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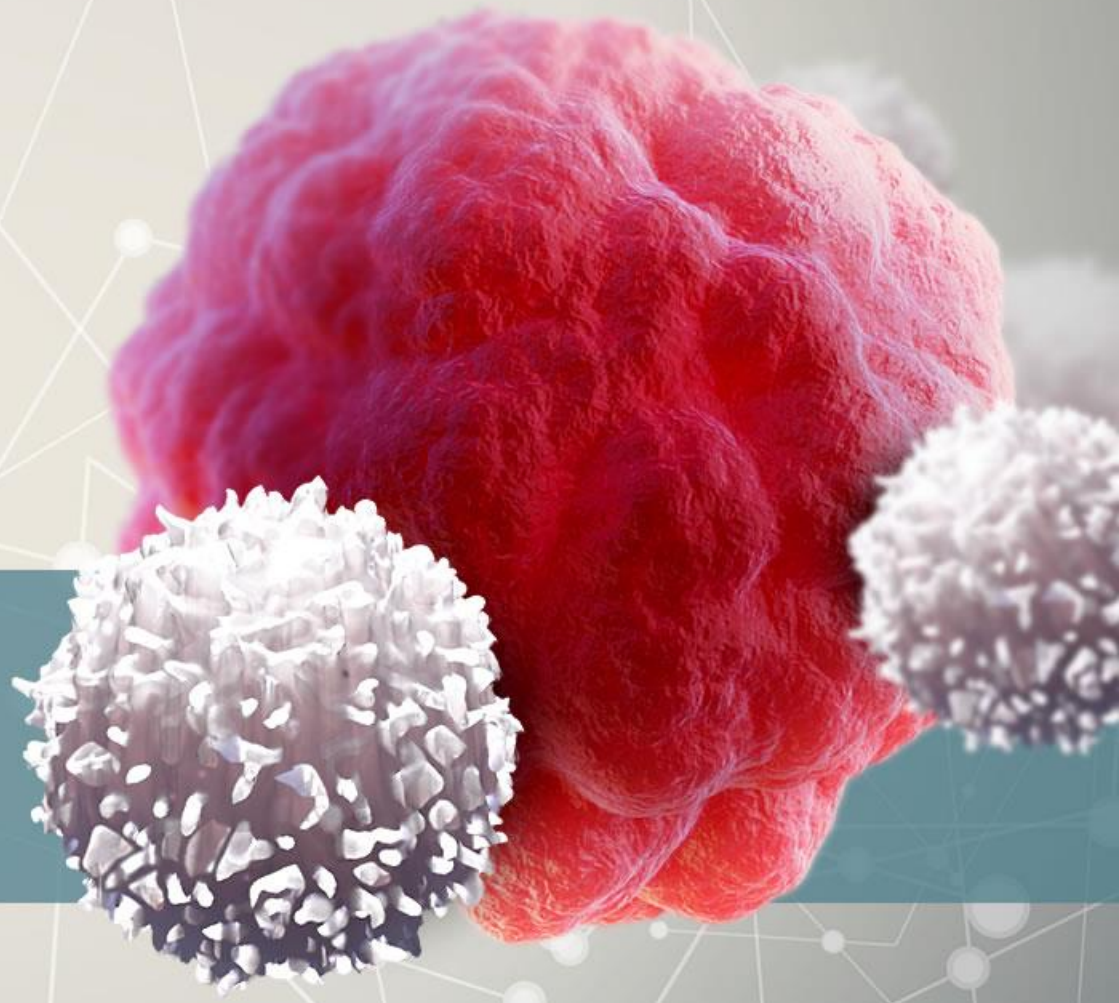
CORPORATE PRESENTATION

GT-EPIC™: EXQUISITELY PERSONALIZED IMMUNOTHERAPIES FOR CANCER



Q2, 2023

GENEOS OVERVIEW

Mission to develop Personalized Therapeutic Cancer Vaccines (PTCV's) to treat cancer

Initially set up as a spin out of INOVIO

- Additional PTCV-related IP developed internally

Institutional VC backed company

- Raised $40M to date
- Key investors - Sante Ventures, KIP-VC, Flerie Invest, INOVIO

Key upcoming Clin-Reg milestones in next 18 months

EXPERIENCED LEADERSHIP TEAM

NIRANJAN Y. SARDESAI, PH.D
President & CEO, BOD
Founder

JOANN PETERS, MHA
Chief Operating Officer

ILDIKO CSIKI, MD, PH.D
Consulting Chief Medical Officer

FEDERICA F. O'BRIEN
Consulting CFO

DAVID WURTMAN, MD MBA
Consulting Chief Business Officer

JIAN YAN, PH.D
VP, Research & Discovery

MYRNA THOMAS
VP, QA Manufacturing

BETH JUNKER, PH.D
Consultant CMC / Manufacturing

BOARD OF DIRECTORS

DR. SAMUEL BRODER
Independent; Former NCI Director

DR. CASEY CUNNINGHAM
Santé Ventures

DR. JAMES EADIE
Santé Ventures

DR. LAURENT HUMEAU
Inovio Pharmaceuticals

MR. SANGWOO LEE
KIP-VC, USA

DR. TED FJÄLLMAN
Flerie Invest

DR. ROBERTO DE PONTI (BOD OBSERVER)
3B Future Health Fund

ADVISORS

DR. DAVID B. WEINER
Wistar Institute

DR. CHI VAN DANG
Ludwig Institute, Johns Hopkins University

MS. SHAWN TOMASELLO
Independent; Formerly Kite, Celgene

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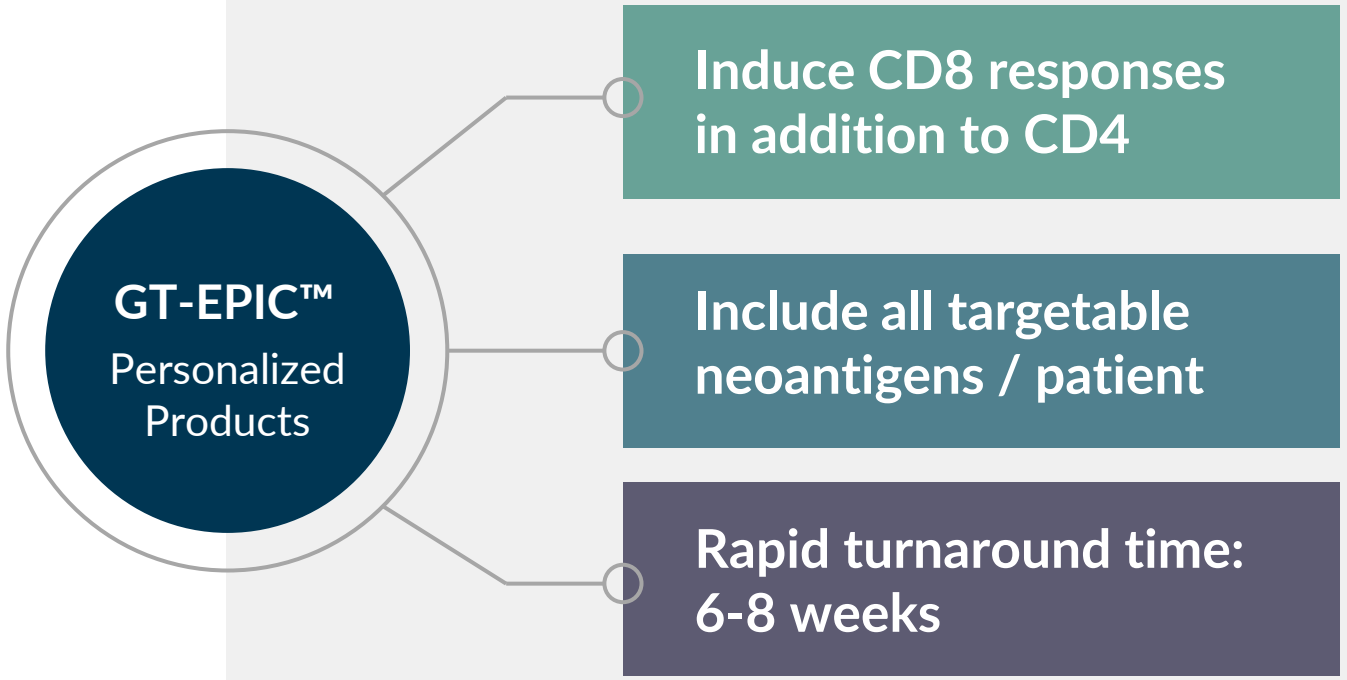
GENEOS PERSONALIZED CANCER VACCINES (PCV) ARE VERSATILE & POTENT

GENEOS DIFFERENTIATION:

- Deliver cancer neoantigens & shared antigens in patient specific product
- Leverage patient's own immune system to in vivo select neoantigens that induce T cells and drive clinical responses

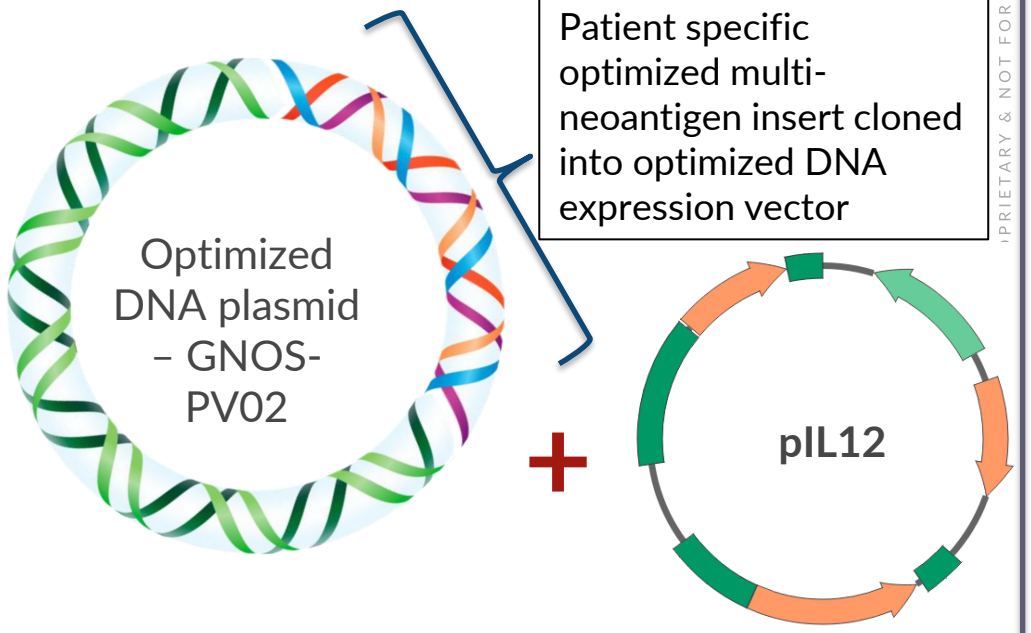


Targeting all neoantigens can address potential issues with tumor immune escape & polyclonal, multi-focal tumors

GENEOS PERSONALIZED TREATMENT DRIVES IMMUNE RESPONSES BY DESIGN

OPTIMIZED DNA NEOANTIGENS + pIL12 + CELLECTRA® ELECTROPORATION (EP)

- Personalized product has three components –
  - Optimized DNA plasmid encoding neoantigens
  - IL-12 (pIL12): Cytokine immune-modulator; Boosts T cells
  - CELLECTRA® delivery device (*in vivo* electroporation; EP): Efficient plasmid uptake for optimal antigen production
- Combination activates robust functional antigen specific CD4+ & CD8+ killer T cells



GNOS-PV02+ pIL12 are co-formulated and administered intradermally (ID) with CELLECTRA® EP device

CELLECTRA® is a registered trademark of INOVIO Pharmaceuticals; EP Device & pIL12 licensed for use under an exclusive agreement

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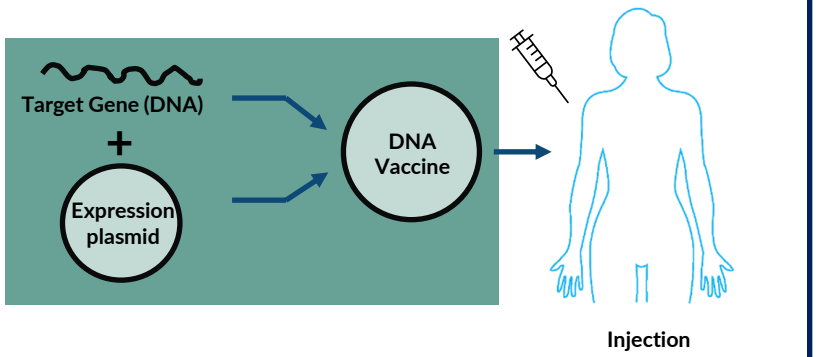
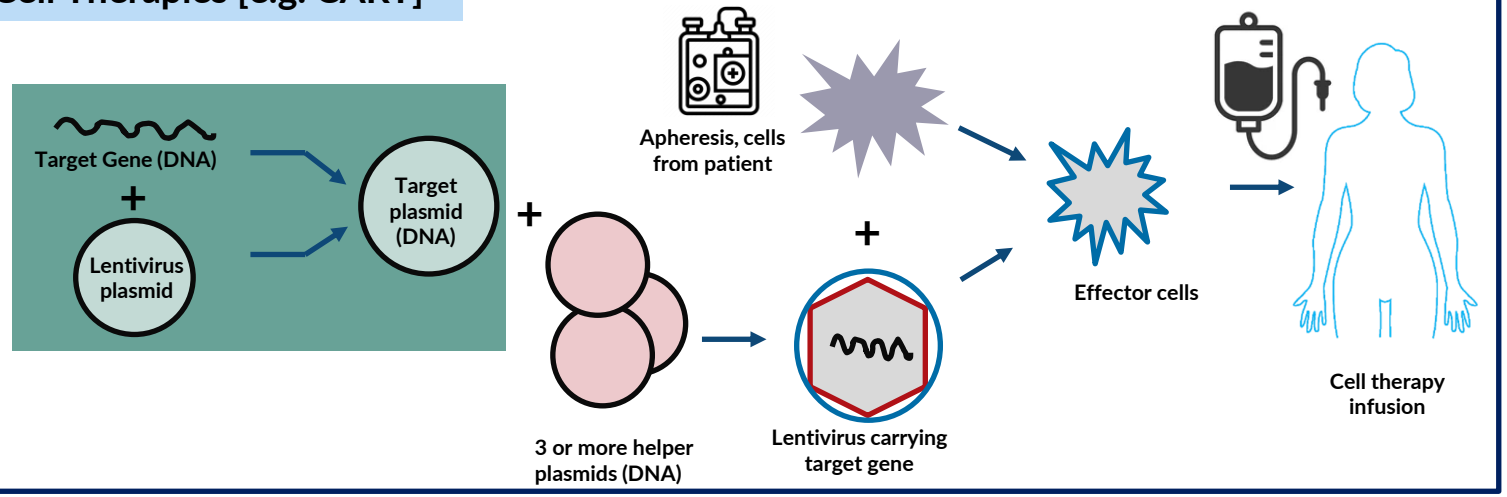
ALL CELL & GENE THERAPY (CGT) PRODUCTS START WITH THE MANUFACTURING OF PLASMID DNA: FOR GENEOS IT IS ALSO THE FINAL DRUG PRODUCT

