Corporate Presentation

Cell-based platform providing durable and safe treatments for solid tumors

September, 2022

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FORWARD-LOOKING STATEMENTS

This presentation contains forward-looking statements. In some cases, you can identify forward-looking statements by terminology such as "may," "will," "should," "expects," "plans," "anticipates," "believes," "estimates," "predicts," "potential" "intends" or "continue," or the negative of these terms or other comparable terminology. All statements other than statements of historical facts contained in the presentation, such as statements regarding our potential future results of operations and financial position, prospective product candidates, availability of future funding, anticipated clinical trial results, timing of possible product approvals and expected regulatory pathways, future potential collaborations and matters concerning the timing and likelihood of success of plans and objectives of management for future operations, are forward-looking statements. Any such forward-looking statements are based on our current expectations and beliefs, as well as assumptions concerning future events. These statements involve known and unknown risks, uncertainties and other factors that could cause such matters to differ materially from those discussed in such forward-looking statements. We discuss many of these risks in our filings from time to time with the U.S. Securities and Exchange Commission, including under the heading "Risk Factors" in such documents. You should not rely upon forward-looking statements as predictions of future events.

Although we believe that the expectations reflected in the forward-looking statements are reasonable, we cannot guarantee future results, levels of activity, performance, or achievements. Except as required by law, we are under no duty to update or revise any of the forward-looking statements, whether as a result of new information, future events or otherwise, after the date hereof.

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EXPERTISE IN GENE THERAPY, DRUG DEVELOPMENT AND FINANCE

PIERLUIGI PARACCHI
Co-Founder, CEO

- >$200MM raised in Venture Capital (VC)
- Co-founder & Board member **Altheia Science**. Consultant to **Sofinnova**. Founder & CEO of **Quantica SGR**, Co-founder **Axòn Grp**; VC Partner **AurorA Science**

LUIGI NALDINI
Co-Founder, Exec. Chair SAB

- "Father" of Lentiviral Gene Therapy
- Director **SR-Tiget**, Professor of Cell and Gene Therapy at **San Raffaele University**

CARLO RUSSO
CMO, Head of Development

- Former **GSK** Head of R&D Rare Disease Unit; Head of Devel. R&D Biopharm Unit
- Former **Merck** Head of Regulatory for New Vaccines, including Gardasil and Rotateq

RICHARD B. SLANSKY
CFO

- 30+ years life science executive experience including at **Genmark** and **CN Biosciences**
- Raised $500MM+ in equity and debt capital in public and private offerings

TIM OBARA
Head of Business Development

- 30+ years life science executive experience
- Senior BD, Strategy, Commercial and CMC roles at **Merck**, **GSK**, **AZ**, **Amicus** and **Univ of Penn** Gene Therapy Program

STEFANIA MAZZOLENI
Scientific Project Mgr & Comms Officer

- 15+ years experience in R&D, oncology and project management, in both academia and industry

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AGENDA

HIGHLIGHTS AND PIPELINE
MECHANISM OF ACTION
DATA AND DEVELOPMENT STRATEGY
NEXT STEPS

HIGHLIGHTS
Transformative Cell Therapy Platform for Solid Tumors

Proprietary platform to provide durable and safe treatments for solid tumors	• **One-time cell therapy** designed to enable **sustained targeted expression** of therapeutic payload **inside the TME[1] minimizing systemic toxicity** • **Tumor and antigen agnostic**; potential for broad combination use
Generating clinical proof of concept for breaking immune tolerance	• Lead product candidate precisely delivers IFN-α to the tumor microenvironment aiming to **break immune tolerance** • **Phase 1/2a** updates in glioblastoma multiform (GBM) through 2022: **favorable initial biological data** with **no drug limiting toxicities**
Solid funding and partnerships to take to next stage	• **Cash runway into 2024**; no debt, no warrants • Targeting Phase 2 in 2023 in GBM • Research engine through partnership with **SR-TIGET[2]**

[1] *TME: tumor microenvironment*

[2] *SR-TIGET is a world leading cell and gene therapy institute founded by San Raffaele Research hospital, a co-founder and key shareholder of Genenta, and non-profit organization Telethon*

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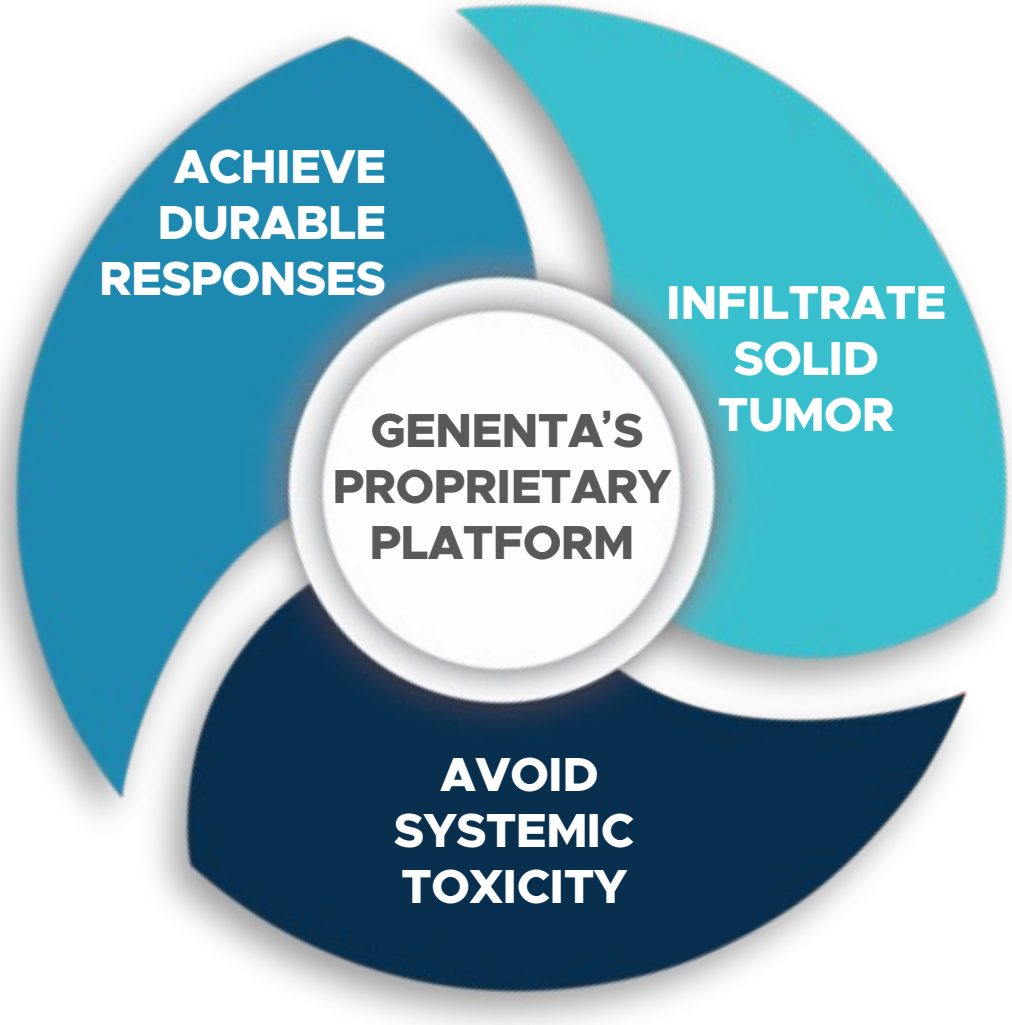
CELL THERAPY PLATFORM TO ADDRESS UNMET IMMUNO-ONCOLOGY NEEDS

ENABLE A DURABLE THERAPEUTIC POTENTIAL

Engineering of hematopoietic stem and progenitor cells (HSPCs) creates a living drug stable reservoir that may ensure a durable response



DELIVER TREATMENTS TO SOLID TUMOR AND BREAK TUMOR INDUCED TOLERANCE

Tie2+ expressing monocytes (TEMs), naturally recruited by growing tumors, infiltrate and deliver the payload

LIMIT EXPRESSION OF THERAPEUTIC TO TUMOR MICROENVIRONMENT

Proprietary transgene expression technology designed to ensure precise intra-tumor expression of payload therapy avoiding systemic toxicity

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PIPELINE: ADVANCING A CELL-BASED PLATFORM PORTFOLIO

TEMFERON™

PAYLOAD	INDICATION	DISCOVERY	CTA/IND-ENABLING	PHASE 1/2a
IFN-α	**Glioblastoma Multiforme** (TEM-GBM_001)			
	Solid Tumor			
	Combinations: CAR-T or ICI or TCR Solid and Hematologic Tumors			

TEMs PLATFORM

TECHNOLOGY	INDICATION	DISCOVERY	CTA/IND-ENABLING	PHASE 1/2a
Undisclosed payload	Solid Tumor			

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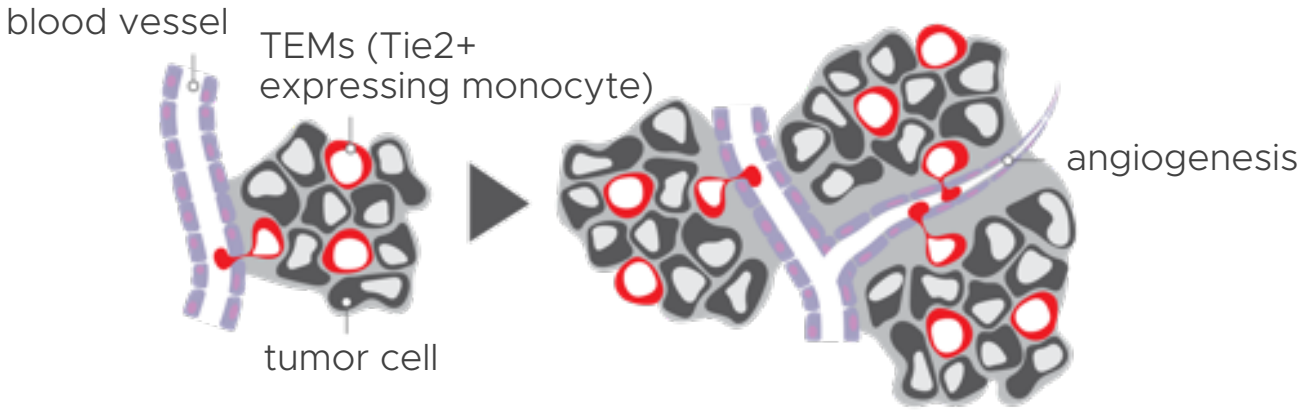
HIGHLIGHTS AND PIPELINE

MECHANISM OF ACTION

DATA AND DEVELOPMENT STRATEGY

NEXT STEPS

TEMFERON DESIGNED TO DELIVER IFN-α IN THE TUMOR MICROENVIRONMENT TO BREAK IMMUNE TOLERANCE

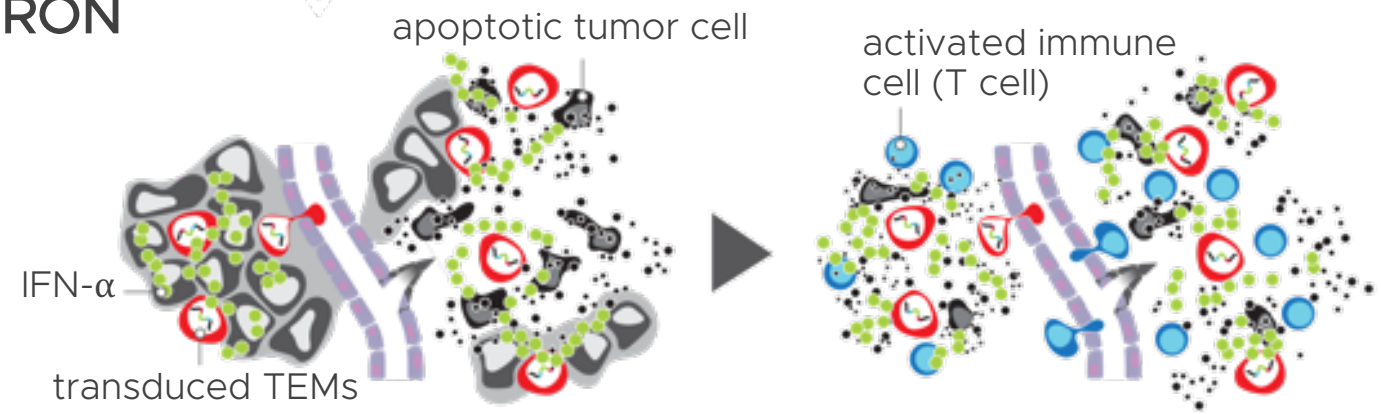


TEMs* are natural tumor infiltrating monocytes associated with angiogenesis in tumors

WITHOUT TEMFERON

WITH TEMFERON

IFN-α targets tumor proliferation via anti-angiogenic impact and reprogramming the immune system



De Palma et al., Cancer Cell, 2008; Gentner et al., Sci Transl Med, 2010; Escobar et al., Sci Transl Med, 2014; Catarinella et al., EMBO Mol Med, 2016; Escobar et al., Nat Commun, 2018

* TEMs are a subset of TAMS, tumor associated macrophages

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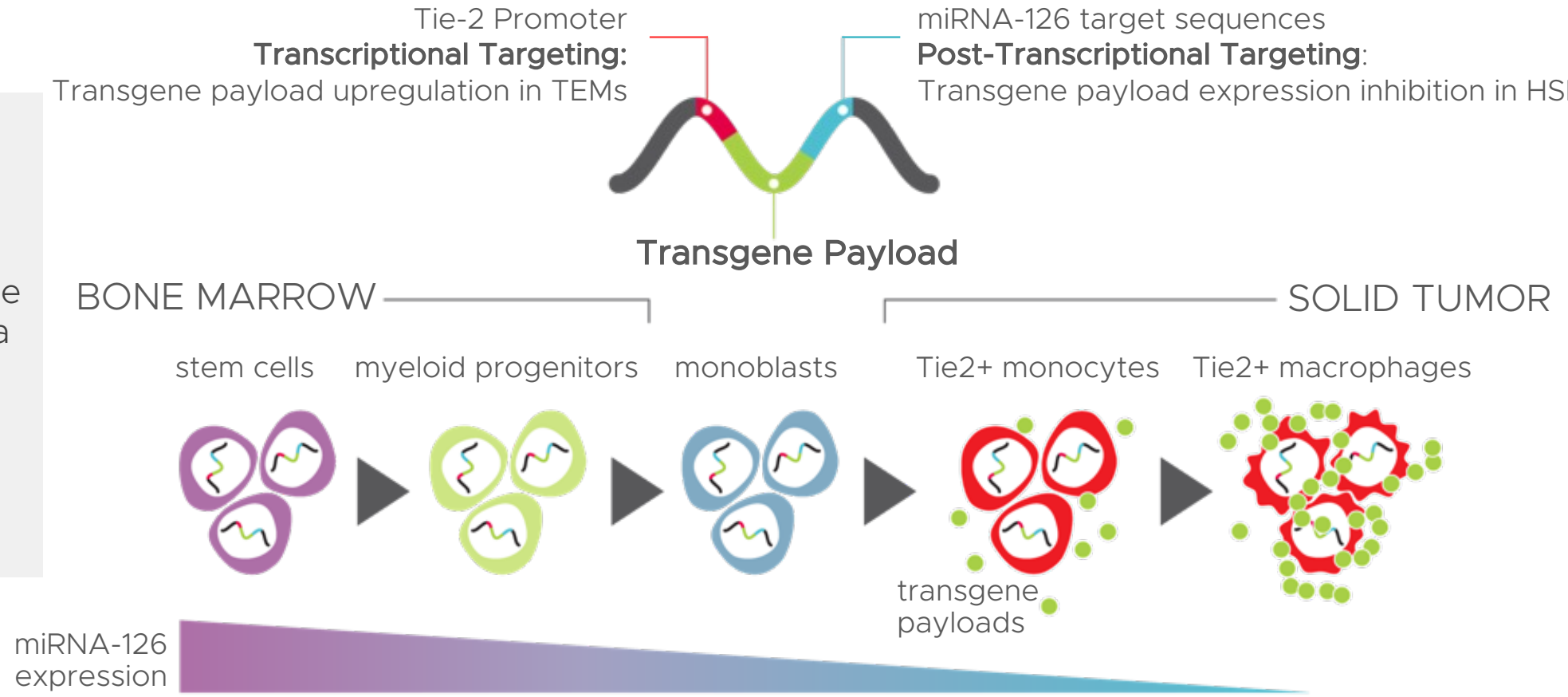
PROPRIETARY TRANSGENE TECHNOLOGY DESIGNED TO ENABLE DURABLE, CONTROLLED INTRA-TUMOR PAYLOAD EXPRESSION

Interaction of miRNAs with their miRNA-targets regulates gene expression via mRNA degradation and translational repression



De Palma et al., Cancer Cell, 2008; Gentner et al., Sci Transl Med, 2010; Escobar et al., Sci Transl Med, 2014; Catarinella et al., EMBO Mol Med, 2016; Escobar et al., Nat Commun, 2018

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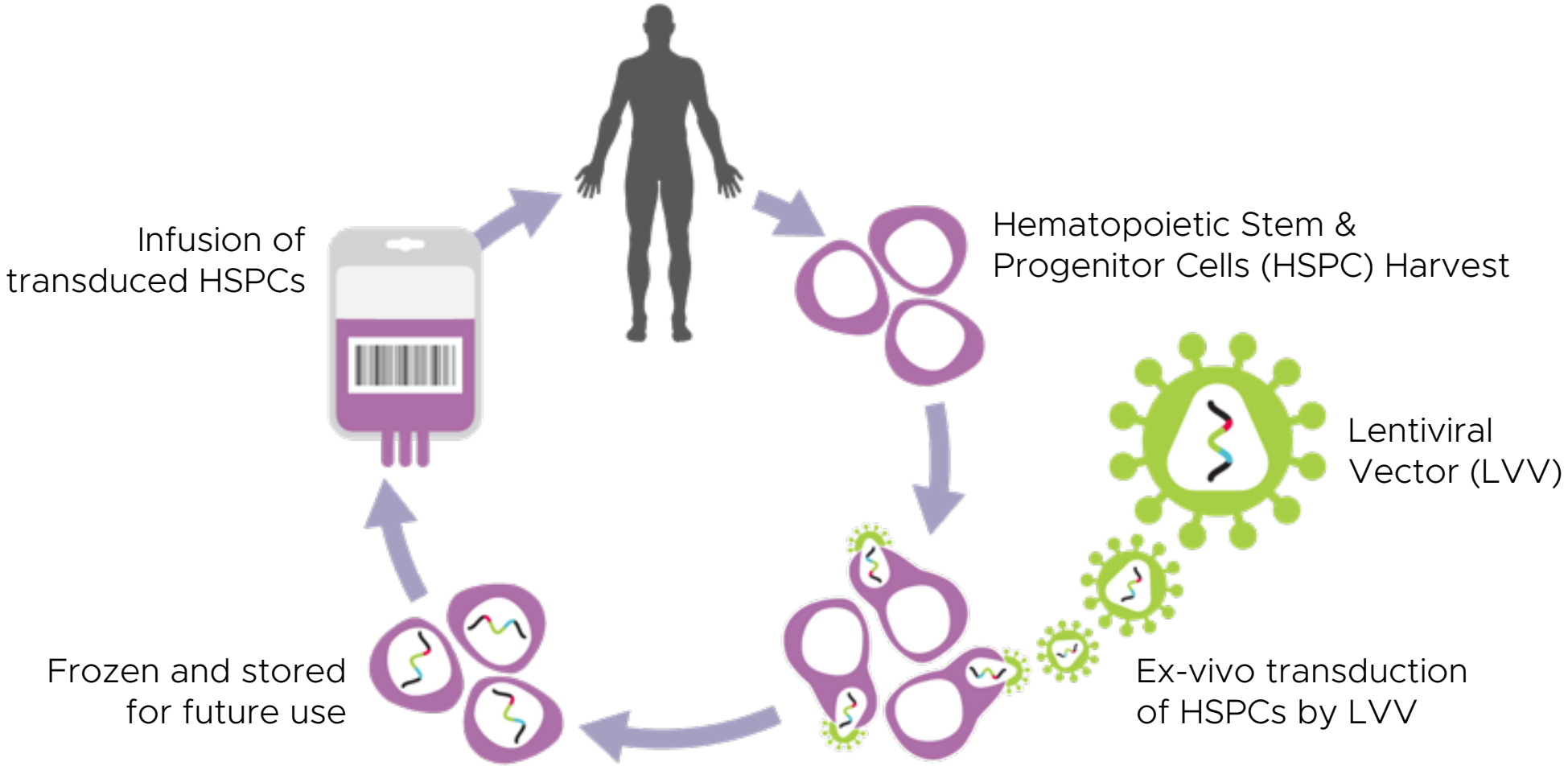
TEMFERON: AN AUTOLOGOUS CELL-BASED TREATMENT PARADIGM



4-6 week process

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HIGHLIGHTS AND PIPELINE
MECHANISM OF ACTION
DATA AND DEVELOPMENT STRATEGY
NEXT STEPS

CLEAR RATIONALE SUPPORTS GLIOBLASTOMA DEVELOPMENT STRATEGY

ROBUST SCIENTIFIC RATIONALE

- Characterized by a **highly suppressive tumor microenvironment** induced by a subset of tumor associated macrophages
- Temferon is designed to **break immunosuppression**

LIMITED AVAILABLE TREATMENTS

- Temferon may be offered as **1st line monotherapy** after 1st surgery enabling patient's **uncompromised immune system to be harnessed**
- Enables impact of Temferon to be **seen in isolation**

FAVORABLE PRECLINICAL DATA

- Temferon demonstrated **control of GBM** pathology despite its aggressive nature
- Temferon favored **a pro-inflammatory state** that induced an immune system reset, **breaking tumor tolerance**

ABOUT GBM

Annual incidence: 3 per 100,000 adults[1],
~60% with uMGMT promoter status [2] (target population)
Median survival: ~≤ 15 months[3]
5-year survival: 5.5%[3]

1 - https://www.ncbi.nlm.nih.gov/books/NBK470003/
2 - https://www.futuremedicine.com/doi/10.2217/cns-2021-0007
3 - https://www.statpearls.com/ArticleLibrary/viewarticle/22272

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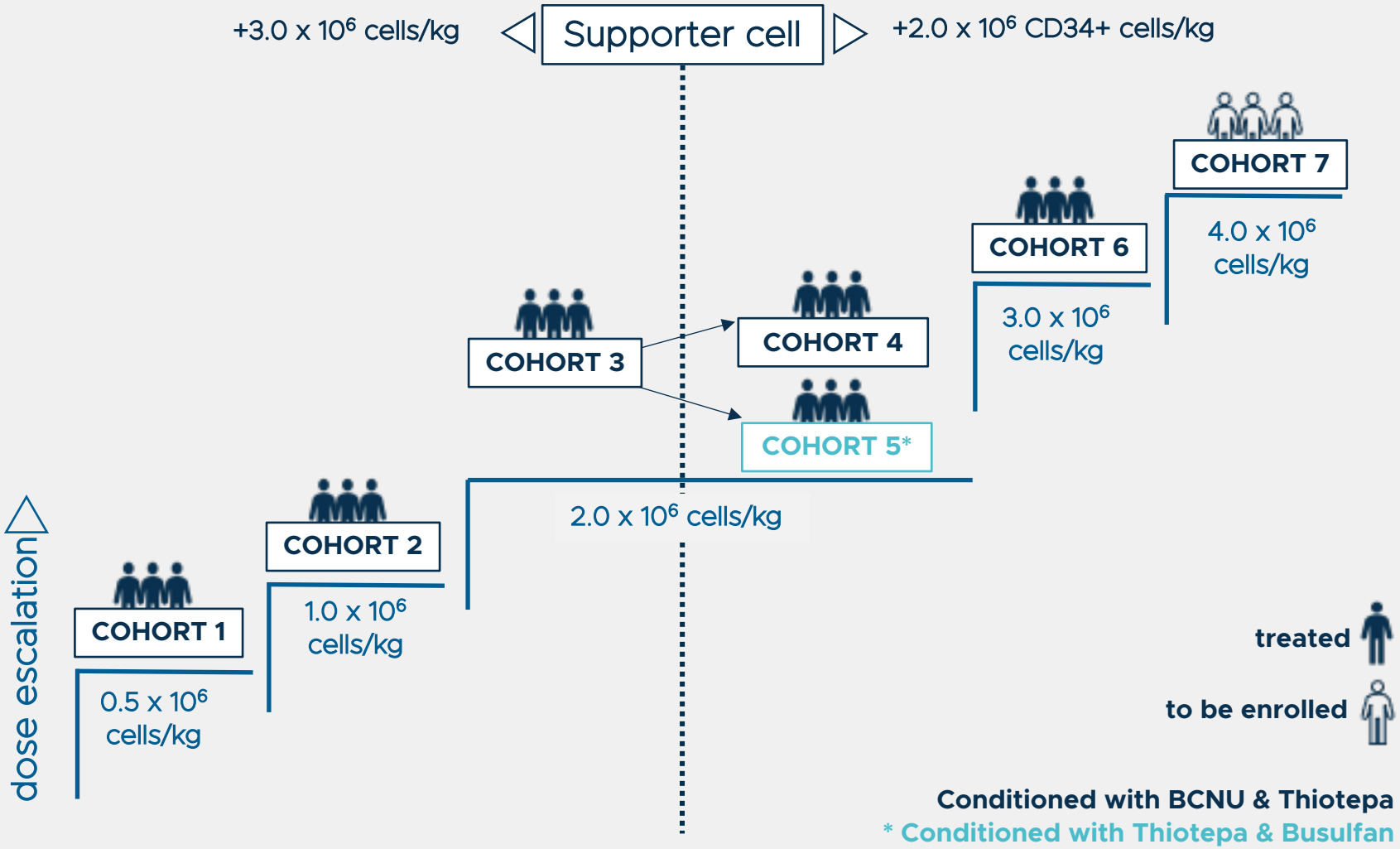
TEMFERON: PHASE 1/2a DESIGN IN GLIOBLASTOMA

A multi-center, open-label, dose escalation & extension study in GBM patients with unmethylated MGMT promoter following standard of care.

DMC[1] at completion of each cohort

Primary endpoints:
Tolerability and safety at 90 days

Secondary endpoints:
Long-term tolerability, safety and efficacy including PFS and OS up to 2 years



[1] DMC: Data Monitoring Committee

Alternative conditioning regimen assessed in cohorts 4 and 5 an reaching 2M VCN in cohort 3

FAVORABLE PRELIMINARY SAFETY & TOLERABILITY DATA IN PHASE 1/2a uMGMT GLIOBLASTOMA TRIAL – Cohorts 1 to 5

SAFETY

Detectable but very **low level of IFN-α** (pg/ml range) in the plasma

Expected and **manageable** adverse events and serious adverse events[1] associated with autologous stem cell transplantation and glioblastoma

TOLERABILITY

No dose limiting toxicities to date

Rapid engraftment and **hematological recovery** observed in all patients treated (n=15)

BIOLOGICAL ACTIVITY

Temferon -derived differentiated cells were evident within the peripheral blood 14 days post treatment and were still **detectable up to 18 months**

Evidence of a **pro-inflammatory state** in patients that required a second surgery

Source: TEM-GBM_001

1 - The reported serious adverse events (SAEs) for Cohorts 1 to 5 were of the type typically associated with transplant procedures (pneumonia, pulmonary embolism, febrile neutropenia, fatigue, C.diff infection, CMV reactivation, sepsis, anemia due to CMV reactivation) or underlying disease GBM (worsening left hemiparesis, seizure, brain abscess, sudden death). A suspected unexpected serious adverse reaction (SUSAR) of elevated gamma glutamyl transferase was also reported (spontaneously resolved). An SAE in Cohort 6 is under evaluation

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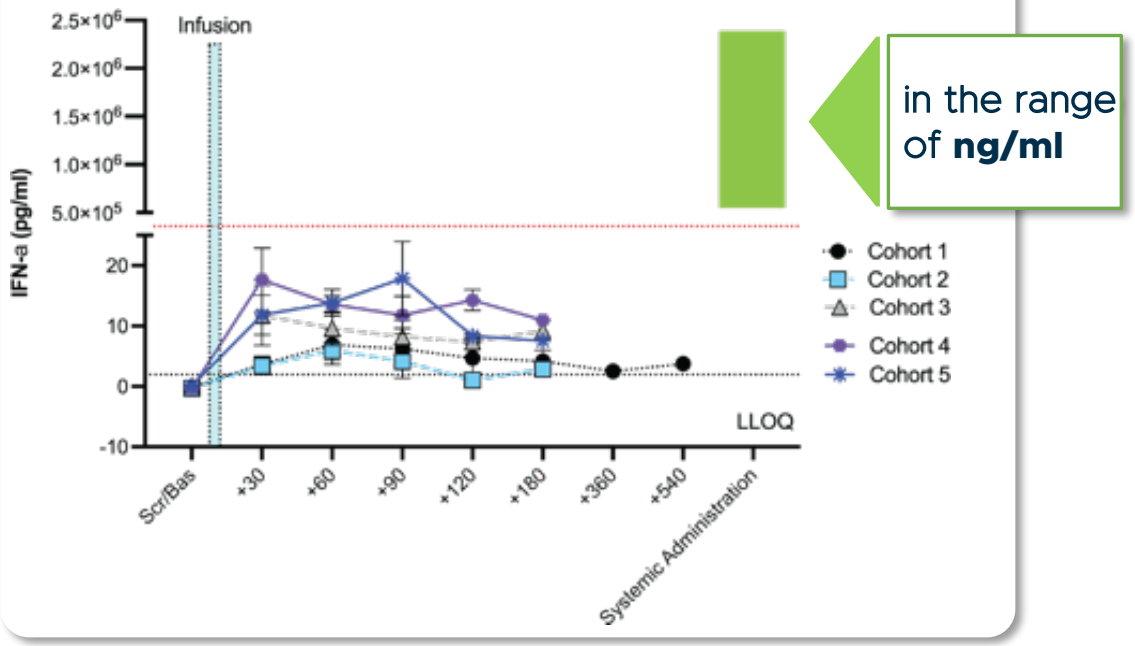
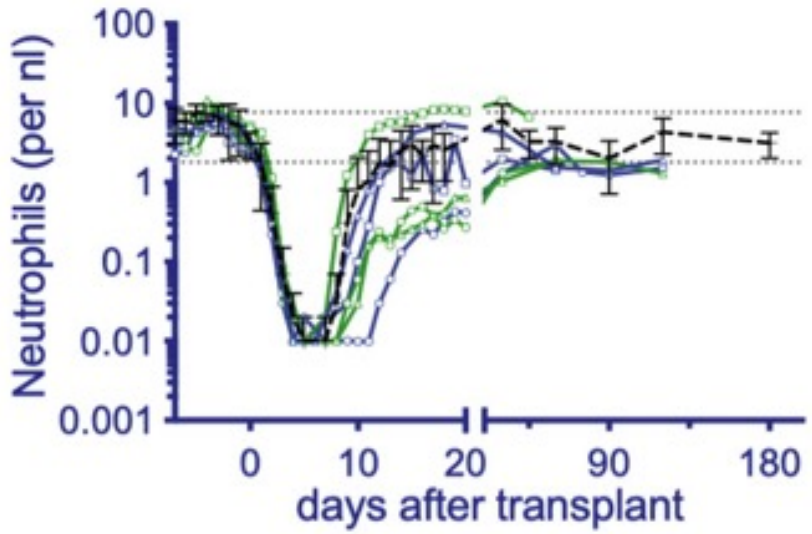
RAPID HEMATOPOETIC CONTROL AND LOW LEVELS OF IFN-α IN THE PERIPHERY SUGGEST CONTROL OF PAYLOAD EXPRESSION LIMITS TOXICITY

IFN-α concentrations in the periphery after systemic administration



Neutrophil counts post transplant*



Source: TEM-GBM_001
LLOQ: Lower Limit of Quantification
* A similar return to pre-transplant levels was seen in monocytes, lymphocytes, platelets and hemoglobin

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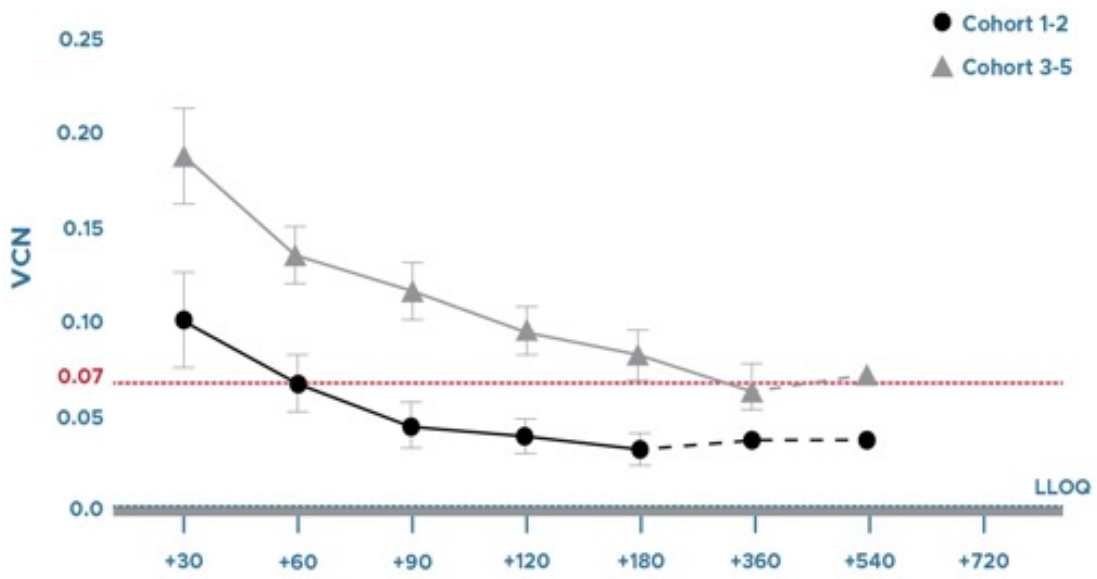
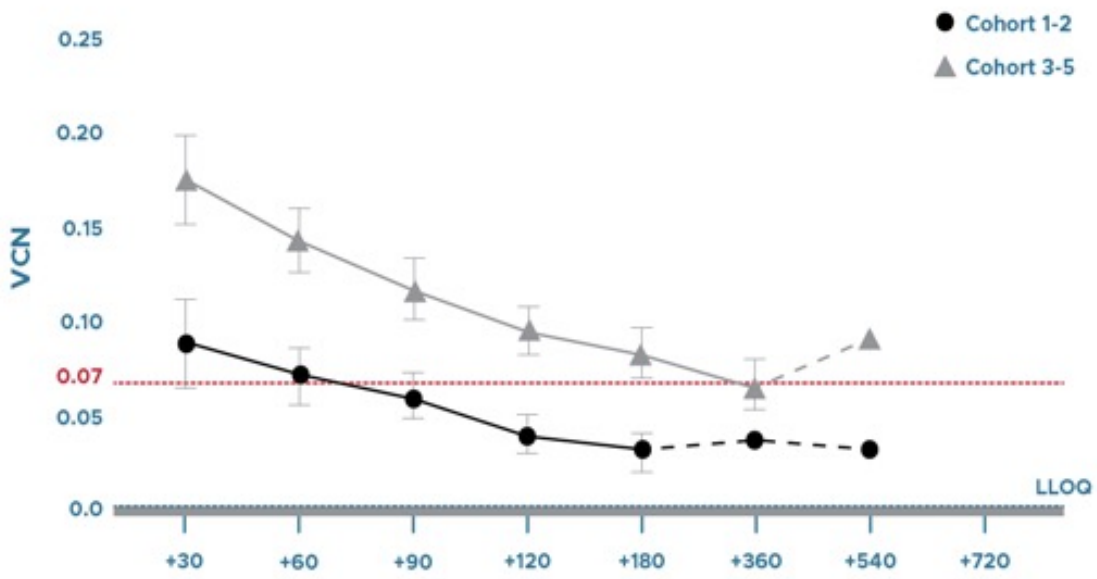
DURABILITY OF RESPONSE: TEMFERON-INDUCED TEMS OBSERVED TO PERSIST FOR UP TO 18 MONTHS

MYELOID CELLS

CD14



CD15

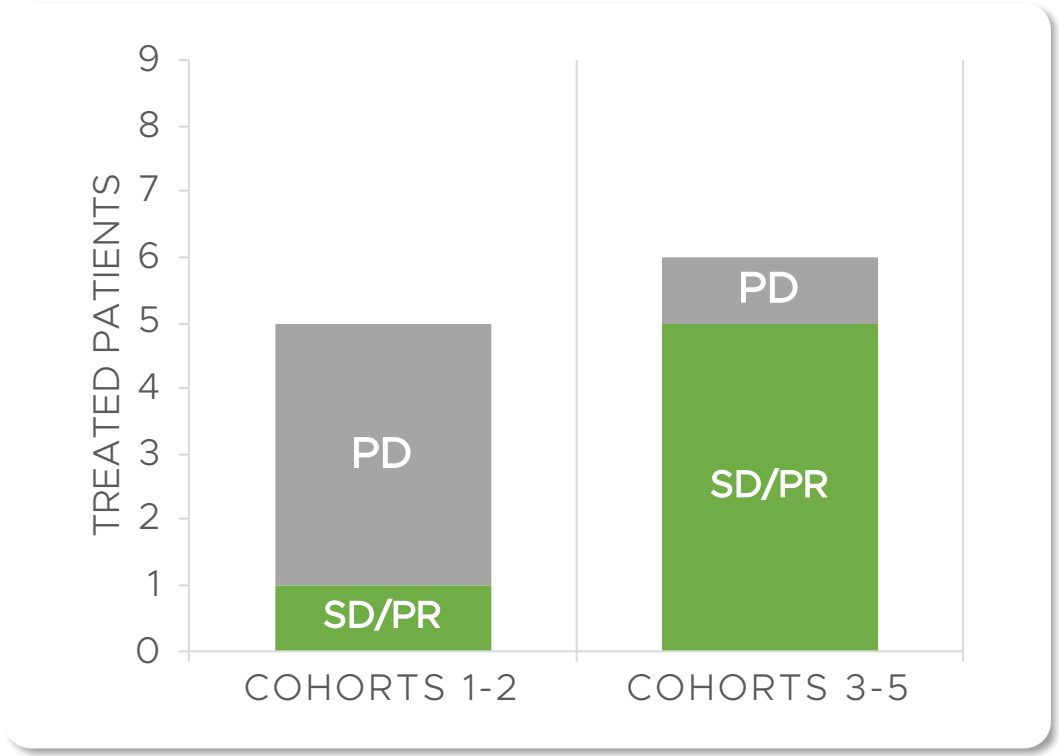


Source: TEM-GBM_001

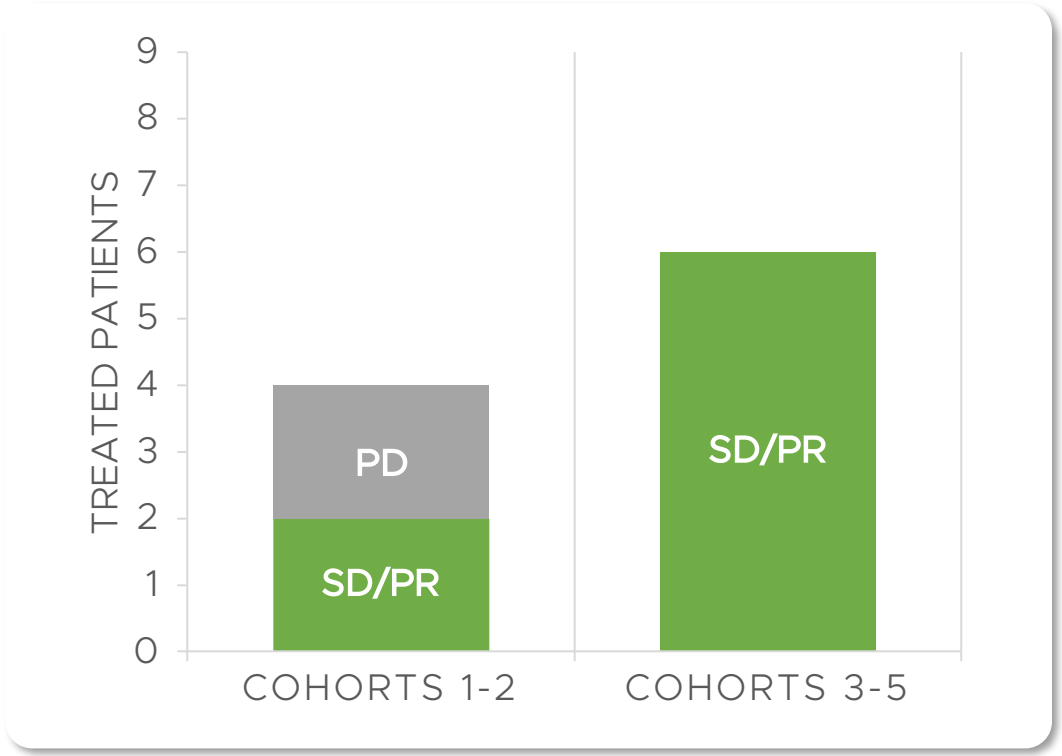
Note: Cohorts 3, 4 and 5 received the same Temferon dose; in cohort 4 and 5 two different conditioning regimens were tested
Dashed lines are connecting timepoint evaluations with less of n=3 measurements
7% VCN reflects efficacy cut off from preclinical data

ACTIVITY: EVIDENCE OF DOSE-RESPONSE WITHOUT DRUG LIMITING TOXICITY SUPPORTS FURTHER DOSE ESCALATION

Radiological Assessment* at 180 Days



Clinical Assessment at 180 Days



Source: TEM-GBM_001

* Based on imaging analysis of tumor volume

■ STABLE / PARTIAL RESPONSE ■ PROGRESSIVE DISEASE

In both charts n (cohorts 1-3)= 7; n (cohorts 4-5) = 6

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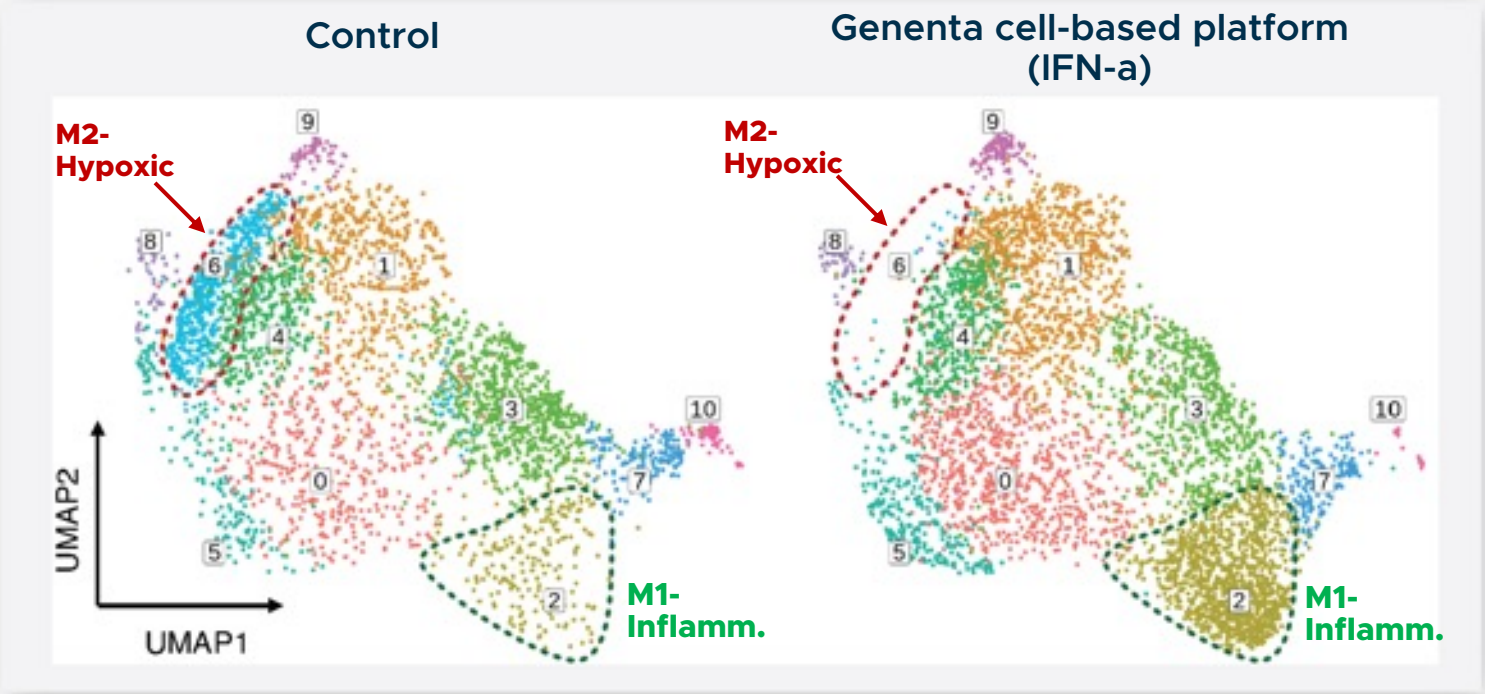
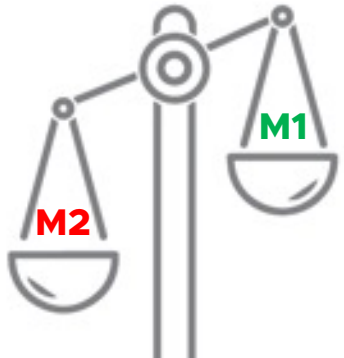
PRE-CLINICAL AND CLINICAL DATA SUGGEST TME REPROGRAMMING INDUCED BY THE PRO-INFLAMMATORY STATE CREATED BY TEMFERON

PRECLINICAL: Analysis of the Myeloid Compartment

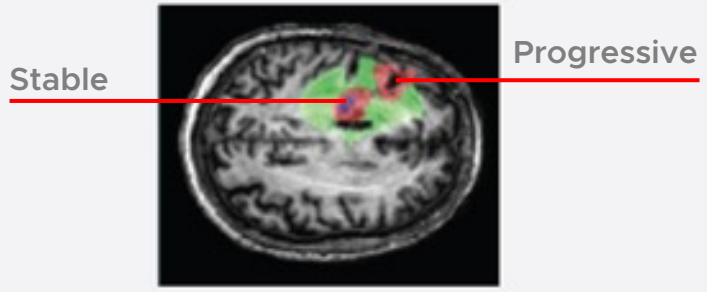


In pre-clinical settings Temferon acts on the M1-M2 balance and favors a pro-inflammatory state that induces an immune system reset resulting in the tumor tolerance breaking

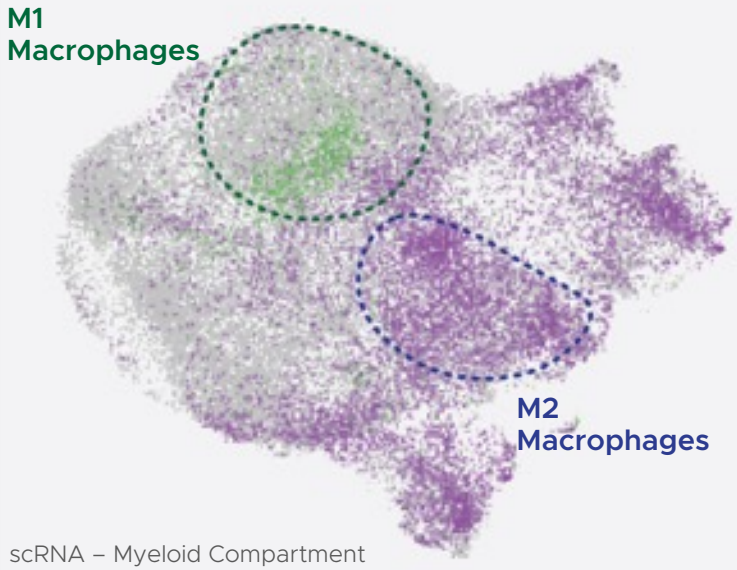


Source: Birocchi et al., Sci Transl Med, July 2022

CLINICAL: Biopsy Analysis



M1 macrophages *are the predominant population in the Stable lesion*



scRNA – Myeloid Compartment
Source: TEM-GBM_001

HIGHLIGHTS AND PIPELINE
MECHANISM OF ACTION
DATA AND DEVELOPMENT STRATEGY
NEXT STEPS

BROAD APPLICABILITY OF PLATFORM

INDICATION	MARKET SIZE U.S. INCIDENCE[1]	UNMET NEED 5Y SURVIVAL[1]	POST ICI APPROACH	TEMS PRESENCE	TME ACCESS PRE & POST TREATMENT	IFN-α SUSCEPTIBILITY
HCC/ICC	~43,000	20%	Y	Y	Y	Y
Gastroesophageal adenocarcinoma/SCC	~18,000	20%	Y	Y	Y	Y
Triple negative breast cancer	~28,000	77%	Y	Y	Y	Y
Mesothelioma	~3,000	12%	-	Y	Y	Y
Renal cell carcinoma	~74,000	75%	Y	Y	Y	Y
Liver metastases (e.g., colorectal, breast, urothelial, melanoma)	~123,000	15% at 1 year	Y	Y	Y	Y
Epithelial ovarian cancer	~20,000	49%	Y	Y	Y	?

1 - SEER Database

HCC: Hepatocellular Carcinoma; ICC: Intrahepatic Cholangiocarcinoma; SCC: Squamous Cell Carcinoma; TEMs: Tie2+ Expressing Monocytes; ICI: Immune Checkpoint Inhibitors; TME: Tumor Microenvironment

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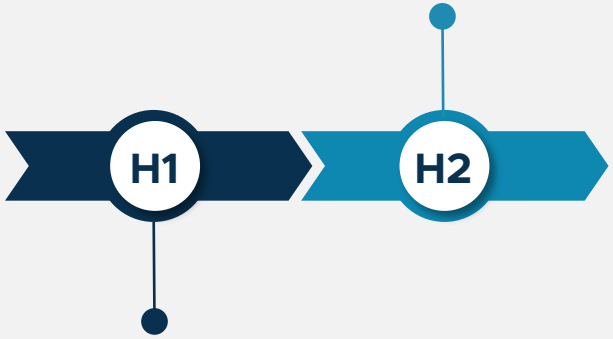
UPCOMING EXPECTED MILESTONES

2022

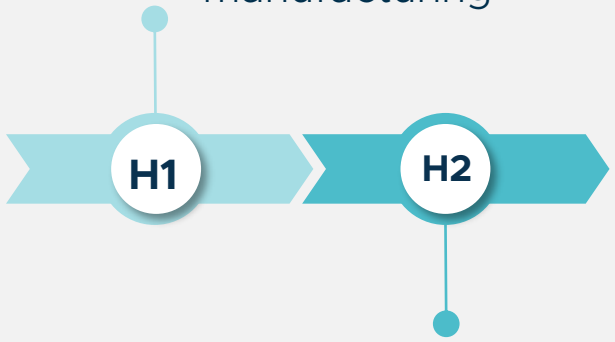
- Temferon combination data



✓ Initiate Phase 1/2a extension phase

2023

- Complete enrollment Phase 1/2a trial
- Scale-up of manufacturing



- Initiate Phase 2

2024

- Phase 1/2a readout: 18-month follow-up cohort 6/7

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BOARD OF DIRECTORS

MARK A. SIRGO
Chairman

>35 years of experience in pharmaceutical industry. Former CEO of Aruna Bio, Inc. Founder and CEO of Biodelivery Sciences, Inc. (NASDAQ: BDSI). Extensive experience in R&D, sales & marketing

PIERLUIGI PARACCHI
CEO

Leading healthcare VC investor including as consultant to Sofinnova, Founder and CEO of Quantica SGR, Co-founder of Axòn Group and as Partner at AurorA Science; >15 years as board director in Life Science Companies

ROGER ABRAVANEL
Director

Former McKinsey & Company director, board member at Luxottica (NYSE: LUX), board member at TEVA (NYSE: TEVA), and Admiral Group (LSE: ADM)

GUIDO GUIDI
Director

Leadership positions in global pharmaceutical companies over 35 years including former Head of Pharma EU at Novartis, previously Head of Oncology at Novartis EU

ANTHONY MARUCCI
Director

President and CEO of Celldex Therapeutics. Former Treasurer at Medarex. Has raised $1.7B in capital over 30 years of experience

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SUMMARY: TOWARDS A TRANSFORMATIVE CELL THERAPY PLATFORM FOR SOLID TUMORS

- **Transformative proprietary platform** designed to overcome the challenges of immuno-oncology therapy: infiltrating solid tumors, limiting toxicity and achieving a durable response
- Supported by **preclinical and clinical evidence** including engineered cells in patients from 14 days until 18 months+ after treatment, and payload expression without systemic toxicity
- **Tumor and antigen agnostic**; potential for **broad combination use**
- **Upcoming catalysts**:
  - Confirmatory preclinical combination data due H2'22
  - Phase 1/2a for GBM to complete enrollment in H1'23
- **Cash runway into 2024**, with no debt or warrants

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APPENDIX

INTELLECTUAL PROPERTY

- Potential 12-year market exclusivity for new biological products (U.S.)
- Key patents already granted

	US	EU	China	Japan	ROW	Expiration
Gene vector comprising mi-RNA	✓	✓	✓	✓	✓	4/30/2030
mi-RNA regulated vectors	✓	✓	✓	✓	✓	5/26/2026*
Monocyte cell (Tie-2) activation process	✓	✓	✓	✓	✓	10/5/2027
Method for Genetic Modification	✓	✓	✓	✓	✓	10/24/2034*
Vector Production	✓	pending	pending	✓	pending	7/13/2035
Type 1 IFN gene therapy	pending	pending	pending	pending	pending	4/20/2038**

*Later expiration for certain U.S. patents pursuant to patent term adjustment (35 U.S.C. §154(b))
** Application pending, anticipated expiration based on 20 year patent term.

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STRATEGIC AND SCIENTIFIC ADVISORS

ADVISORS

Gaurav Shah
CEO at Rocket Pharma (NASDAQ: RCKT) – Gene and Cell Therapy company for rare diseases

Alec Ross
Former Innovation Advisor for President Barack Obama and Secretary of State Hillary Clinton. Board Partner at Amplo VC ($300MM FUM)

Brad Loncar
Founder and CEO at Loncar Investment (ETFs listed - CNCR CHNA). Endpoints News and Nasdaq Contributor

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Prof. Kenneth C. Anderson
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Director of the Precision Immunology Institute and of the Human Immune Monitoring Center at Mount Sinai School of Med. in New York. Member of the Am. Society of Clinical Investigation and the recipient of the William B. Coley Award for Distinguished Research in Basic and Tumor Immunology. Member of the National Academy of Sciences

Prof. Michele de Palma, Ph.D.
Teaches cancer biology at the Federal Institute of Technology Lausanne (EPFL), Switzerland. His research led to first-in-kind clinical trials of engineered monocytes in patients with brain and haematological cancers

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Prof. Lisa Coussens, Ph.D
Professor and Chair, Cell, Developmental & Cancer Biology Department at Oregon Health & Science University. Hildegard Lam from Endowed Chair in Basic Science and Associate Director for Basic Science, Knight Cancer Institute

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FINANCIAL HIGHLIGHTS

NASDAQ: GNTA

Cash & cash equivalents @ 31 Dec. 2021	$ 37.2MM
Cash runway	Mid 2024
Debt and warrant free	
Number of shares outstanding[4]	18.12MM
Average 3m volume[4]	~3K shares

SHAREHOLDERS[4]

Founders and Leadership	28%
San Raffaele Hospital[1]	10%
Institutions/Large FOs[2] /Sovereign Fund[3]	19%
CEO, Directors & >5% shareholders	51%
Top Shareholders (including above)	57%

ANALYST COVERAGE

Roth	Tony Butler	tbutler@roth.com
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Maxim	Jason McCarthy	JMcCarthy@maximgrp.com

(1) San Raffaele Research hospital is a co-founder and key shareholder of Genenta; ongoing relationship through service contract for clinical research. San Raffaele in alliance with non-profit organization Telethon runs the leading gene therapy institute SR-TIGET; (2) Fidim invests on behalf of the Rovati family, the former owner of Rottapharm (acquired by Meda/Mylan, $2.2B); Qianzhan Investment Management, early investor in NYSE: TME; (3) CDP – Cassa Depositi e Prestiti; (4) As of Aug 31, 2022

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