MARKER Therapeutics

MARKER THERAPEUTICS CORPORATE PRESENTATION

January 2024

Forward Looking Statements

Certain statements contained herein are forward-looking statements within the meaning of Section 21E of the Securities Exchange Act of 1934, as amended, and Section 27A of the Securities Exchange Act of 1934, as amended, and Section 27A of the Securities Act of 1933, as amended, that involve risks and uncertainties. All statements other than statements relating to historical matters including statements to the effect that we "believe", "expect", "anticipate", "plan", "target", "intend" and similar expressions, including without limitation statements regarding Marker Therapeutics, Inc.'s ("Marker" or the "Company") intentions, beliefs, projections, outlook, analyses or current expectations concerning, among other things: the Company's research, development and regulatory activities and expectations relating to its non-engineered multi-tumor antigen specific T cell therapies; the effectiveness of these programs or the possible range of application and potential curative effects and safety in the treatment of diseases; the timing, conduct and success of the Company's clinical trials of its product candidates, including MT-401 for the treatment of MT-401 for the treatment of patients with Acute Myeloid Leukemia ("AML"), MT-401 Off-the-Shelf ("OTS") for the treatment of patients with AML and MT-601 for the treatment of patients with relapsed non-Hodgkin lymphoma; the Company's long-term stability and cash runway; the Company's optimized manufacturing process; and the future development of multiTAA therapies. Forward-looking statements are by their nature subject to risks, uncertainties and other factors which could cause actual results to differ materially from those stated in such statements. Such risks, uncertainties and factors include, but are not limited to the risks set forth in the Company's most recent Form 10-K, 10-Q and other SEC filings which are available through EDGAR at WWW.SEC.GOV. No representation or warranty (expressed or implied) is made as to, and no reliance should be placed on, the fairness, accuracy or completeness of the information contained herein. Accordingly, none of the Company, or any of its principals, partners, subsidiaries or affiliates, or any of such person's board members, officers or employees accepts any liability whatsoever arising directly or indirectly from the use of this presentation. Certain information set forth herein includes estimates, projections and targets and involves significant elements of subjective judgement and analysis, which may or may not be correct. No representations are made as to the accuracy of such estimates, projections or targets or that all assumptions relating to such estimates, projections or targets have been considered or stated or that such estimates, projections or targets will be realized. This presentation does not purport to contain all of the information that may be required to evaluate the Company and any recipient hereof should conduct its own independent analysis of the Company and the data and information contained herein. Any forward-looking statements are not guarantees of future performance and actual results may differ materially from estimates in the forward-looking statements. Unless otherwise stated, all information in this presentation is as of the date of the cover page of this presentation, and the Company undertakes no obligation to revise these forward-looking statements to reflect events or circumstances that arise after the date hereof.

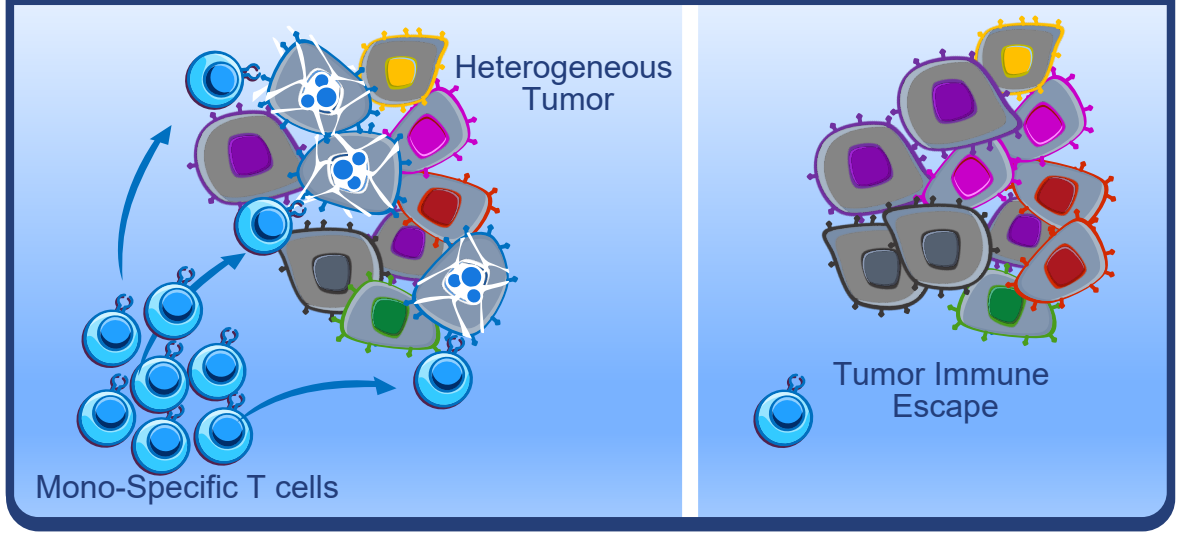
Marker Therapeutics Overview

Marker is a clinical-stage immuno-oncology company focusing on developing next-generation T cell-based immunotherapies for the treatment of hematological malignancies and solid tumor indications

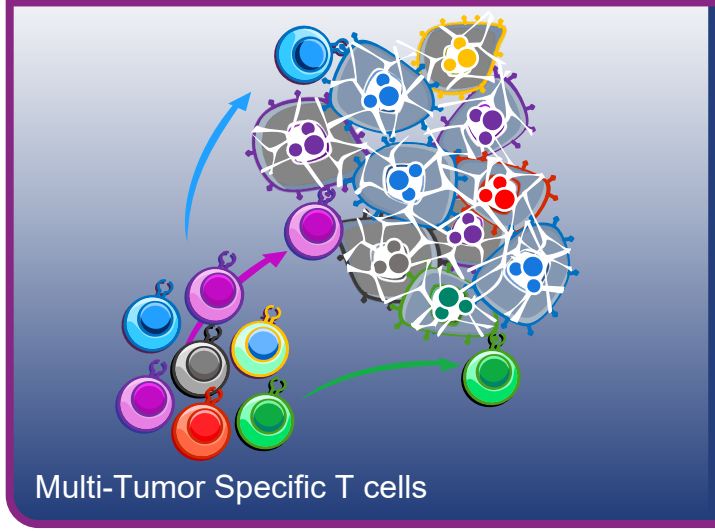
- Multi targeted T cell therapy
- Does not require genetic engineering
- Non-clinical proof-of-concept data
- Clinical data in >200 patients across 7 indications in Phase 1/2 trials

Key Advantages of Marker's multiTAA Therapy

Single antigen targeted therapies



Marker multiTAA targeted therapies



Targeting Multiple Antigens for Improved Outcomes

In contrast to mono-specific T cells, multiTAA–specific T cells recognize up to 6 antigens for a more potent, durable anti-tumor response.

Simple Manufacturing Process

Culture Initiation

G-Rex® 500M

+ Cytokines

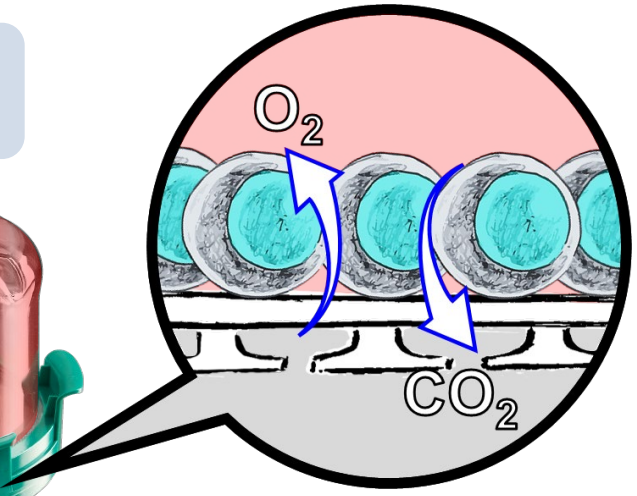
+ Peptides

Expansion of multiTAA-specific T Cells

Incubation without Interventions

Day 9 Cell Harvest

multiTAA Product



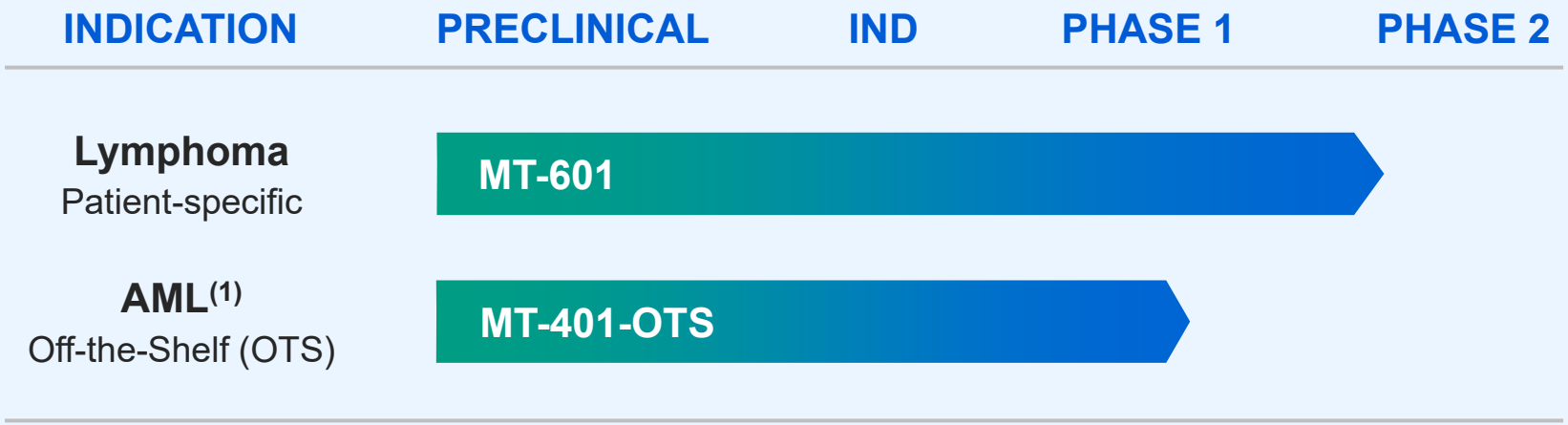
G-Rex's unique gas permeable membrane allows for uninterrupted expansion

A single G-Rex device can produce enough product for up to 3 infusions (complete course for 1 patient)

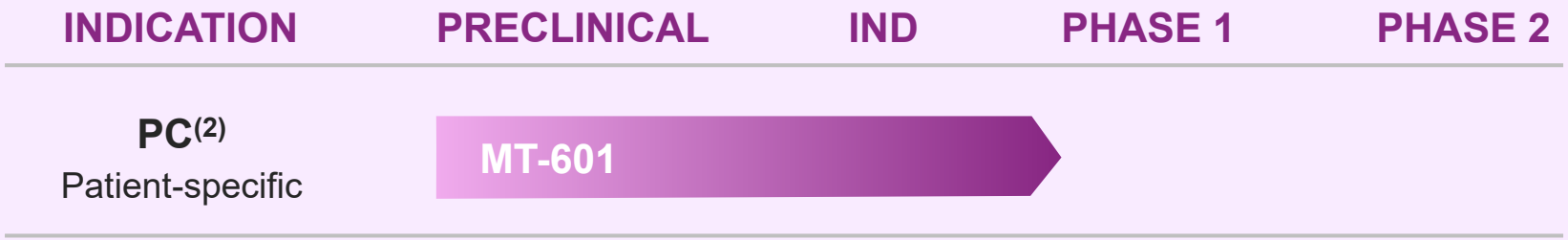
(1) PBMCs, peripheral blood mononuclear cells.

Marker's multiTAA-Specific T Cell Pipeline

HEMATOLOGIC MALIGNANCIES



SOLID TUMORS



(1) AML, Acute Myeloid Leukemia (2) PC, Pancreatic Cancer

Marker's multiTAA-Specific T Cell Pipeline

HEMATOLOGIC MALIGNANCIES

AML[1]
Off-the-Shelf (OTS)
MT-401-OTS

SOLID TUMORS

INDICATION
PRECLINICAL
IND
PHASE 1
PHASE 2

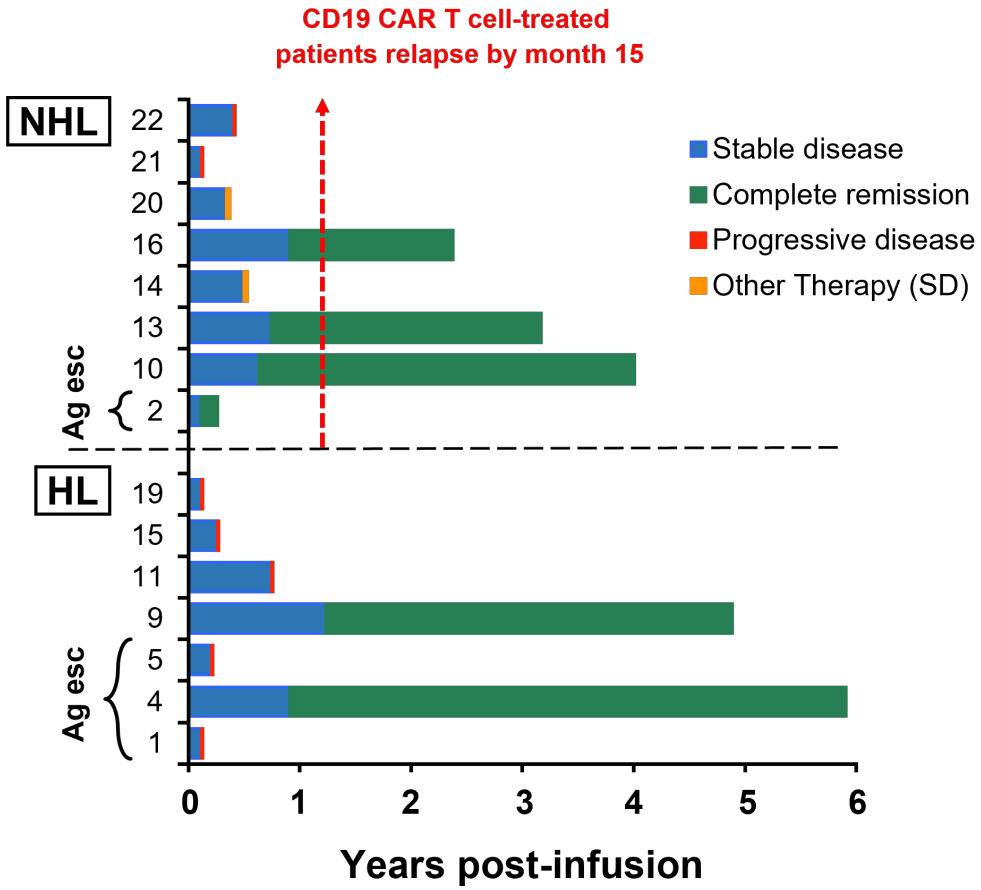
PC[2]
Patient-specific
MT-601

[1] AML, Acute Myeloid Leukemia [2] PC, Pancreatic Cancer

Durability of Response of multiTAA-Specific T Cells vs. CAR T Cells in Lymphoma

Durability of Response

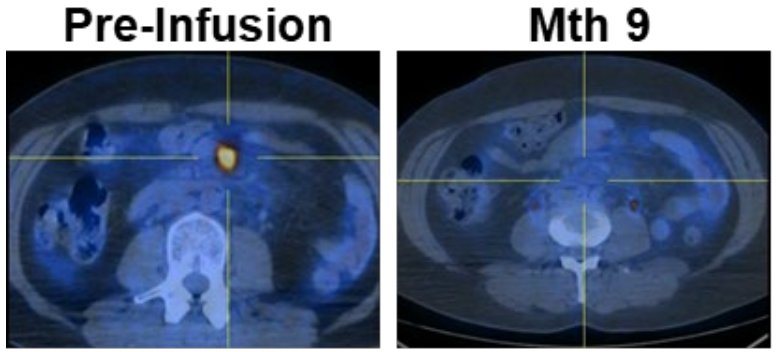
multiTAA-specific Ts (6 years) vs CAR Ts (15 months)

