

August 2023



Disclaimer

This presentation contains "forward-looking statements," as that term is defined under the Private Securities Litigation Reform Act of 1995 (PSLRA), which statements may be identified by words such as "believe," "may," "will," "estimate," "continue," "anticipate," "intend," "expect" and other words of similar meaning. These forward-looking statements involve certain risks and uncertainties. Such risks and uncertainties could cause our actual results to differ materially from those indicated by such forward-looking statements, and include, without limitation: the success, cost and timing of our product development activities and clinical trials; our ability to submit an IND and successfully advance our technology platform to improve the safety and effectiveness of our existing TCR therapeutic candidates; the rate and degree of market acceptance of T-cell therapy generally and of our TCR therapeutic candidates; government regulation and approval, including, but not limited to, the expected regulatory approval timelines for TCR therapeutic candidates; and our ability to protect our proprietary technology and enforce our intellectual property rights; amongst others. For a further description of the risks and uncertainties that could cause our actual results to differ materially from those expressed in these forward-looking statements, as well as risks relating to our business in general, we refer you to our Annual Report on Form 10-K filed with the Securities and Exchange Commission filed for the year ended December 31, 2022, our Quarterly Reports on Form 10-Q, Current Reports on Form 8-K and other filings with the Securities and Exchange Commission. The forward-looking statements contained in this presentation speak only as of the date the statements were made and we do not undertake any obligation to update such forward-looking statements to reflect subsequent events or circumstances.

We urge you to consider these factors carefully in evaluating the forward-looking statements herein and you are cautioned not to place undue reliance on such forward-looking statements, which are qualified in their entirety by this cautionary statement. The forward-looking statements contained in this presentation speak only as of the date the statements were made and we do not undertake any obligation to update such forward-looking statements to reflect subsequent events or circumstances.

We intend that all forward-looking statements be subject to the safe-harbor provisions of the PSLRA.





To transform the lives of people with cancer by designing, developing, and delivering cell therapies

Arming cells.
Against cancer.
For good.



A pre-eminent cell therapy company

The leader in cell therapies for solid tumors

Deep clinical late-stage pipeline

Multiple near-term catalysts End-to-end capabilities

Cash runway into 2026

Solid tumors represent ~90% of all cancers

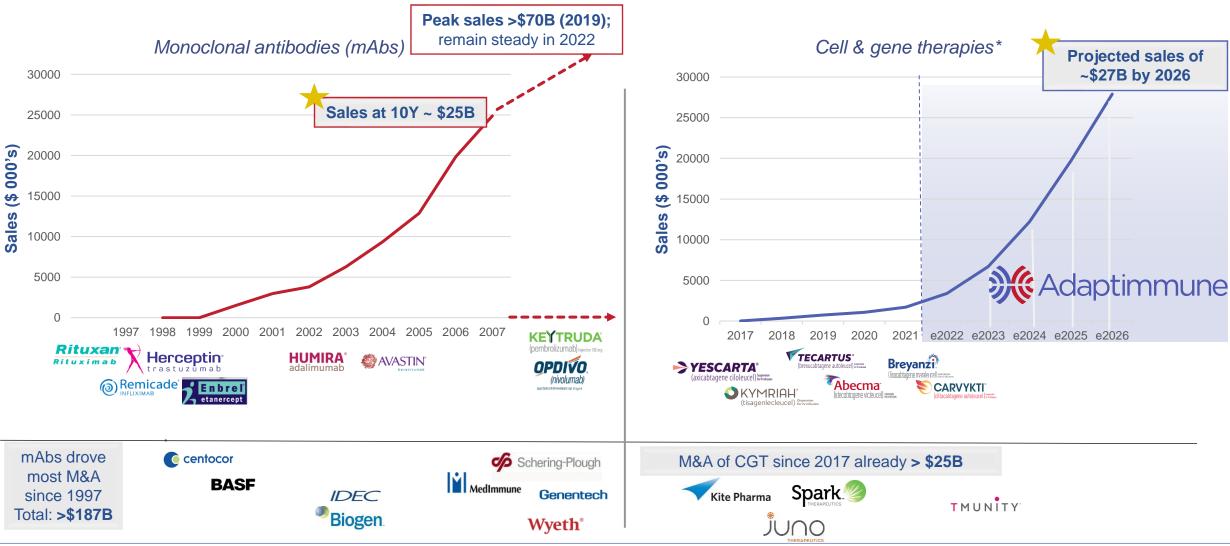
Paths to products targeting MAGE-A4, NY-ESO, and mesothelin Clinical development decisions driven by data

Experienced teams successfully advancing and manufacturing T-cell therapies

Strong balance sheet to deliver across programs

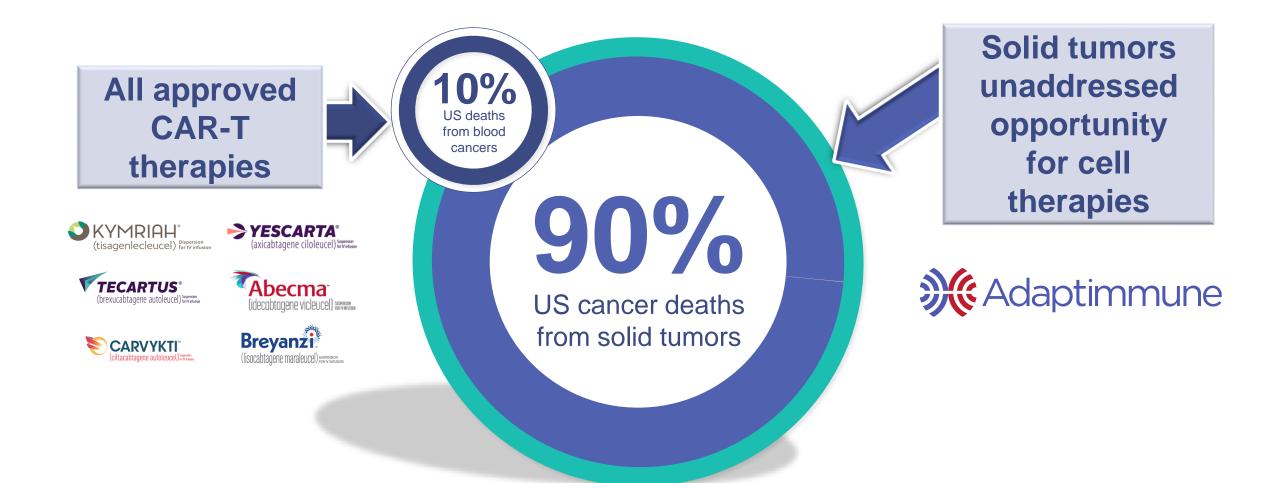


Cell and gene therapies set to transform the treatment landscape





Cell therapy solid tumor space: a significant opportunity



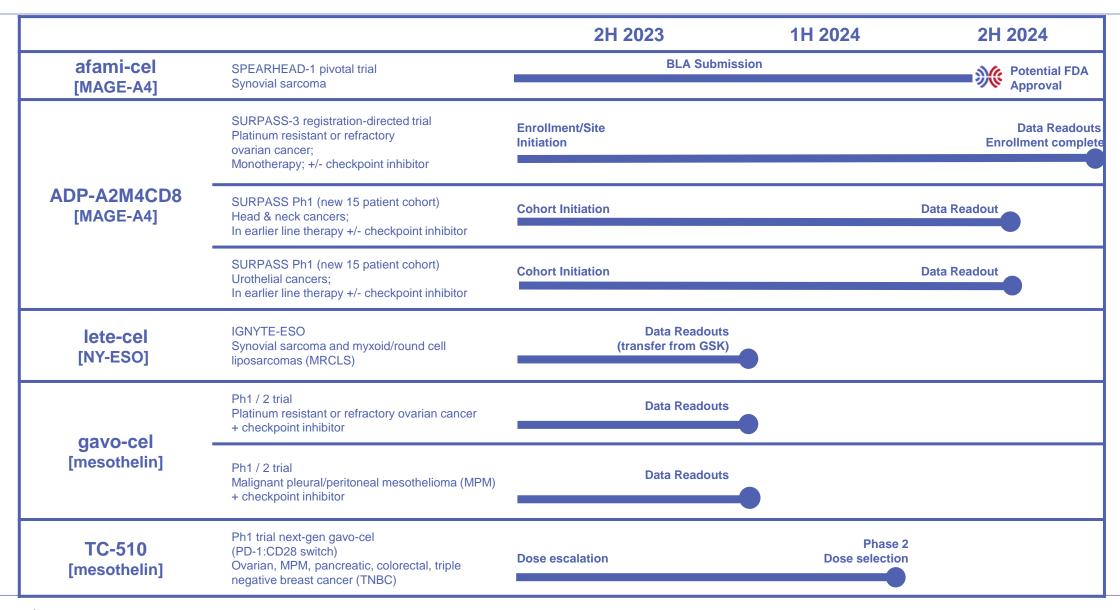


Deep pipeline of opportunities across multiple cancer indications

PROGRAM	TRIAL NAME(S)/ INDICATION(S)/DESIGN	IND-ENABLING	PHASE 1	PHASE 2/3
afami-cel [MAGE-A4]	SPEARHEAD-1 pivotal trial Synovial Sarcoma			
ADP-A2M4CD8 [MAGE-A4]	SURPASS-3 registration-directed trial Platinum resistant or refractory ovarian cancer; Monotherapy; +/- checkpoint inhibitor			
	SURPASS Ph 1 signal finding trial Multiple indications Two arms: Monotherapy; +/- checkpoint inhibitor			
	SURPASS Ph1 (two new 15 patient cohort) Head & neck cancers; urothelial cancers In earlier line therapy +/- checkpoint inhibitor			
lete-cel [NY-ESO]	IGNYTE-ESO Synovial sarcoma and MRCLS			
gavo-cel [mesothelin]	Ovarian + checkpoint inhibitor Malignant Pleural/Peritoneal Mesothelioma (MPM) +/- checkpoint inhibitors			
	PD-1:CD28 Switch Ovarian, MPM, Pancreatic, