Adkins D; NivoPostOp: Bourhis J, ASCO 2025; Checkmate 77T, Cascone T, NEJM, 2024; NIAGARA, Powles T, NEJM, 2024; Matterhorn, Janjigian Y, NEJM, 2025

myvac® Platform: Patient Journey and Mechanism of Action

myvac

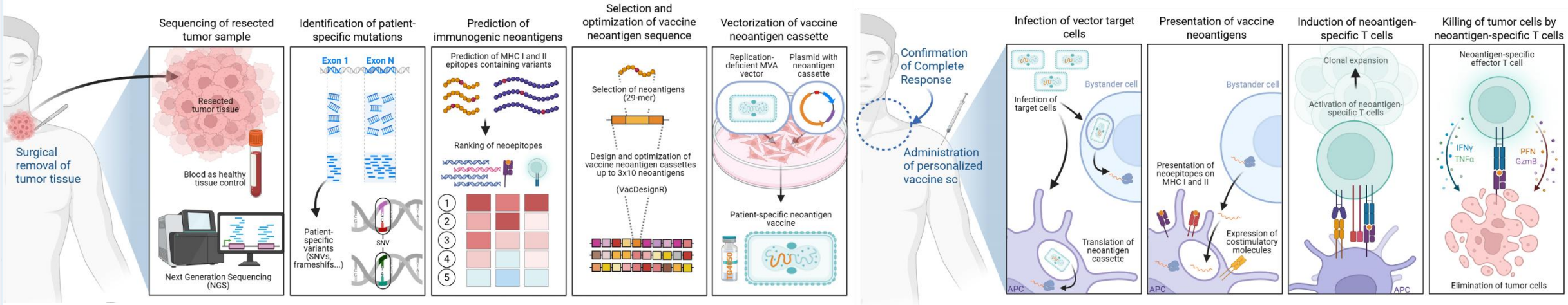
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NGS lab

Antigen selection with AI-based tool

Vaccine design and manufacturing

Induction of immune response



Up to 30 MHC I and MHC II cancer neoantigens derived from patient-specific tumor somatic variants are vectorized into MVA

Mode of action: **treatment induces neoantigen-specific CD8 T cell responses** which eliminate new tumor cells and **prevent recurrence**

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myvac — Building a Multi-Asset Platform

myvac platform

one patient · one cancer · one vaccine

AI-powered · Individualized Neoantigen Therapeutic Vaccine (INTVs) Platform

MVA

(Modified Vaccinia Ankara)

2 innovative clinical-stage candidates from myvac platform

Transgene's lead asset

TG4050

First MVA-based INTV

Randomized Phase 2 ongoing · resected **HNSCC** · as monotherapy

Phase 1 part – 100% DFS after more than 3 years of follow-up (41 months median follow up)*

Expanding *myvac*® potential

TG4070

Second MVA-based INTV

Randomized Phase 1 ongoing · resected **NSCLC** · with nivolumab (ICI)

New solid-tumor indication
Sites initiation ongoing

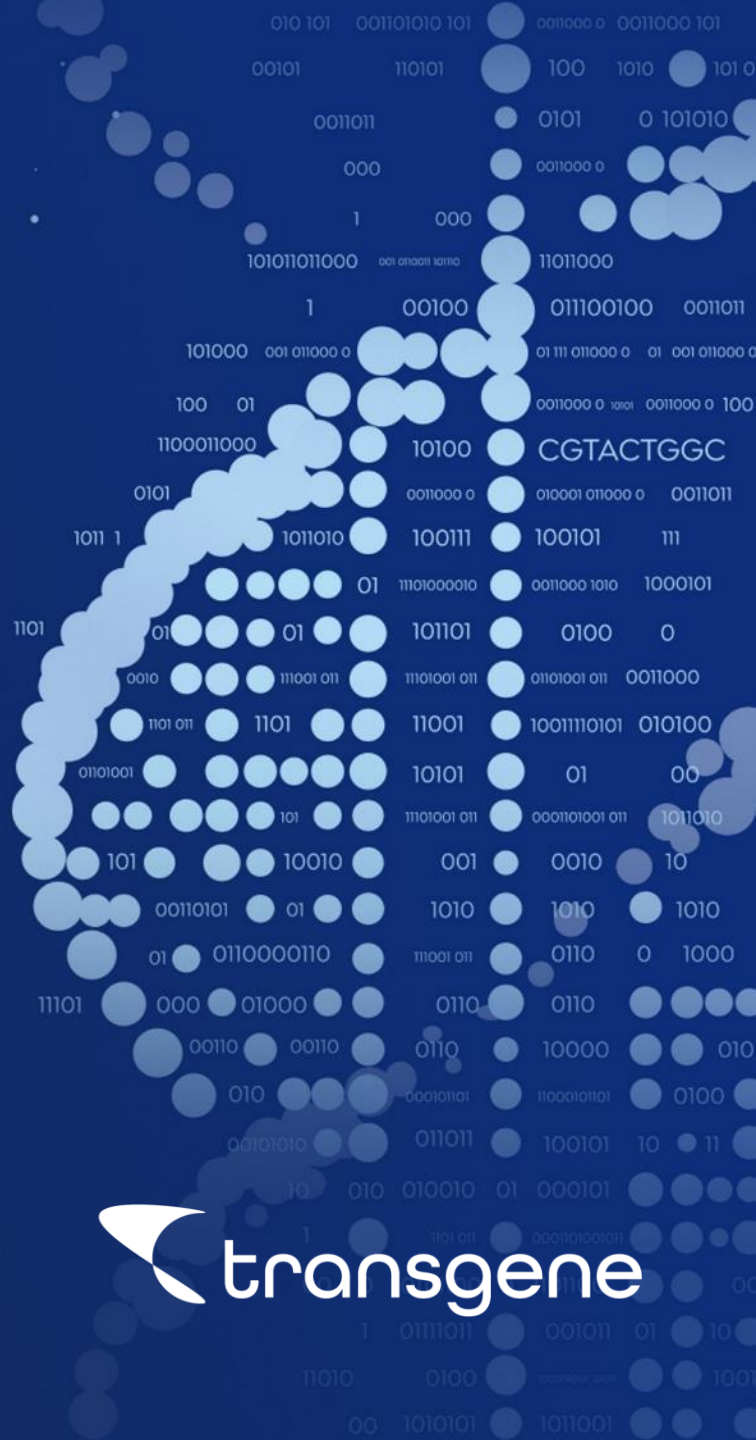
HNSCC (Head and Neck Squamous Cell Carcinoma); MHC (Major Histocompatibility Complex); NSCLC (Non-Small Cell Lung Cancer); INTV (Individualized Neoantigen Therapeutic cancer Vaccine); ICI (Immune Checkpoint Inhibitor).

nature communications

** C. Ottensmeier et al. A viral-based individualized neoantigen vaccine as adjuvant treatment in resected head and neck squamous cell carcinoma: a randomized Phase I trial. Nature Communications, 2026. (DOI: 10.1038/s41467-026-76667-1)*

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TG4050: The Head and Neck (HNSCC) Cancer Opportunity



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TG4050 in Resected HNSCC – Leading INTV Program in Partnership with NEC

Proof of Principle Achieved in Randomized Phase 1; Phase 2 Ongoing

Viral Vector: MVA

- Strongly immunogenic vector
- Established safety profile
- Large multi-antigen capacity
- Decades of MVA expertise

AI-based neoantigen prediction tool

Licensed from NEC for development and commercialization in resected HNSCC cancer patients

VacDesignR®

In-house computational engine that optimizes the genetic design of the MVA vector

Improving reliability and quality

Scalable manufacturing

- CEF (Ph.1-2)
- Cell-line (Ph.3 and commercialization) engineered for automation, scale for multiple indications, turnaround time

Robust process supporting next development steps

INTVs (Individualized Neoantigen Therapeutics Vaccines); MVA (Modified Vaccinia Ankara); CEF (Chicken Embryo Fibroblast).

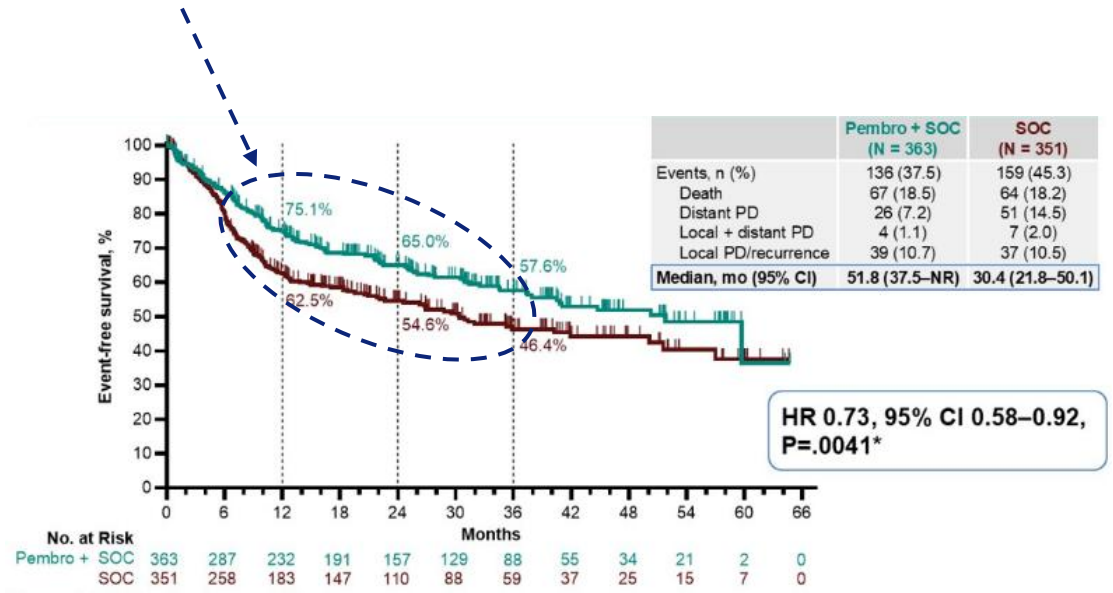
Adjuvant HNSCC, Still a Significant Medical Need

Despite ICI-containing adjuvant treatment emerging as new SOC for operable squamous H&N cancer patients, high medical need remains:

35% OF PATIENTS RELAPSE WITHIN 2 YEARS

KEYNOTE 689

Medical need despite the addition of pembrolizumab

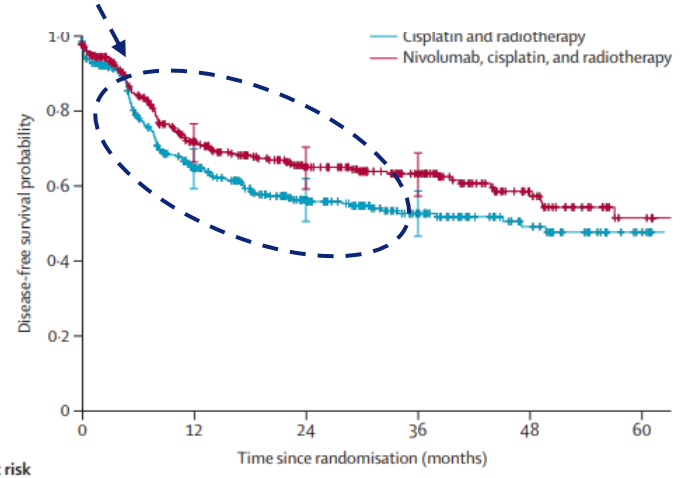


	Pembro + SOC (N = 363)	SOC (N = 351)
Events, n (%)	136 (37.5)	159 (45.3)
Death	67 (18.5)	64 (18.2)
Distant PD	26 (7.2)	51 (14.5)
Local + distant PD	4 (1.1)	7 (2.0)
Local PD/recurrence	39 (10.7)	37 (10.5)
Median, mo (95% CI)	51.8 (37.5–NR)	30.4 (21.8–50.1)

HR 0.73, 95% CI 0.58–0.92, P=.0041*

NivoPostOp

Medical need despite the addition of nivolumab



Number at risk (censored)						
Cisplatin and radiotherapy	334 (0)	178 (47)	112 (92)	66 (132)	35 (160)	10 (184)
Nivolumab, cisplatin, and radiotherapy	332 (0)	188 (60)	130 (102)	88 (141)	42 (181)	16 (204)

Sources: ***KEYNOTE 689:*** *Uppaluri R, NEJM 2025 and Adkins D; ASCO 2025 ;*
NivoPostOp: *Lim et al. Lancet. 2026 Jan 24;407(10526):363-374*

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TG4050 | HNSCC – Proof of Principle Data in Monotherapy

PHASE 1/2
TRIAL DESIGN

Locoregionally advanced HPV-negative HNSCC (NCT: 04183166)

Surgery → **Adjuvant (chemo-) radiotherapy** → **Complete Clinical Response (3 months after (C-)RT)** → **1:1**

- **TG4050** (single agent) Repeated injections
- **Patient monitoring** (no treatment)

GOAL

To prevent disease recurrence after surgery and adjuvant chemoradiotherapy

Phase 1 part (n=32) – Successfully completed

- ✓ Primary objectives achieved: safety and tolerability
- ✓ Secondary objectives achieved: feasibility, disease-free survival (DFS) => **100% 24-month DFS in treatment**
- ✓ Continued monitoring: **100% DFS maintained through 3+ years (41-month median follow-up)***
- ✓ Exploratory objectives: immunogenicity, exploratory tumor biomarkers (TMB, PD-L1) => Confirms specific, effective and long-lasting immune response.
- ✓ Neoantigen-specific **effector and cytotoxic CD8 T cell induction** – Persist over 12 months after treatment completion

Phase 2 part (n ≈ 38) – **Ongoing** (Randomization completed)

- **Primary endpoint**: 24-month DFS, defined by either an event (relapse or death) or 24-month follow-up, whichever occurs first
- **Preliminary immunogenicity data**: H2 2026
- **Efficacy data** (2-year DFS): by the end of Q1 2028

nature communications

** C. Ottensmeier et al. A viral-based individualized neoantigen vaccine as adjuvant treatment in resected head and neck squamous cell carcinoma: a randomized Phase I trial. Nature Communications, 2026. (DOI: 10.1038/s41467-026-76667-1)*

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TG4050 | HNSCC Phase 1 Data – Patient Population Balanced for Major Prognostic Factors

Patient Characteristics	Arm A (N=17*) TG4050 single agent	Arm B (N=16) Watchful waiting
Male / Female, n (%)	11 (65%) / 6 (35%)	13 (81%) / 3 (19%)
Age (years), median (range)	61 (26 – 79)	57 (47 – 74)
ECOG PS 0 / 1, n (%)	12 (71%) / 5 (29%)	9 (56%) / 7 (44%)
Primary tumor location		
Oral cavity	14 (82%)	10 (63%)
Oropharynx	2 (12%)	2 (13%)
Hypopharynx	1 (6%)	3 (19%)
Larynx	-	1 (6%)
Clinical stage, n (%)		
III	7 (41%)	3 (20%)
IVa	10 (59%)	13 (81%)
Pathological stage, n (%)		
I/II	1 (6%)	1 (6%)
III	4 (24%)	3 (19%)
IVa	7 (41%)	5 (31%)
IVb	5 (29%)	7 (44%)
Concomitant cisplatin, n (%)	10 (59%)	9 (56%)

Pathological Risk Factors	Arm A (N=17*) TG4050 single agent	Arm B (N=16) Watchful waiting
Extracapsular effraction, n (%)	5 (29%)	8 (50%)
Invaded margins, n (%)	4 (24%)	3 (19%)
Perineural infiltration, n (%)	13 (77%)	7 (44%)
4+ invaded lymph nodes, n (%)	2 (12%)	3 (19%)
No. of risk factors, n (%)		
0	3 (18%)	2 (13%)
1	5 (29%)	9 (56%)
2+	**9 (53%)**	**5 (31%)**

* **17** patients evaluable for demographic and safety / **16** patients evaluable for DFS
Minimum exposure not met: the 1 patient non evaluable for DFS was diagnosed with locoregional recurrence after only 2 administrations of TG4050

Source: C. Le Tourneau, ***"Randomized Phase I trial of adjuvant personalized cancer vaccine TG4050 in resected locally advanced head and neck squamous cell carcinoma (HNSCC) patients"***, ASCO - June 2025, rapid oral presentation

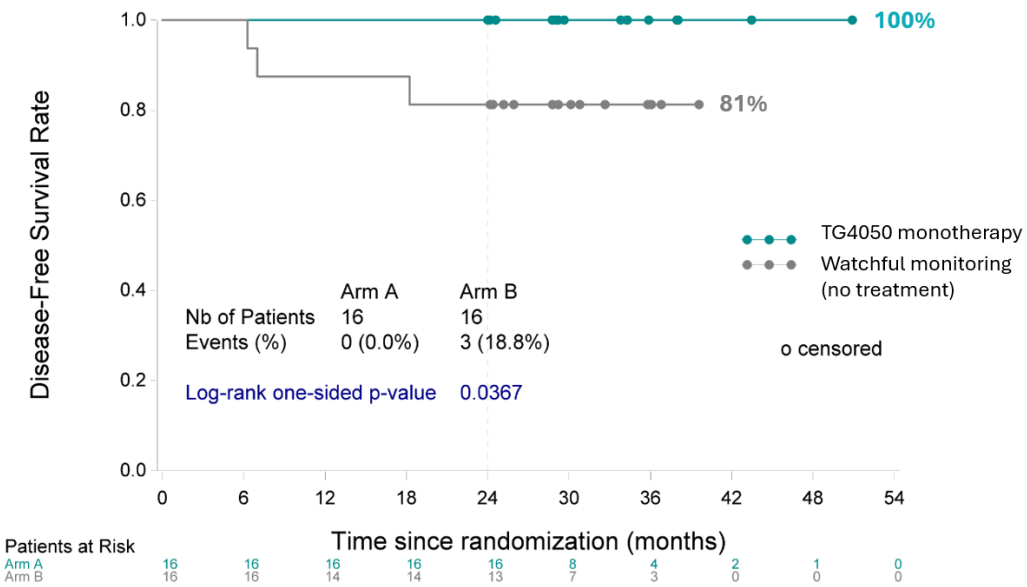
2025 ASCO ANNUAL MEETING

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myvac — TG4050 in HNSCC: The Platform's Lead Clinical Proof of Concept

Primary analysis (Phase 1 part)
2-year DFS

100% disease-free survival (DFS) at 2 years in treated patients (*vs 81% in watchful monitoring*)



73.3%
of treated patients showed neoantigen-specific T-cell responses (SITC 2025)

> 12 months
Effector and cytotoxic CD8 T-cell induction persisting over 12 months after treatment completion

Good safety profile

Follow up analysis

100% disease-free survival (DFS) maintained after **3+ years** in treated patients (**median follow up of 41 months**) *vs 81% in watchful monitoring*)

DFS (Disease-Free Survival)

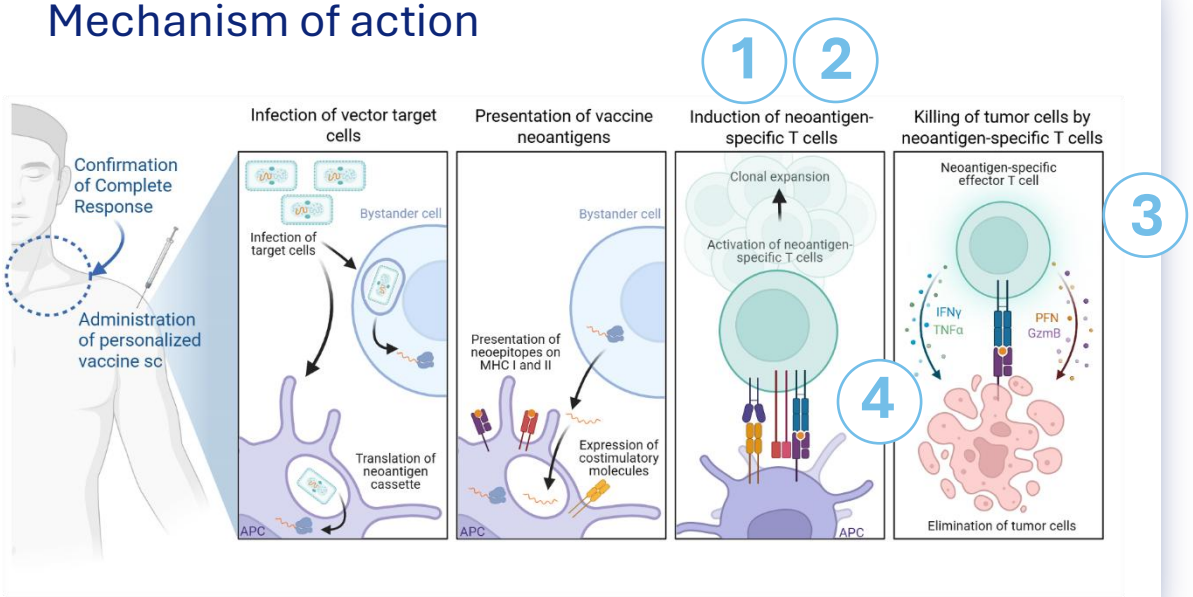
Source: C. Ottensmeier et al. A viral-based individualized neoantigen vaccine as adjuvant treatment in resected head and neck squamous cell carcinoma: a randomized Phase I trial. Nature Communications, 2026. (DOI: 10.1038/s41467-026-76667-1)

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TG4050 | HNSCC Phase 1 Data – Comprehensive Data Presented at SITC 2025

Key Findings

Mechanism of action



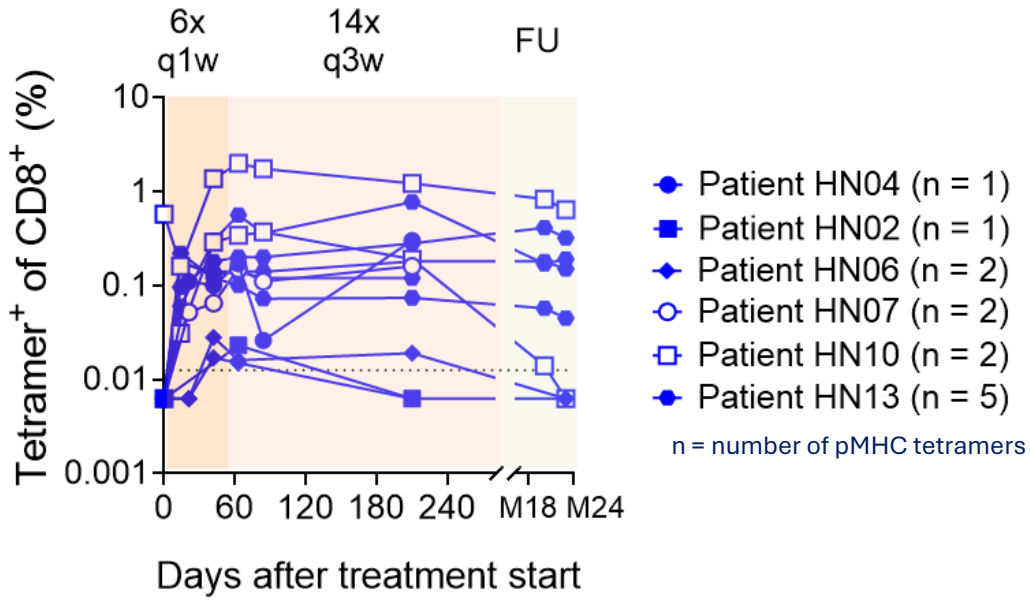
1. Induction of specific T cell responses ✓
2. Persistent T cell response ✓
3. Long-lasting effector and cytotoxic phenotype ✓
4. Expansion and diversification of T cell repertoire ✓

Demonstrate TG4050 mechanism of action ✓

TG4050 | HNSCC Ph. 1 Data – T Cell Response Persists Up to 12 Months after the End of Treatment

Specific Cellular Response with Durable Anti-Tumor Immunity

Persistent T cell response



Performed for all patients with reactive tetramers above 5/40,000 CD8 T cells at one time-point
Complete time-series was not available for all patients. All available time-points are shown

- Patients treated with TG4050 single agent develop **CD8 T cell responses against multiple vaccine neoantigens**

- **Sustained CD8 T Cell responses at 24 months**
  - Neoantigen-specific CD8 T cell responses to multiple vaccine epitopes
  - Responses persist over one year after the end of treatment (M24)

2025 ASCO ANNUAL MEETING

Source adapted from: C. Le Tourneau, ***"Randomized Phase I trial of adjuvant personalized cancer vaccine TG4050 in resected locally advanced head and neck squamous cell carcinoma (HNSCC) patients"***, ASCO - June 2025, rapid oral presentation

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TG4050

Building on Proof of Principle Data to Accelerate Development

Only INTV in early setting HNSCC

- ✓ Proof of principle obtained
- ✓ Excellent safety profile
- ✓ Induces broad T cell response
- ✓ Induces neoantigen-specific immune response
- ✓ **100% DFS after more than 3 years of follow-up in Ph. 1**

2026 – Q1 2028

Significant catalysts available to attract potential pharmaceutical partners

HNSCC Ph.1 part
- **H2 2027:** 4-year follow up (DFS)

HNSCC Ph. 2 part
- **H2 2026:** Preliminary immunogenicity data
- **By the end of Q1 2028:** Efficacy data (2-year DFS)

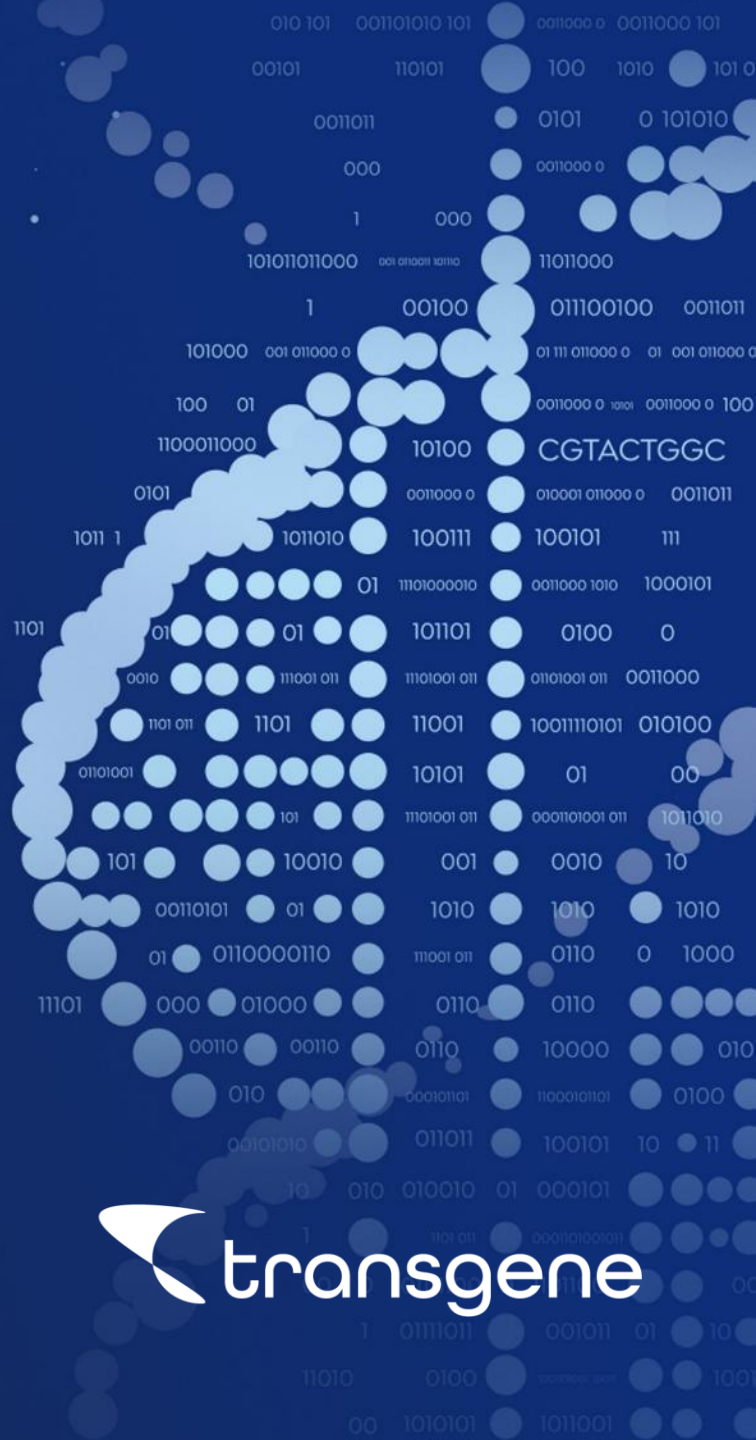
HNSCC potential Ph. 3 trial
- **End 2027:** Ready for Ph. 3 in HNSCC, incl. GMP manufacturing and FDA/EMA regulatory alignment
- Potential to transition to cell line manufacturing

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Potential to expand in other early-stage solid tumors and attract pharmaceutical partners (MNCs)

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TG4070: Expanding the Platform in Non-Small Cell Lung Cancer (NSCLC)



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TG4070 — Transgene's Innovative and Integrated Proprietary INTV Ecosystem

Controlling the Key Steps of Individualized Vaccine Development, Supporting Long-term Value Creation

Innovative building blocks to grow the value of the *myvac*® platform

Viral Vector: MVA

- Strongly immunogenic vector
- Established safety profile
- Large multi-antigen capacity
- Decades of MVA expertise

SNIPER

Specific Neoantigen Identification and Prediction of Elicited Response

- AI-based neoantigen identification tool
- Prediction and scoring

In-house control of critical step

VacDesignR®

In-house computational engine that optimizes the genetic design of the MVA vector

Improving reliability and quality

Scalable manufacturing

Cell-line process engineered for lead time, automation and scale across large indications

Robust process supporting next development steps

Patients & Partnering

Advancing in the clinic across tumor types to deliver life-changing outcome to patients

Potential to attract global pharmaceutical partners

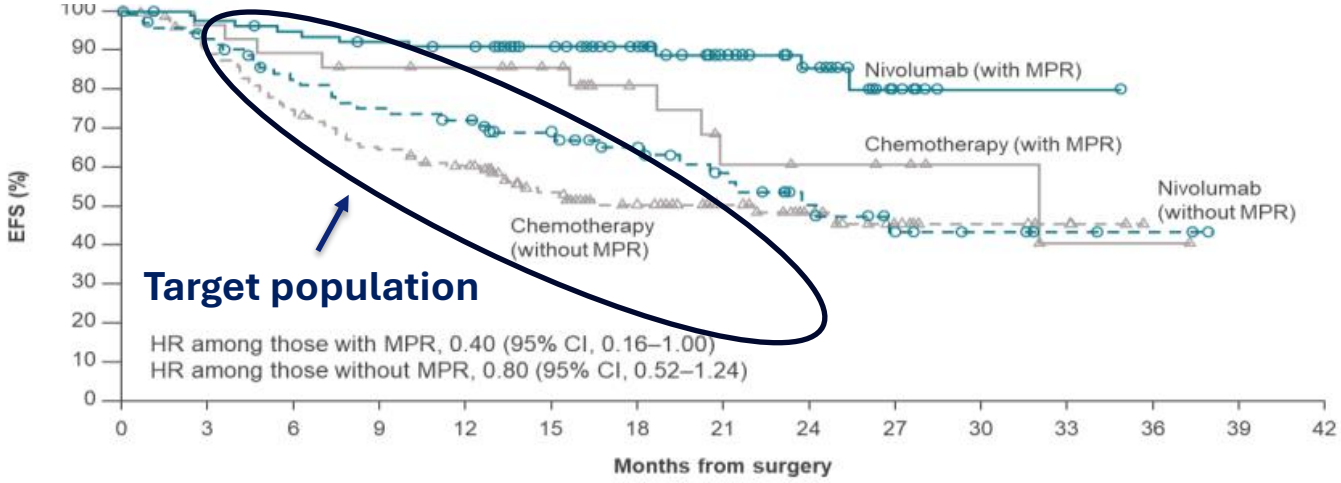
INTVs (Individualized Neoantigen Therapeutics Vaccines); MVA (Modified Vaccinia Ankara); AI (Artificial Intelligence).

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A High Unmet Medical Need For Patients That Do Not Respond Completely To Chemotherapy And ICI Based Neoadjuvant Treatment

≈25K patients / year
(EU, US, Japan)

CM77T, *NSCLC**



No. at Risk															
With MPR															
Nivolumab	81	76	73	70	68	59	47	34	22	6	1	1	0	0	0
Chemotherapy	28	27	25	23	22	19	13	8	6	5	3	1	1	0	0
Without MPR															
Nivolumab	75	65	55	50	46	40	33	24	15	10	6	3	2	0	0
Chemotherapy	131	113	95	81	73	52	38	28	19	11	7	5	0	0	0

65% of patients operated on for non-small cell lung cancer who do not show a major pathological response (MPR) after neoadjuvant chemo-immunotherapy relapse within the first 18 months**

Source: CheckMate 77T trial (NCT04025879) T. Cascone et al., NEJM 2024 (supplementary data)
***Disappearance of at least 90% of tumor cells*

TG4070 Could Improve Benefit for Resected Patients That Do Not Achieve MPR

1

COMBINATION REGIMEN: Potentially synergistic

TG4070 + nivolumab:
a complementary
therapeutic approach



- ✓ TG4070 boosts tumor-specific immune responses
- ✓ Nivolumab reactivates T cells by blocking the PD-1 pathway

2

MORE FAVORABLE IMMUNOLOGICAL CHARACTERISTICS

NSCLC known to better respond
to immunotherapy

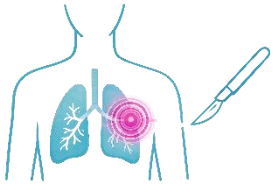


- ✓ High mutational burden
- ✓ Immunologically active (“hot”) tumor microenvironment

3

OBJECTIVE

Prevent relapse
after surgery



- ✓ Patients without MPR, representing a population at high risk of relapse

MPR = major pathological response

A Focused, Randomized Trial Design

TG4070.01 Phase 1 (≈30 patients) - EUCT 2025-520946-31-00

KEY ELIGIBILITY CRITERIA

- Resected stage II–IIIB(N2) NSCLC
- PD-L1 ≥1%
- No EGFR / ALK alteration
- Prior neoadjuvant chemo + nivolumab
- Complete (R0) resection
- No complete / MPR

SURGERY → **R 2:1**

ARM A N≈20 — **TG4070 + NIVOLUMAB**

— individualized vaccine manufactured for each patient; administered weekly for 6 weeks then q3w, in combination with nivolumab.

Stratified by PD-L1 (1–49% vs ≥50%), histology, stage (II vs III), center.

ARM B N≈10 — **NIVOLUMAB ALONE**

— active comparator

Nivolumab 360 mg IV q3w

PRIMARY ENDPOINT

- Safety & tolerability of the combination of TG4070 + nivolumab

KEY SECONDARY ENDPOINTS

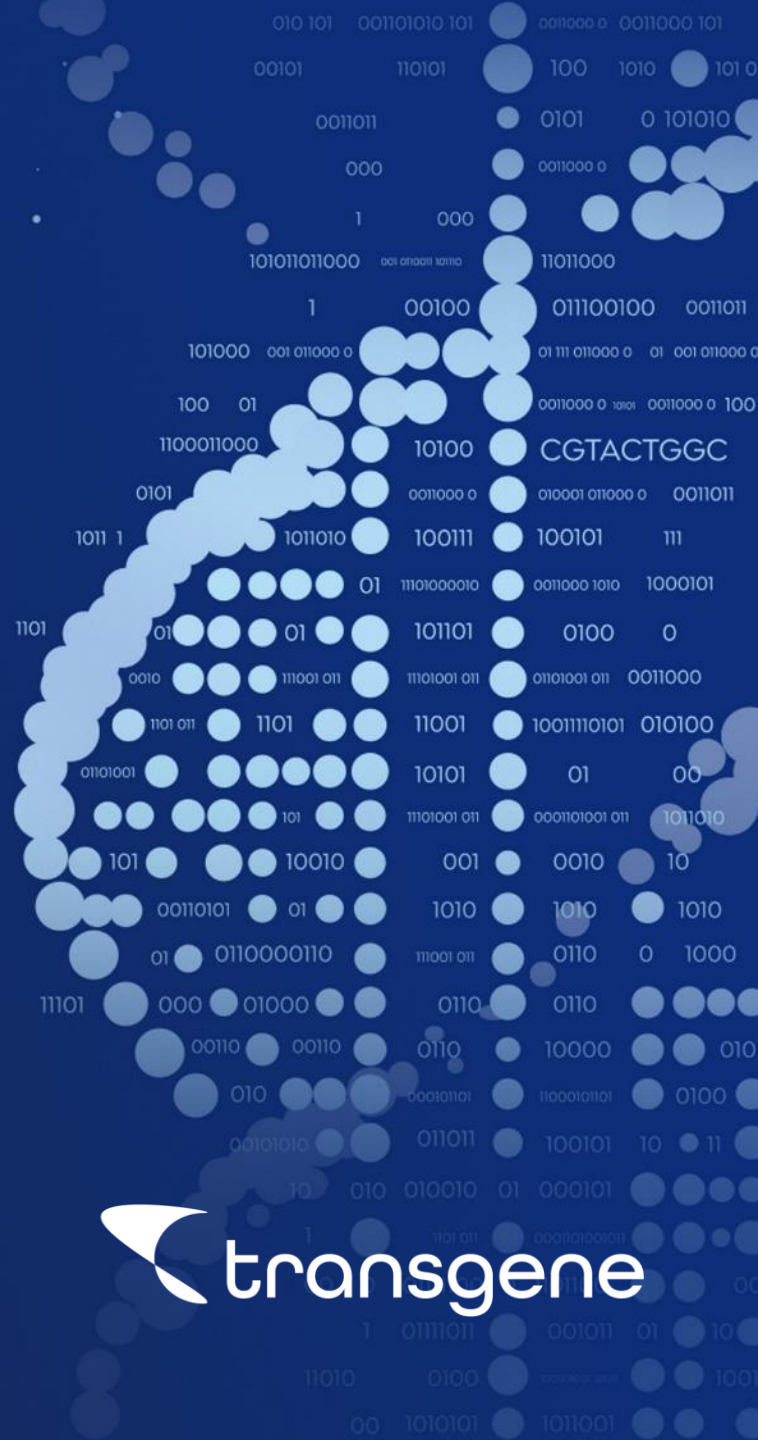
- EFS at 18 months

- Sites initiation completed. Patient screening underway

R (Randomization); q3w (every 3 weeks); IV (Intravenous); PD-L1 (Programmed Death-Ligand 1); MPR (Major Pathological Response); EGFR (Epidermal Growth Factor Receptor); ALK (Anaplastic Lymphoma Kinase); EFS (Event-Free Survival).

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The MonkeyPox Opportunity
TG-MVA



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MVA Cell Line Manufacturing: Driving Platform Value

Decades of Waning Immunity and Limited Manufacturing Capacity Below Recurrent Needs

Creating a modern, cost effective and scalable MVA-cell-line based platform

- Cell-line production
- Better efficacy
- Scalable manufacturing

→ myvac

Individualized Therapeutic Vaccine Platform

Transgene's lead asset and main value creation driver

→ TG-MVA

Novel prophylactic vaccine against smallpox & mpox

Opportunity to generate upside with limited risk

Scalable platform beyond orthopox viruses

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Mpox/smallpox: Structural, Recurring Public-health & Biosecurity Threats

Decades of Waning Immunity Meet Supply Capacity Below Recurrent Needs

Loss of collective immunity

Routine smallpox vaccination stopped in the 1980s — most people under ~45 are immunologically naïve to orthopoxviruses

Endemic & recurring

Persistent zoonotic reservoirs in Sub-Saharan Africa make eradication unrealistic; mpox is a structurally recurrent threat

Top-priority biosecurity

Mpox & smallpox rank among prioritized threats for HERA, CEPI, BARDA & CDC (smallpox = Category A agent)

Concentrated supply

One dominant supplier; stockpiles in EU & US still under replenishment and below pandemic needs

~450M

orthopox-naïve people in EU + US

>1B

orthopox-naïve people in Africa

Sources for EU/US: 1. US census bureau, population data 2. Eurostat population data;
Sources for Africa: 3. UN-DESA URPAS population data; 4. WHO

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TG-MVA | Building Next Line of Biosecurity Against Pox-Diseases

Transgene's Optimized Cell Line Process Enhances Safety, Scalability and Robustness

MVA, an ideal platform for immunogenicity

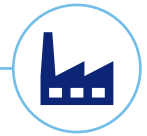


Non-replicating pox vaccine built on a viral backbone similar to reference platform

Designed to protect against mpox, smallpox and disease caused by vaccinia virus

2-dose schedule enabling durable protection without boosters

Cost-Effective high-volume solution enabled by cell-line manufacturing



Scalable

Lower COGS enabled by cell-line production

Freeze-dried/ lyophilized formulation enabling long-term stockpiling and easier transportation/storage

Overcoming ethical and industrial limits of CEF[1] production

EU to start, US to expand



Part of a broader European ecosystem, combining EU-based CDMO and CROs with public and institutional scientific collaborations

Flexible EU approval based on epidemic context

LMIC[2]: Optimized for global access & high-need regions



Stable, low-COGS product with flexible fill-finish for broad deployment

Easily transferable manufacturing enabling regional production

1. CEF = chicken embryo fibroblast 2. LMIC = Low- and middle-income countries

TG-MVA | Preclinical Data Demonstrates Efficacy, Immunogenicity and Safety Comparable to Reference Vaccine Against Mpox

$TG\text{-}MVA_{CL}$ — a next-generation candidate for clinical development

EFFICACY

Strong protection against lethal mpox

- **100% survival** in mice
- **7/8 survival** in non-human primates
- **Markedly reduced skin lesions** vs unvaccinated controls
- **Attenuated viral burden** in blood and throat

IMMUNOGENICITY

Broad humoral & cellular response

- **Neutralizing antibodies** vs VACV and MPXV (clades I & II)
- **Seroconversion in all** vaccinated animals (peak ~D42)
- **Detectable T-cell immunity** (ELISpot)
- **Comparable to reference vaccine** in magnitude and kinetics

SAFETY

Favorable and comparable profile

- **Comparable safety** to reference vaccine
- **Slight-to-mild, transient** local reactogenicity
- **Consistent** with the established MVA safety profile

Innovative cell line manufacturing ($TG\text{-}MVA_{CL}$):
- Proof of concept of the MVA platform;
- Scalable, reproducible & transferable process;
- Manufacturing change **did not impact potency or safety.**

Next development steps will be planned in alignment with Health Authorities

Source: Nathalie Silvestre, "Robust Protection Against Monkeypox Virus Mediated By a Novel Cell-Line-Derived MVA Vaccine (TG-MVACL)", WCID – June 2026

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Outlook



Why Invest in Transgene Now?

INTV

Transgene is a key player in the rapidly emerging individualized cancer immunotherapy field

HNSCC: PROOF OF CONCEPT DATA

ICI: Immunotherapy now plays a key role in the treatment of resected H&N patients, but a significant medical need remains

TG4050
Randomized Phase 1 data featured in rapid oral presentation at ASCO 2025: 100% 2-year DFS, maintained more than 3 years of follow-up.

STRATEGIC & CLINICAL DEVELOPMENT WINDOW for *myvac*® just opened

Transgene is the only company in HNSCC with TG4050

- Positive randomized Phase 1 data
- Ongoing Phase 2 part: Preliminary immunogenicity data in H2 2026; 2-year DFS by March 2028
- High interest from head & neck medical community to plan a Phase 3 trial

Phase 1 in NSCLC with TG4070 – sites initiation completed

Scalable manufacturing on track for Phase 3

Broad applicability of myvac platform in early-stage treatment of solid tumors



MPOX OPPORTUNITY

Potential upside to value creation
Preclinical data and business case support progress into clinic

COMPANY FUNDED UNTIL EARLY 2028

Dense news flow expected through to Q1 2028

POTENTIAL MULTI BILLION MARKETS

Expected to be driven by a few players, at the crossroad of immune checkpoint inhibitors and CAR-T cells

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Appendices

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TG4050 | HNSCC Phase 1 Data – Induction of Specific Immune Response

Circulating T Cell Responses to Vaccine Neoantigens

Induction of specific T cell responses

Overall neoantigen-specific responses detected at D64
by ELISpot and/or tetramer

Arm	Patient ID	Vaccine neoantigens	Neoantigens responding by ELISpot	Responding Tetramer	Overall responding neoantigens
A	HN01	26	Not tested	1/23	1
A	HN16	30	Not tested	1/11	1
A	HN17	30	0/30	0/20	0
A	HN02	27	3/27	1/12	4
A	HN04	30	1/30	1/9	1
A	HN05	30	Not tested	Not tested	N/A
A	HN06	30	1/30	2/12	3
A	HN10	30	1/30	2/12	3
A	HN14	30	1/30	0/5	1
A	HN15	17	0/17	0/4	0
A	HN07	30	2/18	2/19	3
A	HN08	30	0/30	1/18	1
A	HN09	30	0/30	0/16	0
A	HN18	30	Not tested	Not tested	N/A
A	HN11	30	7/30	0/29	7
A	HN12	30	0/30	Not tested	0
A	HN13	30	16/30	5/18	16
B	HN19	30	Not tested	0/10	0
B	HN03	30	Not tested	2/33	2

Arm A
11/15
responders
(73.3%)

No response
Stable
Amplified
De novo

Color coding based on best response for each patient

Two complementary approaches, at Baseline and D64
- Ex vivo IFN-γ ELISpot: detects both CD4 and CD8 T cell responses
- Peptide-MHC class I tetramers: detects specific CD8 T cell

Performed for all patients with available samples

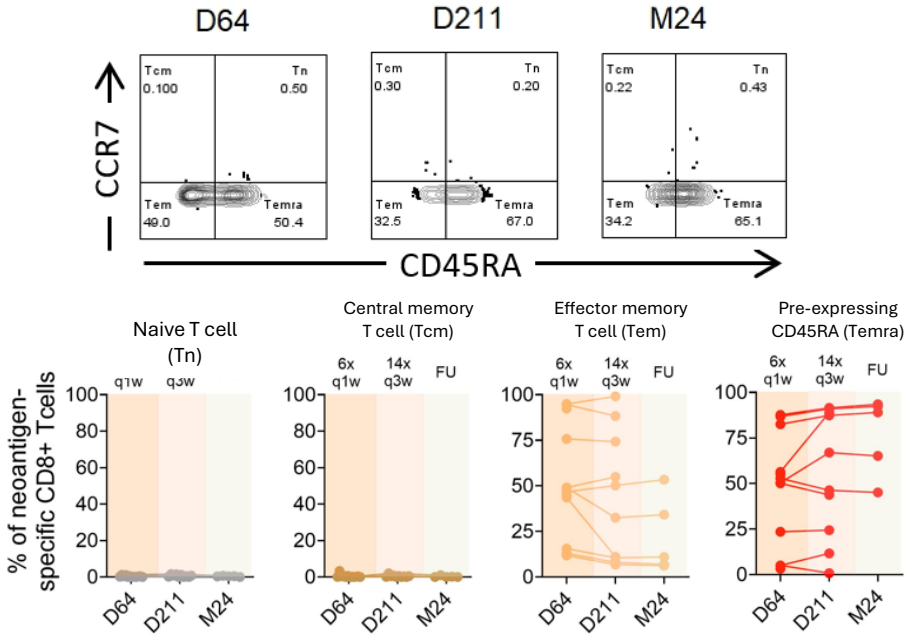
- TG4050 **primed and amplified** circulating T cell responses to **multiple vaccine-encoded neoantigens**
- **Neoantigen-specific T cell responses were found in the majority (73.3%) of Arm A patients** by *ex vivo* IFN-γ ELISpot without pre-expansion step and/or peptide MHC-I tetramer
- **Neoantigens predicted are immunogenic**

Source: C. Le Tourneau, **"Profiling of the neoantigen-specific T cell response after adjuvant TG4050 individualized therapeutic vaccination in a randomized Phase I trial for locally advanced resected HPV-negative HNSCC"**, SITC – Nov. 8, 2025, poster presentation

TG4050 | HNSCC Ph. 1 Data – Effector and Cytotoxic Profile of T Cell Response

Long-lasting effector and cytotoxic phenotype

Phenotype of neoantigen-specific CD8 T cells

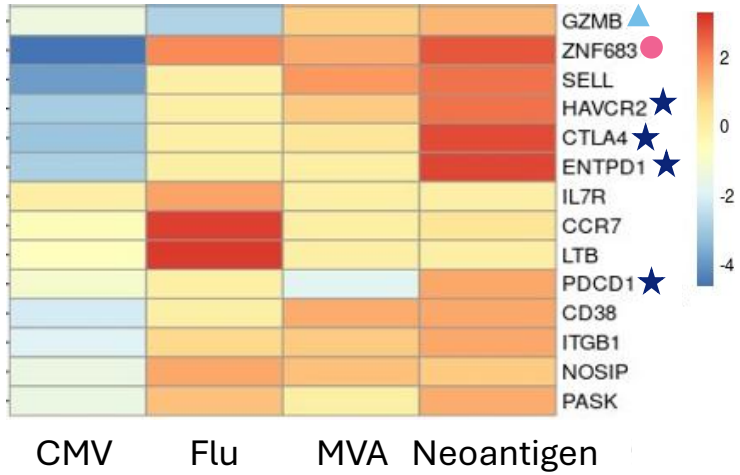


Performed for all patients in longitudinal tetramer analysis
Complete time-series was not available for all patients. All available time-points are shown

Neoantigen specific T cells have a **long-lasting effector phenotype** (Tem and Temra) after TG4050 treatment

Source: C. Ottensmeier et al. A viral-based individualized neoantigen vaccine as adjuvant treatment in resected head and neck squamous cell carcinoma: a randomized Phase I trial. Nature Communications, 2026. (DOI: 10.1038/s41467-026-76667-1)

Transcriptomic signatures of neoantigen-specific vs control CD8 T cells



Performed for 4 patients, total of 10 neoantigens

Neoantigen-specific CD8 T cells have:

- Cytotoxic T cell-like signatures (▲) indicating tumor killing potential
- Tissue-resident marker (●), suggesting these cells can home to and egress tissues
- Higher expression of antigen experience markers commonly associated with tumor-specific T cells than control virus-specific CD8 T cells (★)
- CMV and flu in the same patients are used as controls to evaluate the specific features of treatment-induced T cells

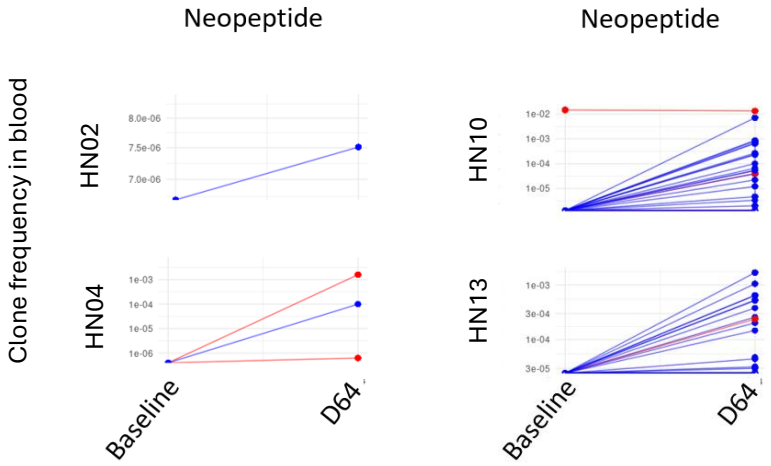
Less than 15% of cells had signatures of exhaustion and dysfunction

TG4050 | HNSCC Ph. 1 Data – Expansion and Diversification of T Cell Repertoire

TG4050 Recalls Tumor Infiltrating T Cell Clones

Expansion and diversification of T cell repertoire

Clonality of neoantigen-specific CD8 T cells



Each line is one neoantigen-specific T cell clone

Each red line is a neoantigen-specific T cell clone found in the tumor pre-treatment

Performed for patients in scRNAseq analysis

- Neoantigen-specific CD8 T cells responses were:
  - **Polyepitopic and polyclonal**
  - Included both **novel** T cell clones and **recall** from tumor-infiltrating T cell clones

- Such responses confirm relevance of the selected neoantigens **for anti-tumor immunity**

Source: C. Ottensmeier et al. A viral-based individualized neoantigen vaccine as adjuvant treatment in resected head and neck squamous cell carcinoma: a randomized Phase I trial. Nature Communications, 2026. (DOI: 10.1038/s41467-026-76667-1)

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TG4050 | Good Safety Profile, No Related SAEs

	Adjuvant TG4050 (N=17)	**TG4050 at recurrence** (N=3)
Patients with at least one AE related to TG4050, n (%)	16 (94%)	2 (67%)
Dose-limiting toxicity	0	0
SAE	0	0
Grade 3-5 AEs	0	0
Grade 1/2 AEs related to TG4050		
Injection site reaction	16 (94%)	1 (33%)
Rash	2 (12%)	0
Fatigue	2 (12%)	0
Influenza-like syndrome	2 (12%)	0
Diarrhea	2 (12%)	0
Lymphopenia	0	1 (33%)
Headache	1 (6%)	0
Alkaline phosphatase increase	0	1 (33%)

2025 ASCO ANNUAL MEETING

Source: C. Le Tourneau, "**Randomized Phase I trial of adjuvant personalized cancer vaccine TG4050 in resected locally advanced head and neck squamous cell carcinoma (HNSCC) patients**", ASCO - June 2025, rapid oral presentation

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TG4050 | Phase 1 Data – Challenging population with relatively low TMB and poor pro-immune infiltrates

Arm A: TG4050 single agent

PD-L1	TMB (mt/Mb)	TME functional class	Tumor cell proliferation
Medium	3.19	Immune Desert	Medium
Medium	1.99	Immune Desert	Low
Medium	4.34	Imm. Enriched, NF	Medium
Low	3.28	Immune Desert	Medium
Medium	3.42	Immune Desert	Medium
Medium	1.9	Imm. Enriched, NF	Low
Medium	3.16	Fibrotic	Medium
Low	4.2	Immune Desert	Medium
Medium	1.99	Imm. Enriched, F	Low
Medium	4	Imm. Enriched, NF	Low
High	1.37	Imm. Enriched, NF	Medium
Low	2.41	Immune Desert	High
Low	3.05	Immune Desert	Medium
Medium	7.7	Imm. Enriched, F	Medium
Medium	1.68	Imm. Enriched, NF	Medium
Medium	1.46	Immune Desert	Low

Arm B: Control arm

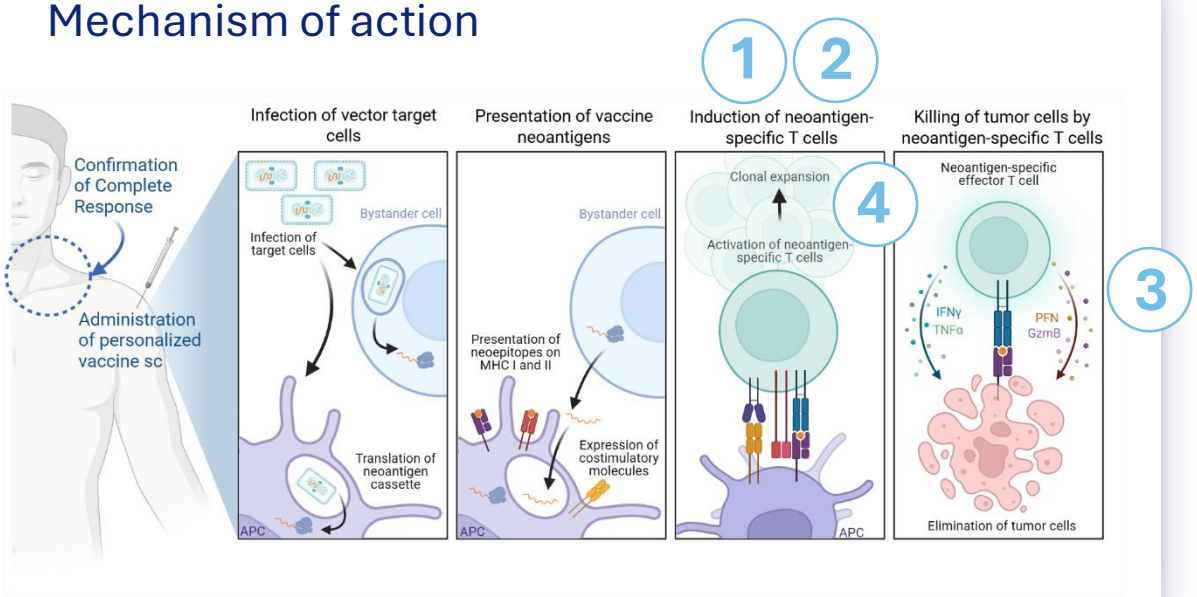
PD-L1	TMB (mt/Mb)	TME functional class	Tumor cell proliferation
Medium	3.02	Immune Desert	Medium
Medium	1.6	Immune Desert	Medium
Low	4.26	Immune Desert	Medium
Medium	3.02	Immune Desert	Medium
Medium	3.36	Immune Desert	Medium
High	3.28	Imm. Enriched, NF	High
Low	3.64	Immune Desert	Medium
Medium	7.95	Fibrotic	Low
Medium	1.9	Immune Desert	Medium
Medium	0.34	Immune Desert	Medium
Medium	2.77	Immune Desert	Medium
Medium	5.24	Immune Desert	Low
Medium	2.91	Imm. Enriched, NF	Medium
Medium	0.03	Imm. Enriched, NF	Medium
Low	2.1	Immune Desert	Medium
Medium	3.56	Immune Desert	Medium

Source: G. Le Tourneau *et al.*, **"Randomized Phase I Trial of Adjuvant Individualized TG4050 Vaccine in Patients with Locally Advanced Resected HPV-negative Head and Neck Squamous Cell Carcinoma (HNSCC)"**, SITC November 2024, Poster presentation

TME: tumor micro-environment, TMB: tumor mutational burden, F: fibrotic, NF: non-fibrotic

TG4050 | HNSCC Phase 1 Data – Comprehensive Set of Data to Assess Induction of Immune Response

Mechanism of action



Addressing the proposed mechanism of action through comprehensive immune profiling

1 T cell response quantification

Two complementary methods, at Baseline and D64 | *Ex vivo* IFN-γ ELISpot & Peptide-MHC class I tetramers
All patients with available samples

2 Persistence of T cell response

Longitudinal monitoring of CD8 T cell responses from D15 to M24, one year after the end of treatment | Peptide-MHC class I tetramer
6 patients with reactive tetramers, total of 12 neoantigens

3 T cell response functional profile

- **Effector phenotype** | Flow cytometry
  6 patients with reactive tetramers, total of 14 neoantigens
- **Transcriptomic profiling at D64** | Single cell RNA sequencing
  4 patients with reactive tetramers, total of 10 neoantigens

Controls related to treatment (MVA) and unrelated viral infections (CMV, flu) from the same patients included for comparison

4 T cell response origin

- **TCR sequencing in the blood at Baseline and D64** | Sequencing and comparison with tumor-infiltrating T cell repertoire before surgery
  Same 4 patients analyzed by scRNAseq, total of 10 neoantigens

NEC Neoantigen Prediction Pipeline can Identify Immunogenic Neoantigens

Initial step in neoantigen discovery

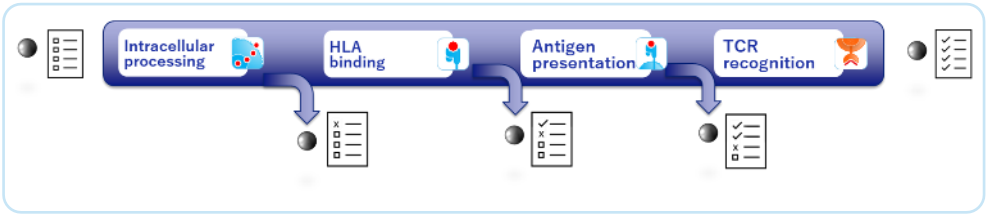
Each tumor-specific mutation is detected in patient's DNA from NGS data.

Expression of neoantigen in tumor

Only mutations from altered genes **expressed** in the tumor are kept.

Predicting immunogenic peptides

Each peptide is evaluated using multiple models and filtering steps that mimic the biological process resulting in multiple **prediction scores.**



Identifying immunogenic neoantigens?

The final scoring and ranking takes into account all the **weighted prediction scores, gene expression** and **mutation frequency** to determine the most immunogenic neoantigen candidates by a final model.

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SNIPER — An AI-Based Expertise Developed by Transgene

A Neoantigen Selection Tool

SNIPER
Specific Neoantigen Identification and Prediction of Elicited Response

1. Mutation Identification

Tumor-specific mutations are identified by comparing the tumor genome (DNA) with the patient's normal-cell genome.

2. Mutation Selection

Only recurrent mutations affecting genes expressed in the tumor are selected.

3. Immunogenicity Prediction

Bioinformatics models integrating tumor data and antigen presentation features enable the selection of neoantigens with high immunogenic potential.

4. Ranking

A proprietary scoring system ranks identified neoantigens according to their characteristics and predicted immunological potential.

AI (Artificial Intelligence); DNA (Deoxyribonucleic Acid)

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A GMP Manufacturing Facility Able to Produce Individualized Clinical Batches

Developing an Efficient, Scalable Production Process



In house GMP facility

Approved by Health Authorities

Enhanced DS/DP manufacturing capabilities including automated filling step



Cell line-based manufacturing

Able to deliver individualized immunotherapy products for international ad multicentric clinical trials

HA approved second manufacturing site (CDMO) allowing enhanced manufacturing flexibility / capabilities



Current turnaround time

In line with therapeutic indication and patient needs

Lead time reduction plan implementation is on track with initial data showing promising results



Cell line process

Easy to industrialize and implement automatization

Improved lead time efficiency

First Phase 1 trial to start soon

CEF: Chicken embryo fibroblast

Manufacturing Designed to Scale the Platform

Advancing to a Scalable Cell Line Process

CEF (chicken embryo fibroblast)

- Validated process supplying ongoing trials
- Lead time aligned to indication
- Less suited for large-scale indications

Avian cell line

- Suspension, serum-free, highly permissive to MVA
- Improved robustness — enabling shorter turnaround times critical for individualized products
- Easy to industrialize & automate; readily scalable

Continuity with existing data

Preclinical data show comparable performance between the cell-line process and CEF-based production — preserving continuity with existing clinical experience while enhancing scalability.

In-house GMP facility approved by Health Authorities + an approved second (CDMO) site for added flexibility and capacity.

Potential for value creation

Scalable

Capacity grows with demand across large oncology indications.

Faster lead time

Shorter patient-to-patient turnaround for individualized supply.

Automatable

Process designed for automation and reliable, reproducible output.

Transferable

Modular scale-out across a global Manufacturing network — no single-site bottleneck.

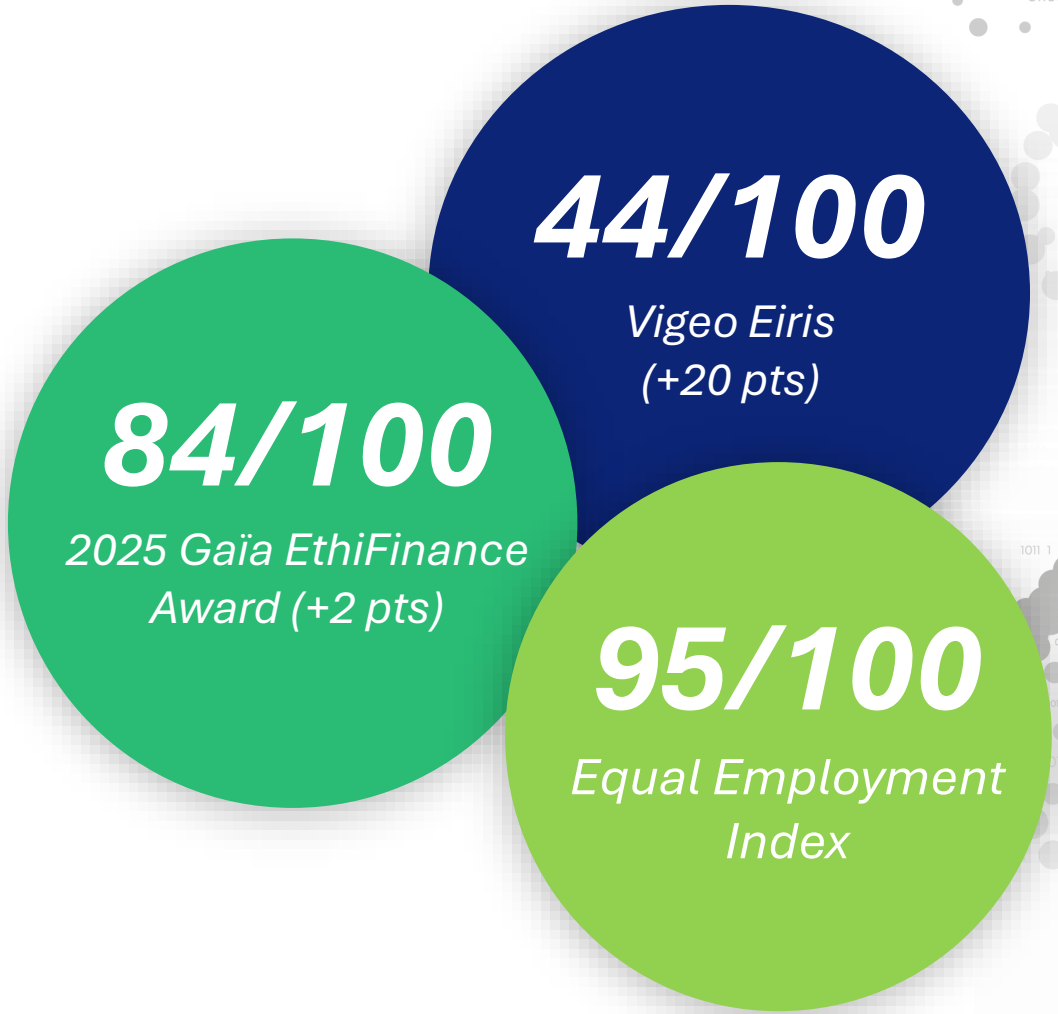
Environmental, Social and Governance Commitments

Transgene's **ESG** strategy is based on 6 commitments

- To **patients**
- To our **partners**
- To our **employees**
- To our **shareholders** and **investors**
- To **society** and the **regions**
- To the **planet**

Our ESG policy is detailed in the chap. 4 in the URD 2025

URD 2025





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