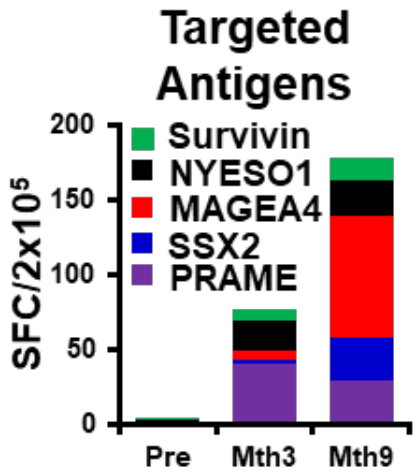


HL: Hodgkin's Lymphoma; NHL: Non-Hodgkin's Lymphoma

Potent and Specific

multiTAA have shown potent and specific anti-tumor activity

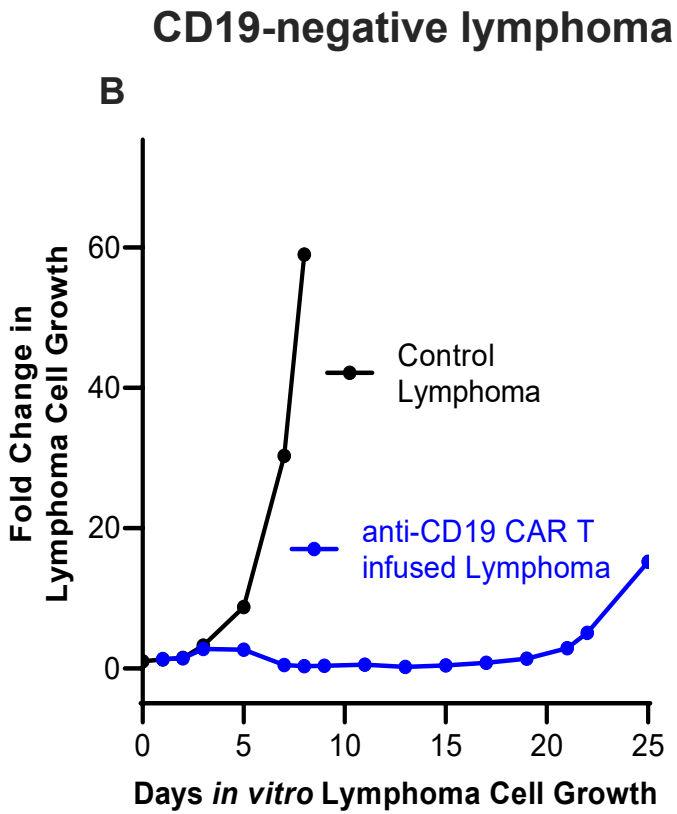




Vasileiou S et al. J Clin Oncol 2021; Locke FL et al. Lancet Oncol 2019; Schuster SJ et al. Lancet Oncol 2021; Locke FL et al. N Engl J Med 2022.

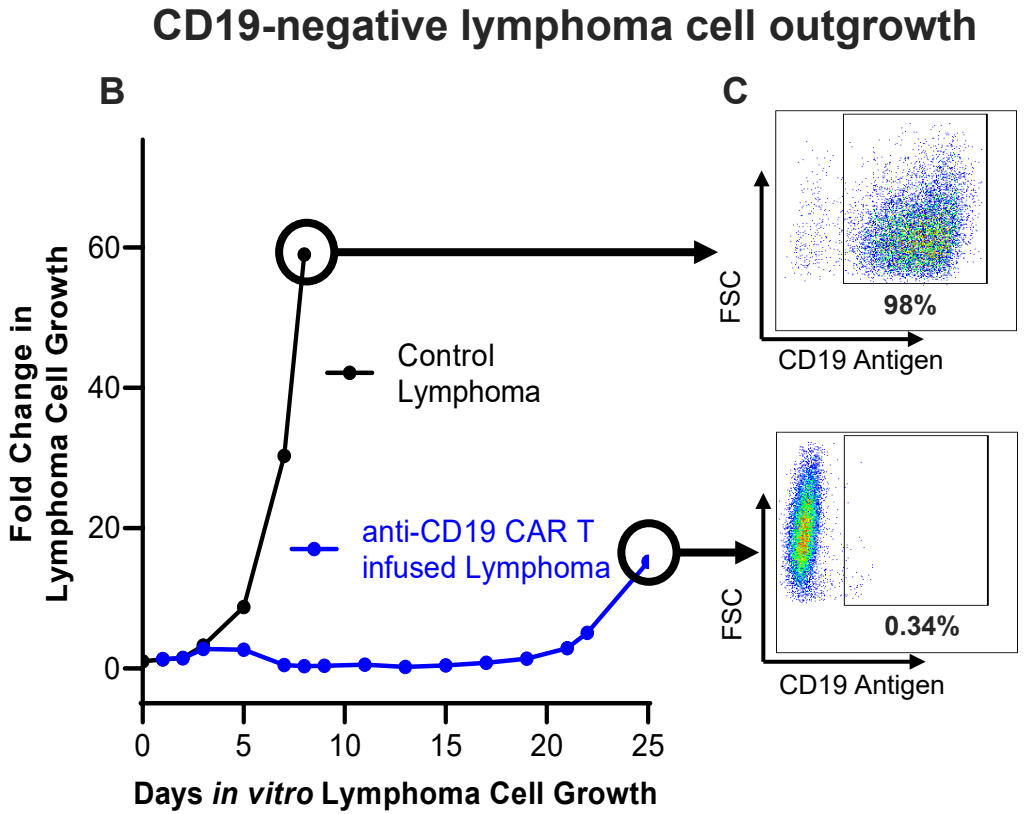
MARKER Therapeutics

Lymphoma Cells Become Resistant to CD19 CAR T Cells



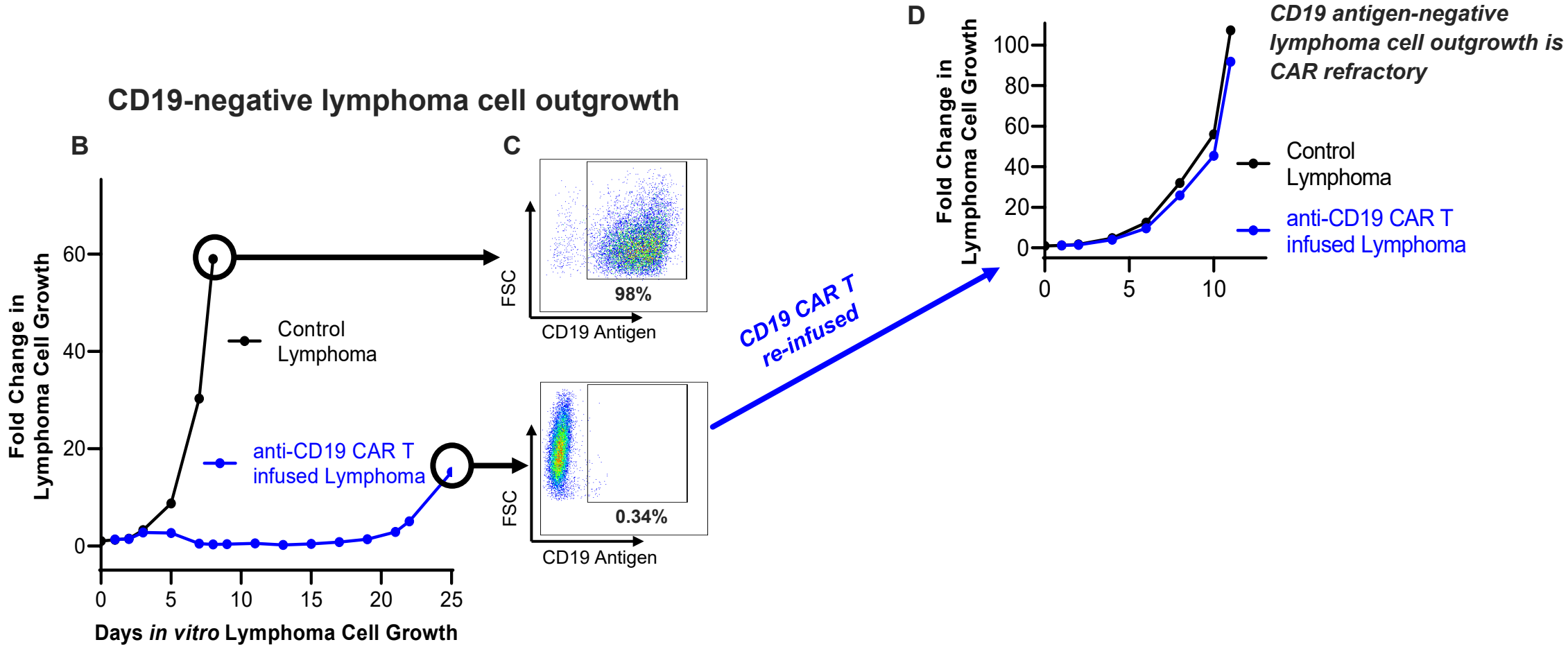
- Hodgkin's lymphoma cell line engineered to overexpress CD19.
- Lymphoma cells relapse 3 weeks after initial anti-CD19 CAR T cell treatment.

CD19 Antigen Escape Results in CAR Resistant Lymphoma Cells

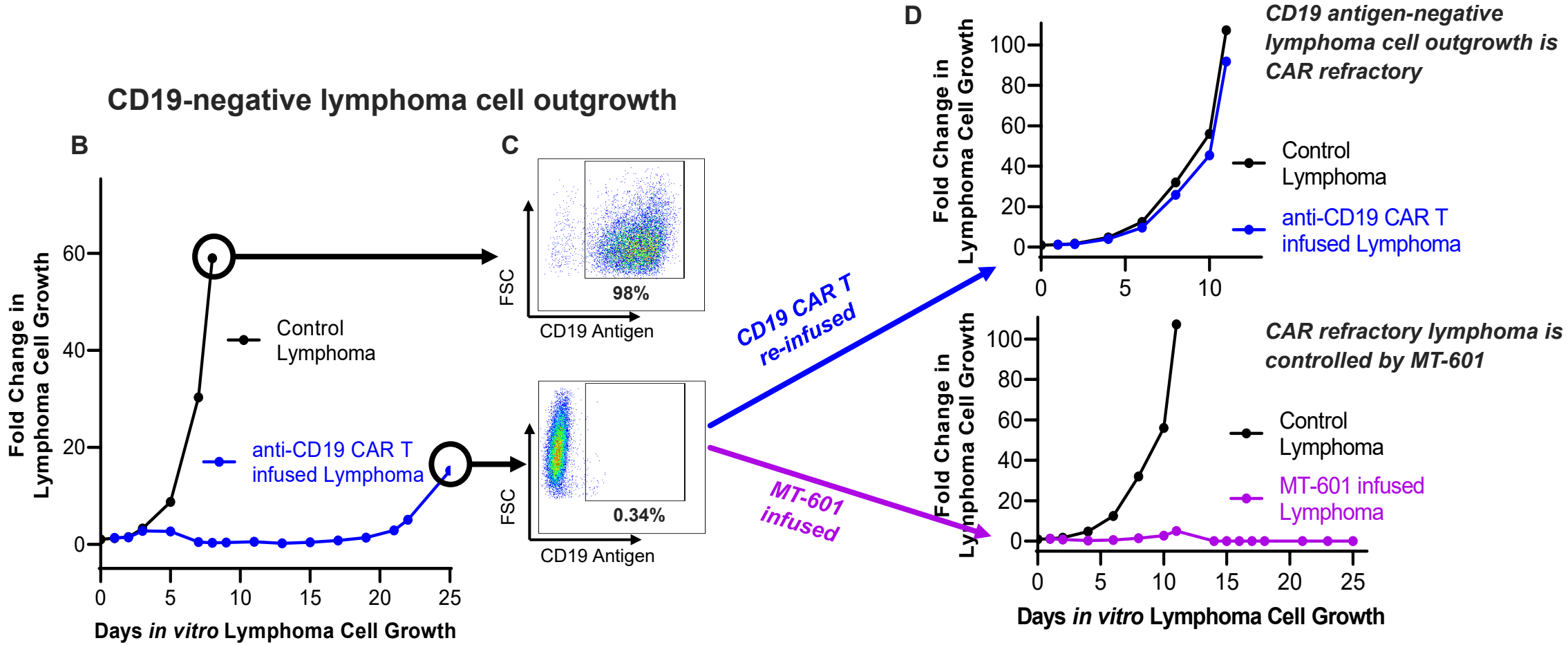


- Hodgkin's lymphoma cell line engineered to overexpress CD19.
- Lymphoma cells relapse 3 weeks after initial anti-CD19 CAR T cell treatment.
- Resistant lymphoma cells are negative for CD19.

Antigen-Negative Lymphoma Cells are CD19 CAR Refractory



MT-601 Demonstrates Anti-Tumor Activity in CAR Refractory Lymphoma Cells



Broad antigen targeting of MT-601 resulted in killing of CD19 CAR T refractory lymphoma cells

First Study Participant Treated with MT-601 in Phase 1 APOLLO Trial

Demographics

- 57-year-old female
- Diagnosed with DLBCL[(1)]

Clinical History

- 4 Prior treatment lines, including CD19 CAR T cells
- Relapse within 90 days after CD19 CAR T cell therapy
- Subsequent treatment with 2 doses of MT-601 ($200x10^6$ cell dose)

[(1)] DLBCL, Diffuse Large B Cell Lymphoma

Complete Response in Lymphoma Patient Treated with MT-601 after CAR T Relapse

MT-601 Clinical Safety

- MT-601 treatment was well tolerated
- No > Grade 1 treatment-related adverse events

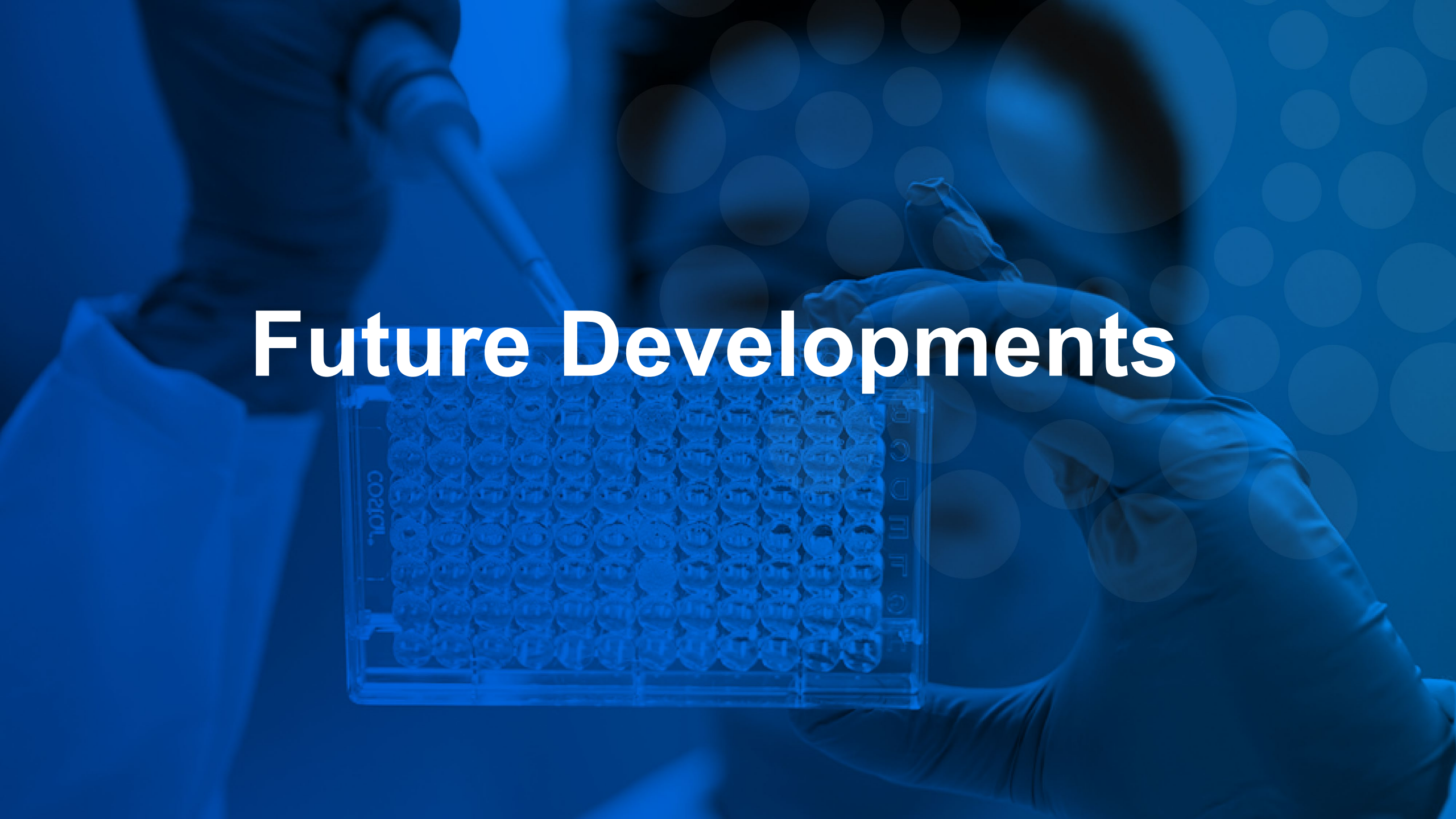
Clinical Response

- Study participant achieved **complete metabolic response** 8 weeks after 2nd infusion of MT-601
- Patient remains in complete response 6 months after MT-601 treatment

Clinical Investigation of MT-601 in Marker's APOLLO Trial

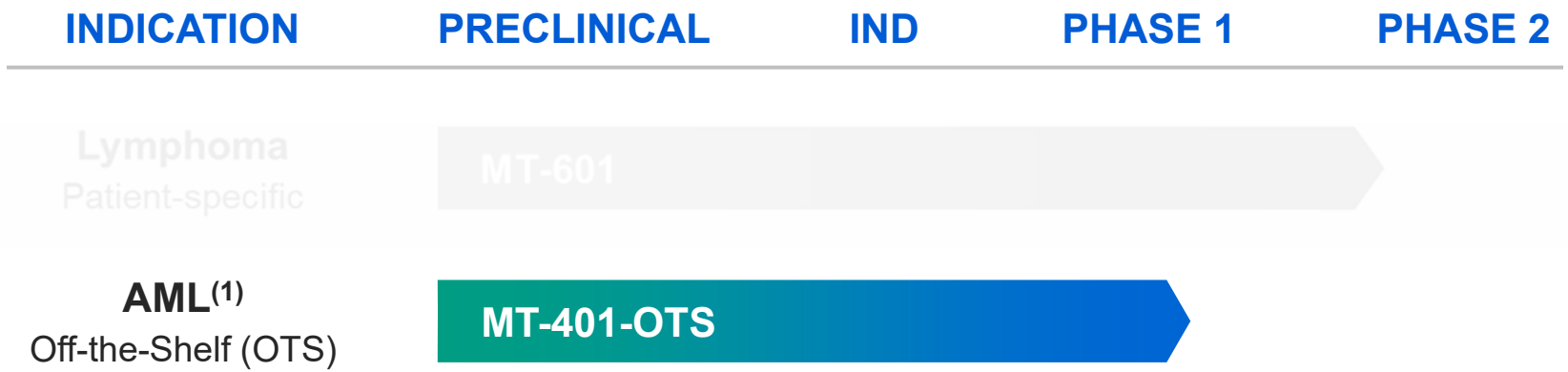
APOLLO Trial	Investigate MT-601 in a Phase 1, multicenter, open-label study
Study Participants	Lymphoma patients who relapsed after or are ineligible for anti-CD19 CAR T cell therapy
Primary Objective	Evaluate safety and efficacy of MT-601 in study participants with various lymphoma subtypes
Clinical Sites	9 clinical sites across the United States will cumulatively enroll up to approx. 30 participants during Dose Escalation phase

Future Developments



Marker's multiTAA-Specific T Cell Pipeline

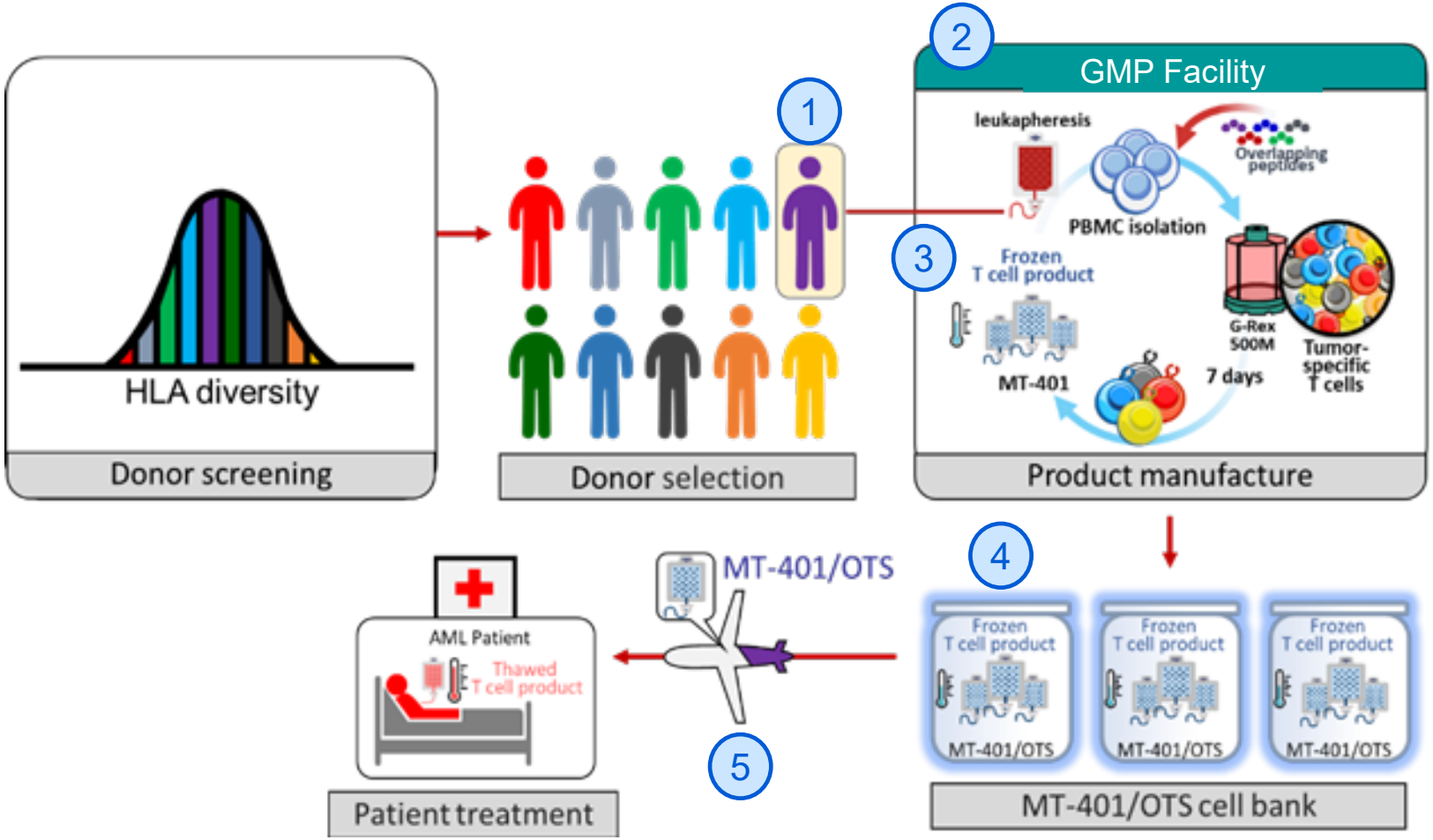
HEMATOLOGIC MALIGNANCIES



SOLID TUMORS

(1) AML, Acute Myeloid Leukemia (2) PC, Pancreatic Cancer

Off-the-Shelf (OTS) Production and Treatment Strategy



Marker's multiTAA-Specific T Cell Pipeline

HEMATOLOGIC MALIGNANCIES

INDICATION	PRECLINICAL	IND	PHASE 1	PHASE 2
Lymphoma Patient-specific	MT-601			
AML[1] Off-the-Shelf (OTS)	MT-401-OTS			

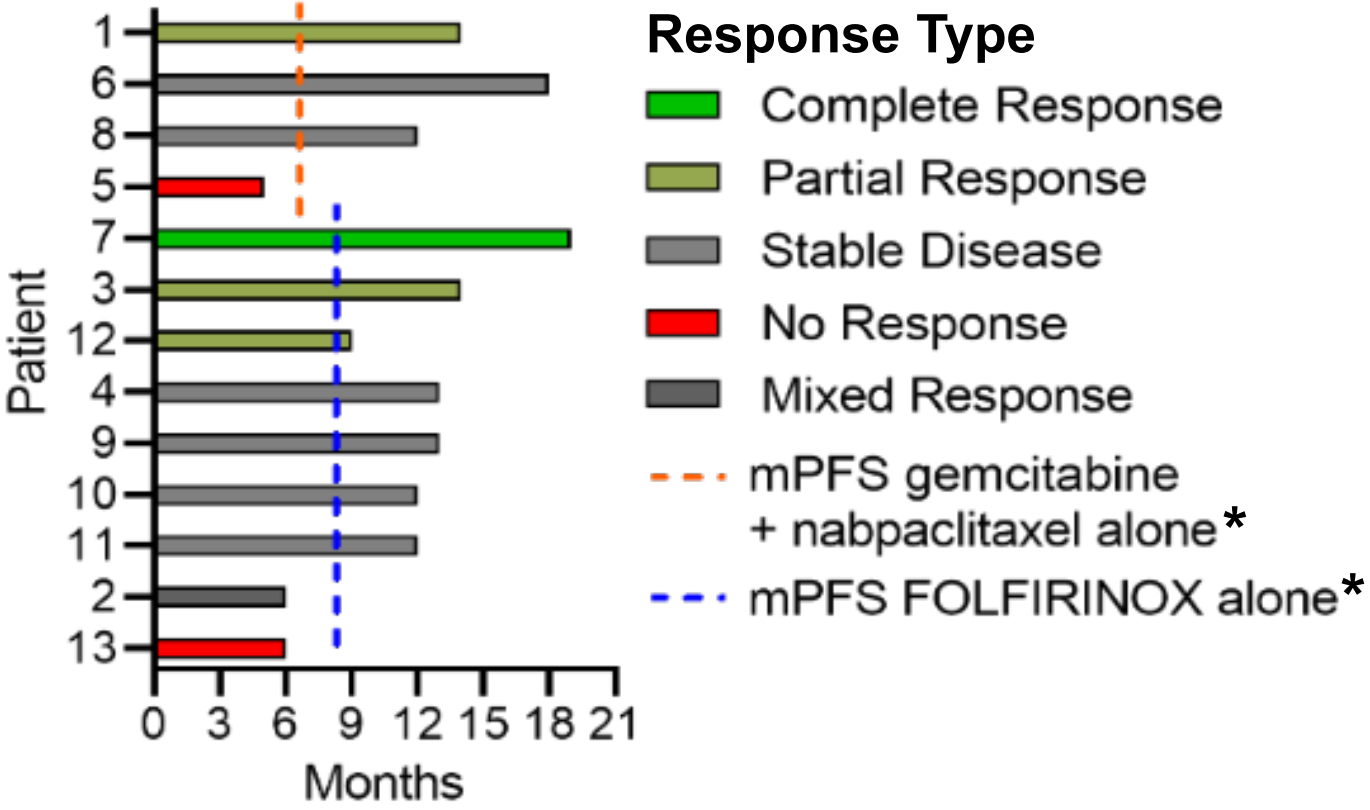
SOLID TUMORS

INDICATION	PRECLINICAL	IND	PHASE 1	PHASE 2
PC[2] Patient-specific	MT-601			

[1] AML, Acute Myeloid Leukemia [2] PC, Pancreatic Cancer

MultiTAA-specific T cells Demonstrated Benefit to SOC Chemotherapy in Patients with Pancreatic Cancer

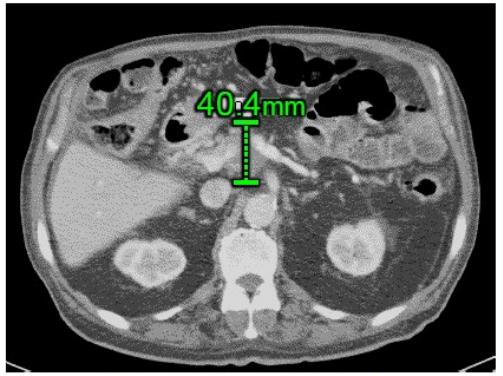
TACTOPS Results



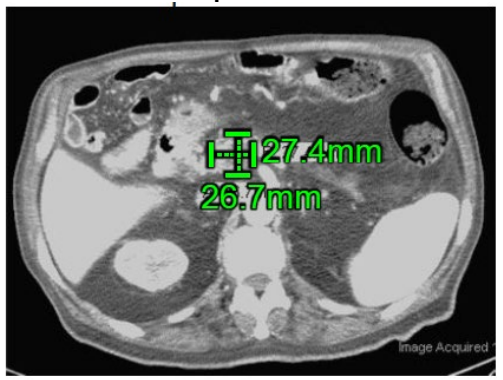
* Combination therapy demonstrates responses beyond historical survival points (orange & blue lines).

Patient 1

Pre-infusion



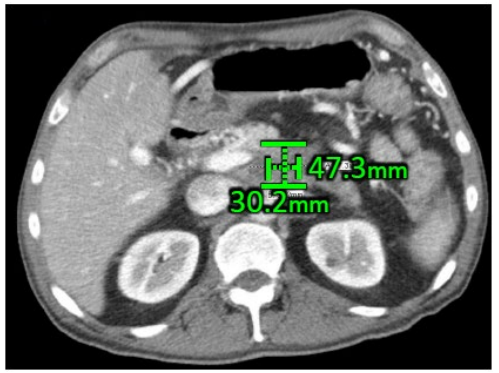
2 months post multiTAAs



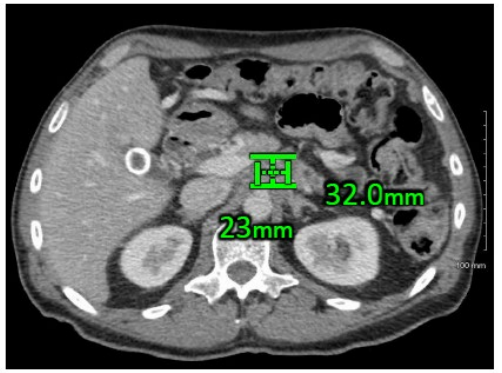
>30% reduction of index lesion

Patient 3

Pre-infusion



6 months post multiTAAs



>40% reduction of index lesion

Smaglo BG et al. J Clin Oncol 2020. ASCO 2020 Presentation.

Corporate & Financial Highlights

- ✓ Demonstrated clinical response in hematological malignancies and solid tumors
- ✓ Favorable safety profile in clinical trials to date
- ✓ 3 FDA-approved INDs
- ✓ Awarded over $17 million non-dilutive funding through grants
- ✓ Cash & Cash Equivalents of $17.5 million(1)
- ✓ Current cash runway expected through Q4 2025

(1) As of September 30, 2023.

THANK YOU

MARKER Therapeutics