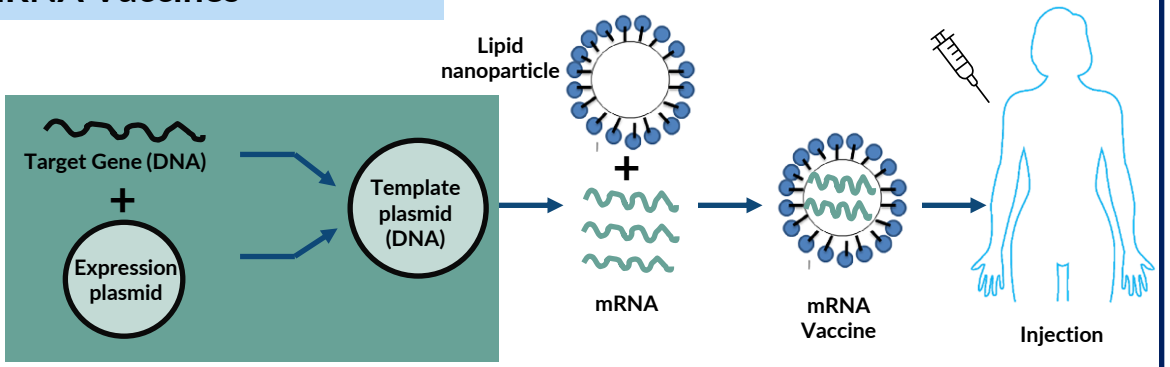
GT-EPIC™ DNA Vaccines



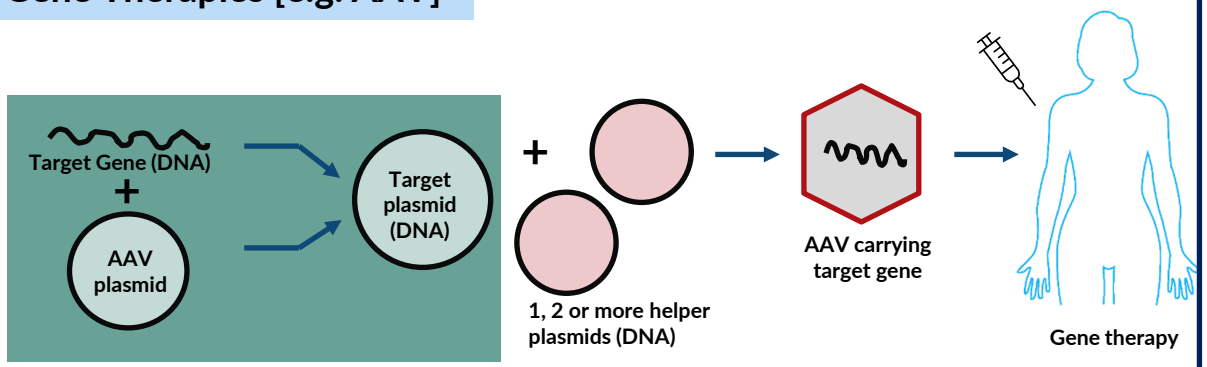
Cell Therapies [e.g. CART]



mRNA Vaccines



Gene Therapies [e.g. AAV]



- Manufacturing represents a key competitive advantage for Geneos' GT-EPIC™ DNA platform
- Higher process complexity drives larger manufacturing TAT and COGS for the other CGT platforms.

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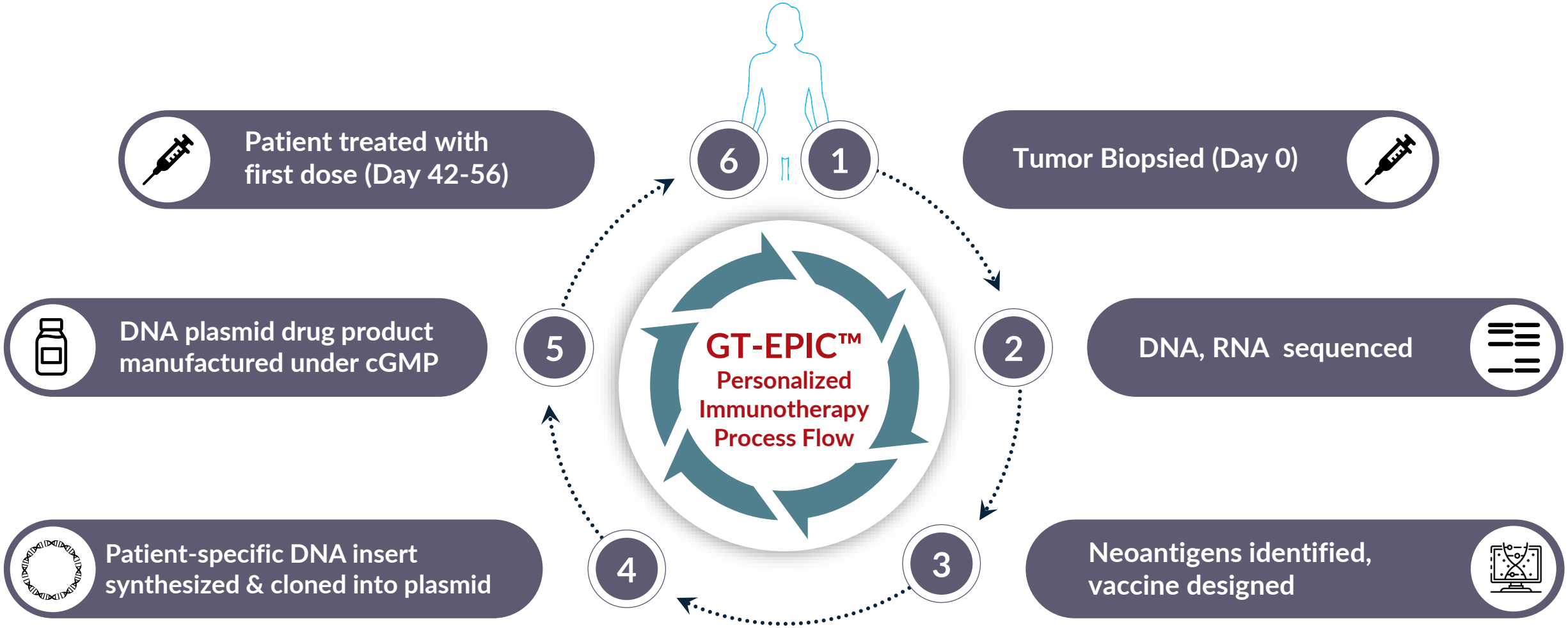
GT-EPIC™ PERSONALIZED IMMUNOTHERAPY PROCESS HAS BEEN SUCCESSFULLY TRANSLATED TO THE CLINIC



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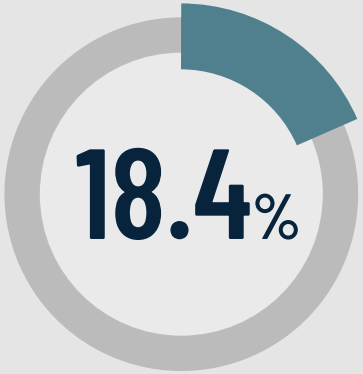
HEPATOCELLULAR CARCINOMA

LARGE UNMET CLINICAL NEED

US cases per year:

29,000

EU: 34,000/year
WW: 800,000/year



5-year survival rate, 2nd behind pancreatic cancer

CPI IN ADVANCED HCC

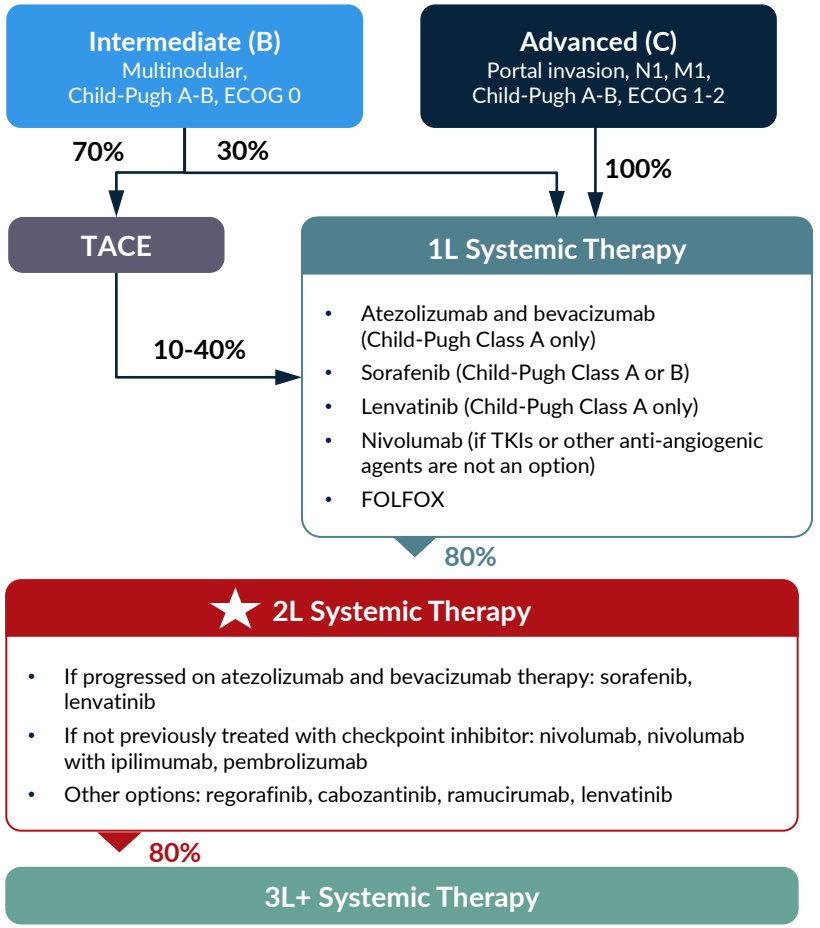
14-17%
Respond to CPI Immunotherapy

4 mo
Median PFS

14 mo
Median OS

★ **GENEOS-targeted segment in HCC could benefit from CD8+ inducing therapy**

Treatment Overview



Villareal, A. N Engl J Med 2019; Ferlay et al Int J Cancer, 2019; Zhu et al Lancet Oncol, 2018; Yuza et al Oncotarget, 2017

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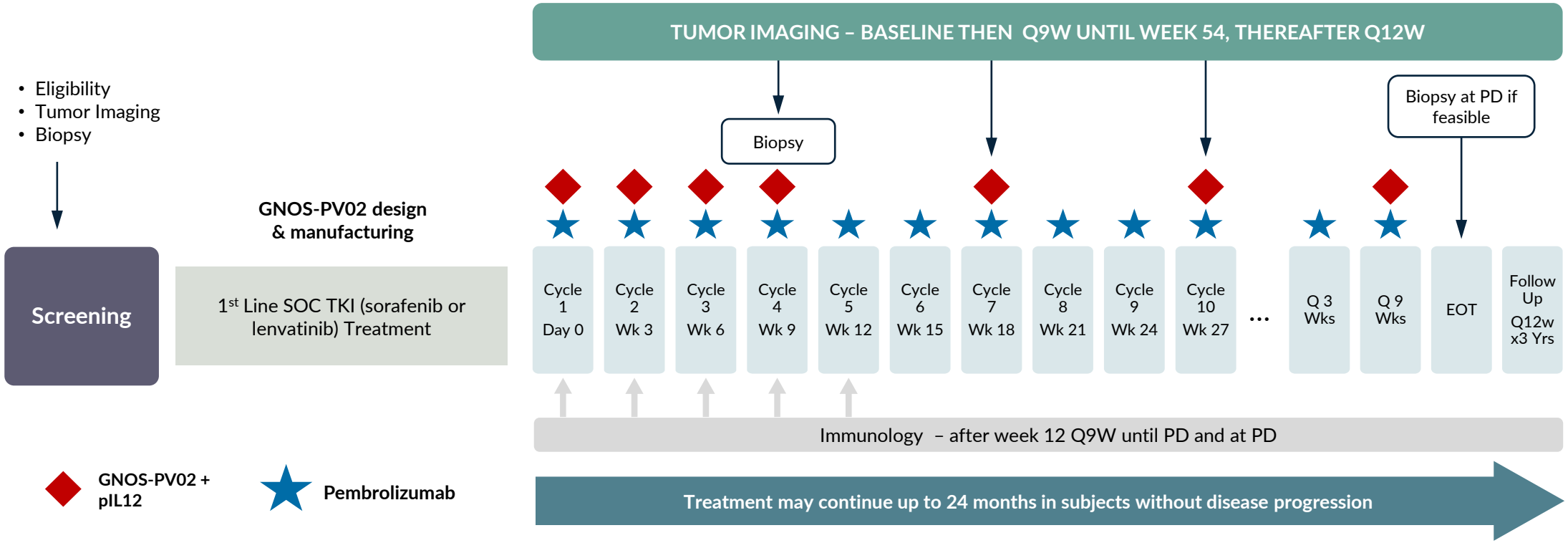
GT-30 CLINICAL TRIAL IN 2ND LINE ADVANCED HCC

Advanced HCC patients who progress during or are intolerant to 1st Line TKI treatment (sorafenib or lenvatinib)

- Goal is to demonstrate safety, immune responses, and enhanced efficacy (ORR, PFS, OS) compared to single agent anti-PD1 therapy
- N = 24 patients (Johns Hopkins University, Mount Sinai, New Zealand Clinical Research)
- Study expanded to n = 36 patients based on current promising data



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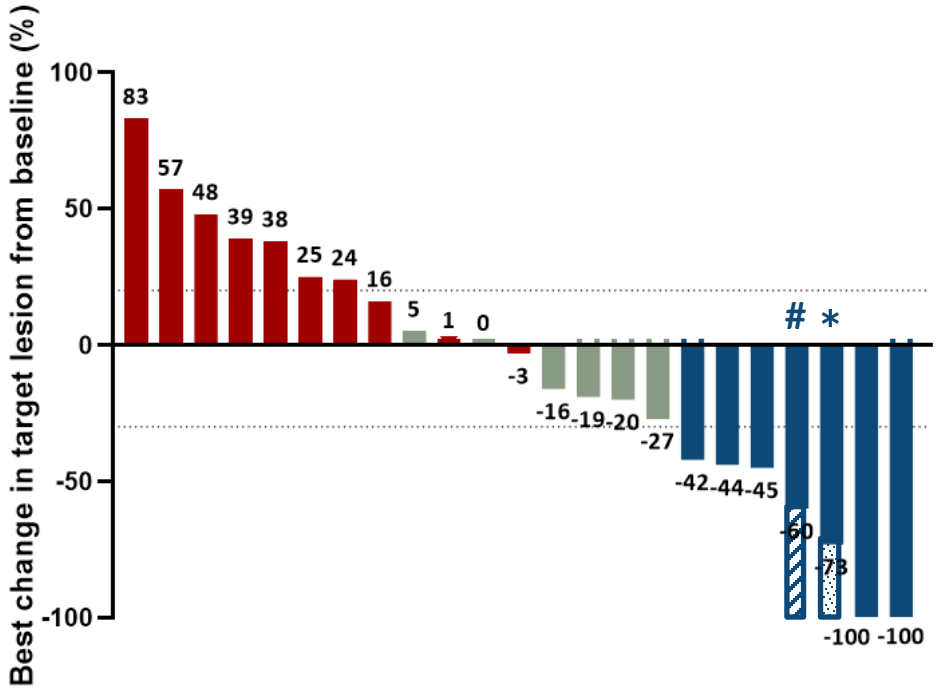
24 PATIENT GT-30 CLINICAL DATA AS OF AUG 31, 2022 – STUDY ONGOING

- 24 patients dosed; 23 patients evaluable
- Combination of GNOS-PV02 and anti-PD1 resulted in:

  Response rate of-
  - 29.2% (7/24) by mITT analysis
  - 30.4% (7/23) by evaluable patients

  Disease Control Rate of-
  - 54.2% (13/24, CR/PR/SD)
- To date, current status is 3 CR#, 4 PR, 6 SD, 10 PD
  - A third subject converted from PR to CR after the Aug 31, 2022 data cutoff date (see #)
  - A fourth subject with a liver primary and two lung mets, and was a PR by RECIST1.1, achieved secondary resectability due to tumor shrinkage; now has no remaining evidence of disease (see *)



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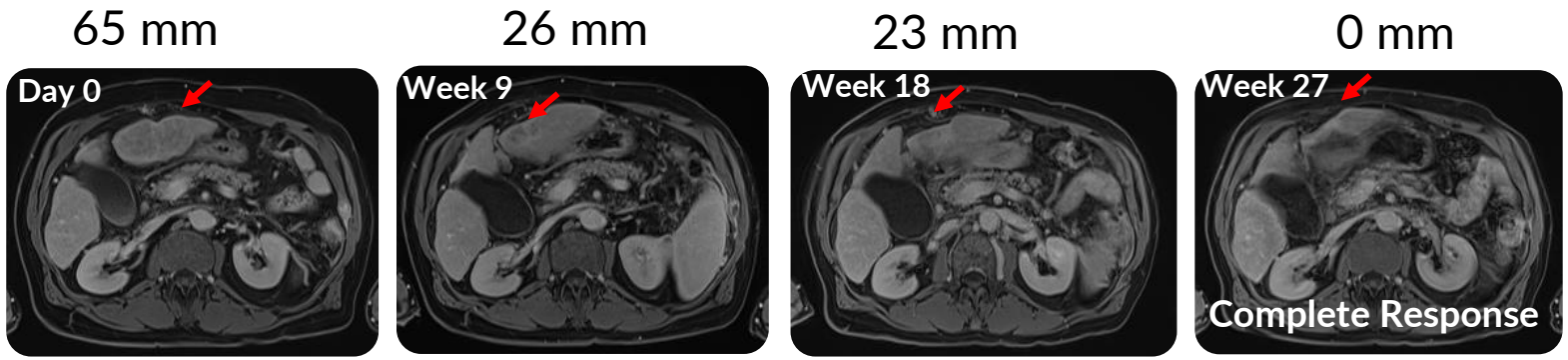
GT-30-2915: COMPLETE RESPONSE

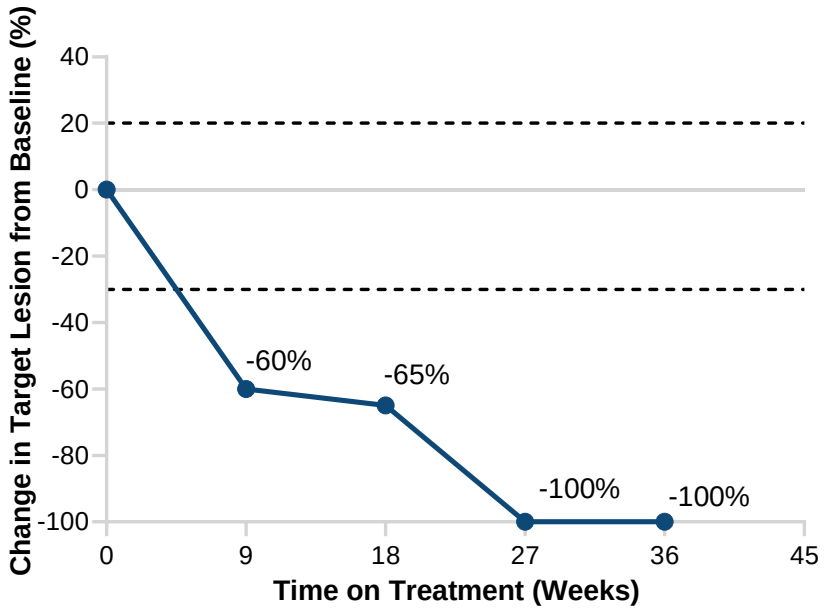
73 yo, white male
HCC (Aug2019)
Microwave ablation (Aug2019)
TACE (Dec2020 and Jan2021)
Lenvatinib (Jun2021; BOR SD)
GNOS-PV02 (Sep2021)
Etiology: non-viral
T2N0M0 (II) BCLC B
Beta-catenin mutation
(CTNNB1 S45F)

Significant Medical History:
Hepatitis C, Cirrhosis, heavy alcohol intake

Neos: 40
PTCV doses: 9
Status: On study

SAEs: 2, unrelated to study treatments
AEs related to PTCV/pIL12/EP: 2, both Grade 1





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GT-30-2105: Reduction in Liver Primary & Two Lung Mets Creates Path to Resection Resulting in Cancer Free Status

68 yo, white female
HCC (May2019)
Lenvatinib (Jun2019)
Radiotherapy (Jul2020)
GNOS-PV02 (Nov2021)
Etiology: non-viral
T4N0M1 (IVB) BCLC C

Significant Medical History:
- Hypertension, diverticulitis, GERD
- DVT, Meningioma

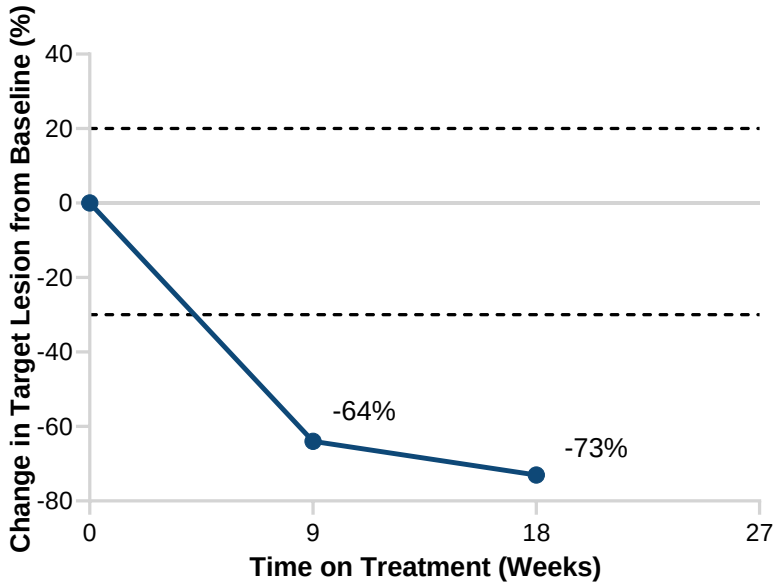
Neos: 40
PTCV Doses: 5
Status: Follow up
Hepatectomy Surgery: 20Apr22
Pembro Q6W: 17May22
No SAEs
No AEs related to PTCV/pIL12/EP

Target lesions (mm)

Location	d0	w9	w18
Lung LUL	11	4	2
Lung RML	22	8	7

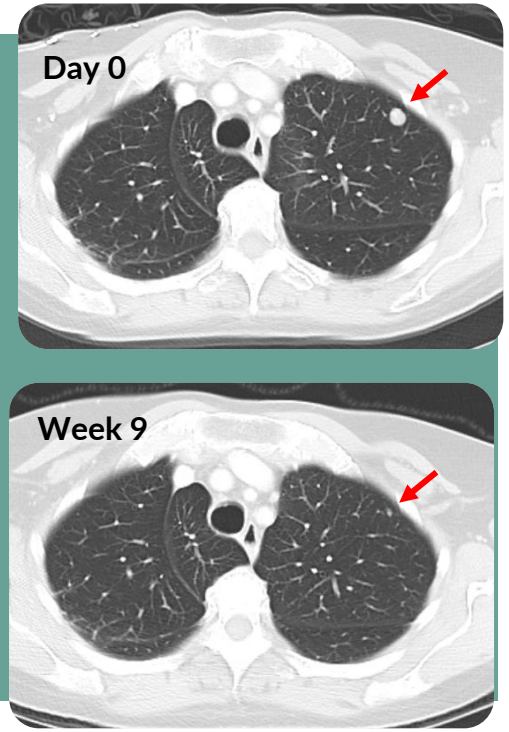
Patient with liver primary and two lung mets; liver biopsied to determine neos for design of PTCV but lung lesions used as target lesions for RECIST1.1

- After 5 PTCV+pIL12 doses, liver lesion shrank to point of secondary resectability and lung mets shrank to point of being amenable to XRT
- Lesions responded fully to XRT and surgery
- Patient now disease and recurrence free



PR

GT-30-2105



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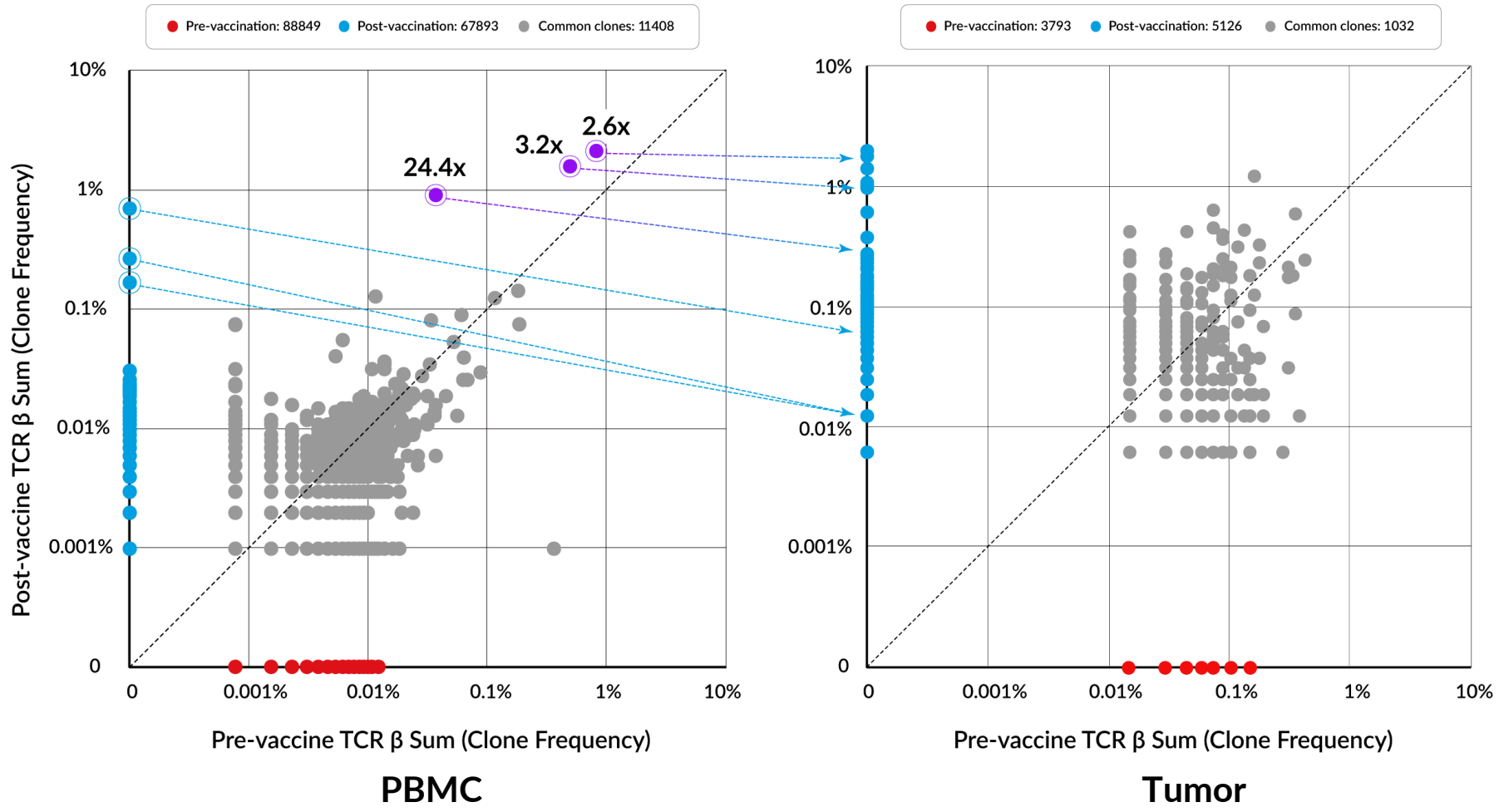
GT-30 CASE STUDY: POST-VACCINATION INCREASE IN PERIPHERAL T CELL CLONES THAT INFILTRATE THE TUMOR



PBMC (Blood) and Tumor:

Expansion of several pre-vac clones (purple) and detection of multiple new T cell clones (blue) post-vaccination

Arrows highlight infiltration of high frequency clones from blood into the tumor post-vaccination

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GT-30 CLINICAL DATA SUMMARY

Clinical Efficacy

- 3 CR & 4PRs detected by RECIST 1.1 out of first 24 patients on treatment and 23 evaluable as of December, 2022
- Overall, 12/24 patients with some level of tumor reduction; 13/24 with CR/PR/SD on treatment (DCR)
- Next data readouts: 36 Pts in Jun 2023

Safety Data

- No treatment related SAEs noted to-date
- 150+ doses of GNOS-PV02+pIL12 and 200+ doses of pembrolizumab across 24 subjects treated

Treatment Feasibility

- Personalized cancer treatments can be designed, manufactured, & administered successfully
- Delivered up to 40 neoantigens/patient
- 6-8 week turnaround time feasible

GT-10 CASE STUDY: EFFICACY FROM A SECOND TUMOR TYPE EXPANDS CLINICAL APPLICABILITY

PT # 10-101: 21y Female, Anaplastic Astrocytoma/GBM

Diagnosis & Primary Treatment

- IDH positive, MGMT methylated
- Two surgeries; Radiation; Temozolomide

GT-10 Treatment

- Monotherapy with GNOS-PV + pIL12

Single Patient Compassionate Use IND

- PCV contains both MHC Class I and II antigens
- 30 antigens (27 neoantigens; 3 shared antigens)

Patient treated only with PCV monotherapy

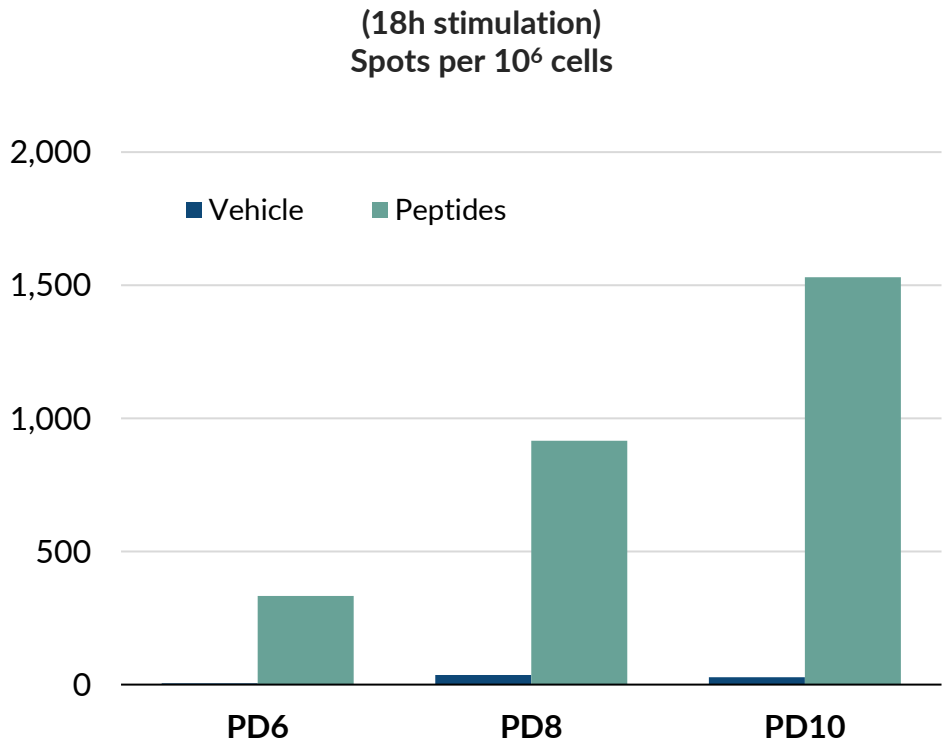
GT-10 Treatment & Outcome (as of December 31st, 2022; Treatment ongoing):

- Patient is recurrence free 54+ mo since 1º surgery & 42+ mo on GT-10 treatment
- No related SAEs

Extended RFS/PFS, OS - illustrates the persistence of response to GT-EPIC™ immunotherapy

GT-10 IFNγ ELISPOT ANALYSIS: RESPONSES DETECTED TO 93.3% ENCODED ANTIGENS

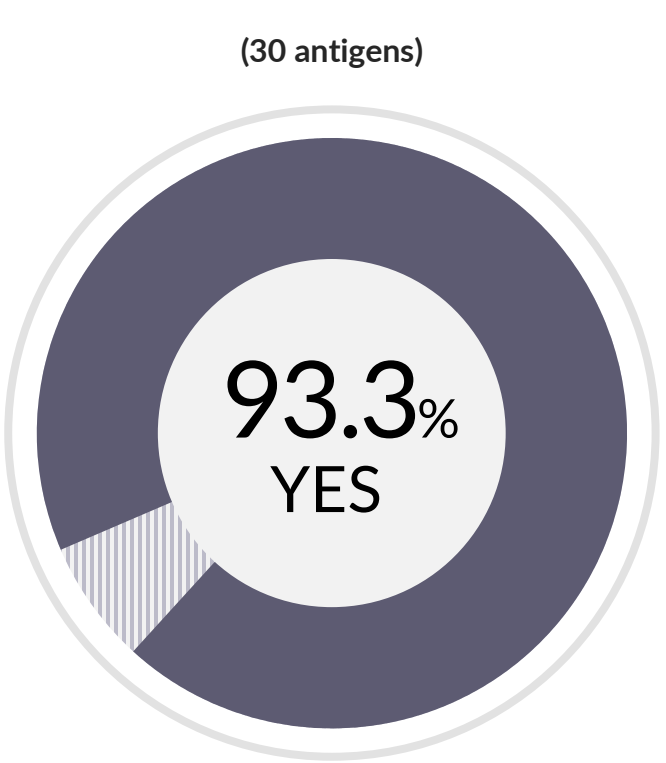
Cumulative ELISpot data from vaccine antigens show induction of a robust response



Responses detected to:

3/3 (100%) shared tumor antigens

25/27 (92.6%) neoantigens



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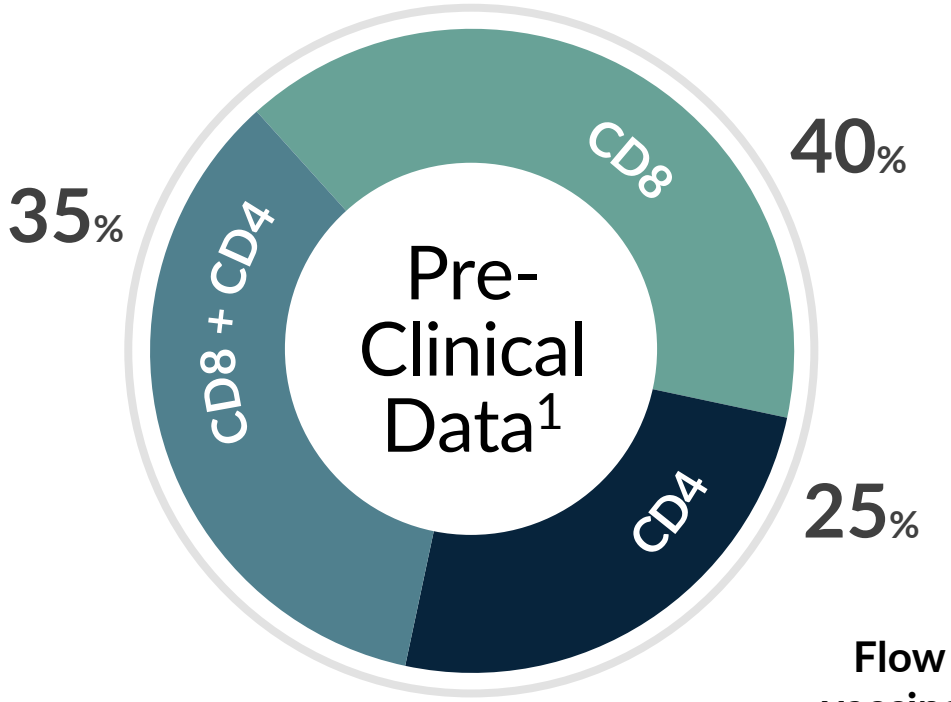
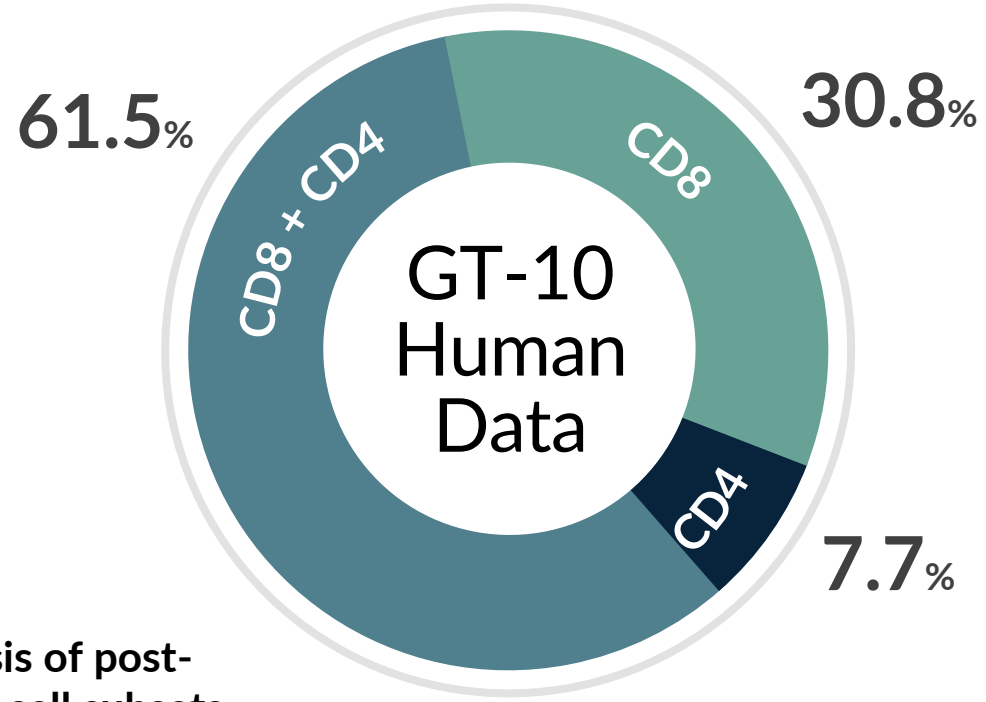
GT-10 IMMUNE PHENOTYPING: GT-EPIC™ VACCINES INDUCE CD8 T CELL RESPONSES TO HIGH PROPORTION OF ENCODED ANTIGENS





Flow cytometry analysis of post-vaccination CD4/CD8 T cell subsets for reactivity to individual antigens

- **Humans: 92% of the epitopes tested individually yield CD8 T cells**
- **Pre-clinical (mouse) models: 75%**

[1] Duperret et al Cancer Immunol Res 2019

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GT-EPIC™ CLINICAL DATA SUPPORTS A MOA BASED ON TUMOR-SPECIFIC IMMUNE-ACTIVATION

Strong induction of antigen-specific T cells

- IFNγ-producing T cells detected by ELISpot analysis
- Polyfunctional T cells – TNF, IFNγ, multiple cytokines, activation markers detected in antigen-specific manner

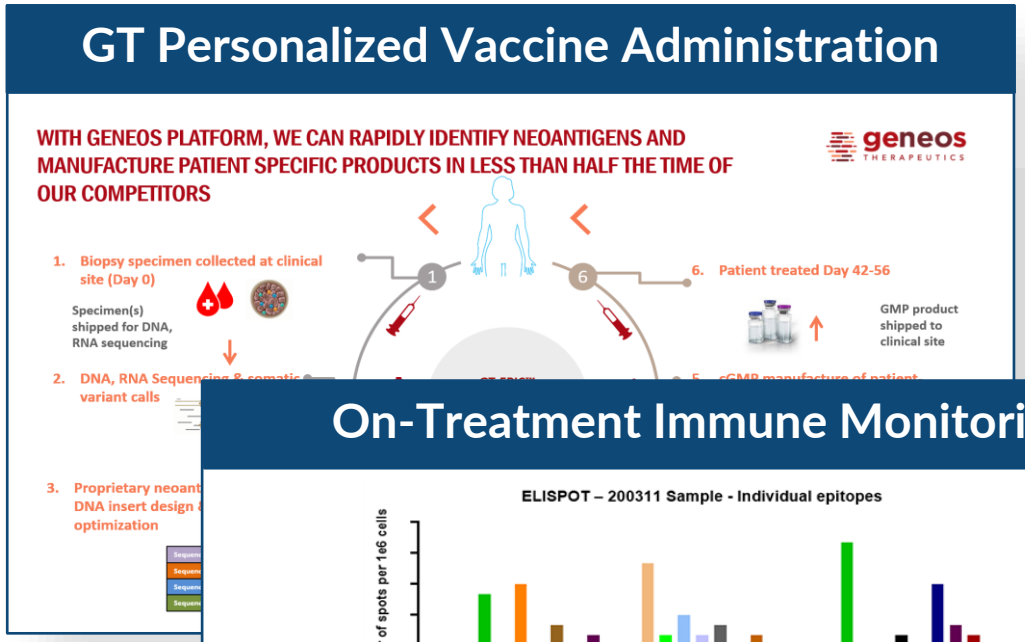
CD4 & CD8 T cell responses

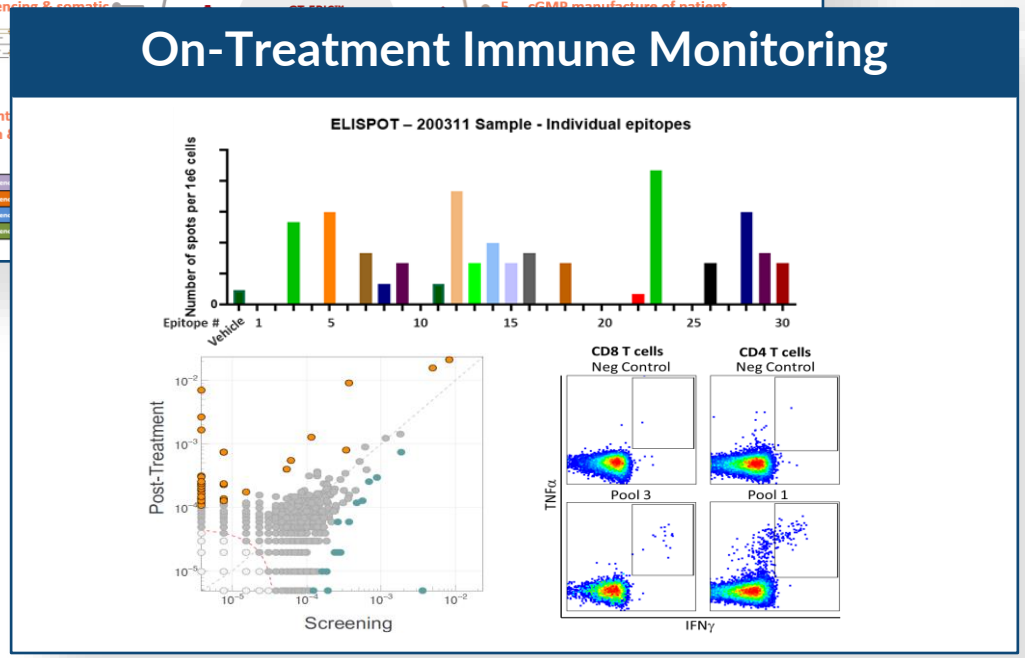
- CTL phenotype

Tumor Infiltration by Lymphocytes (TILs)

- Pre- vs. on-treatment TCR sequence analysis demonstrates expansion of new clones in both blood and tumor tissue
- Infiltration of newly expanded clones into the tumor

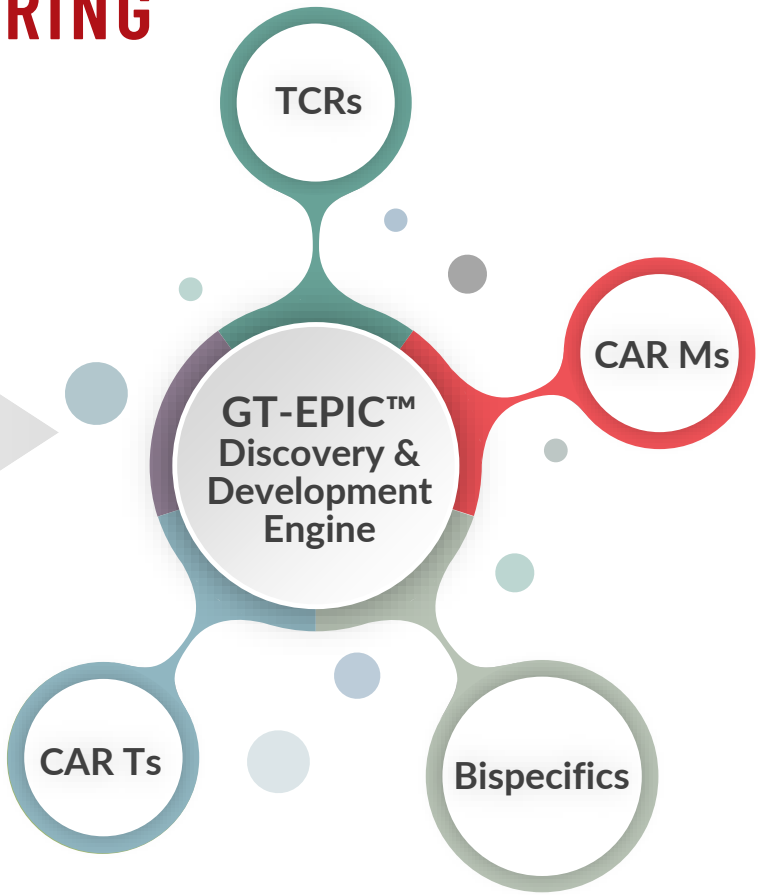
VALIDATED MOA DRIVES GT-EPIC™ DISCOVERY ENGINE FOR NOVEL TCRs TO HIGH VALUE TARGETS FOR PARTNERING





Discovery Engine Highlights:

- Vaccine induced CD8 T cells
- Over 800+ (neo) antigens encoded in PCVs to date
- Select Mutations/Neos include: p53, β-catenin
- Select shared cancer antigens: Survivin, gp100



Validated TCRs, BCRs to novel antigens provide additional assets for partnering in the cell therapy space - CARTs, CAR Macrophages, TCRs, Bispecifics

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GENEOS SUMMARY

- Compelling Clinical Data
- High Neoantigen Payloads Drive CD8s & TILs
- Multiple Upcoming Catalysts
- Strong Discovery Platform

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THERAPEUTICS

BRINGING PATIENT SPECIFIC TUMOR TARGETED IMMUNOTHERAPIES TO THE WORLD, ONE PATIENT AT A TIME.

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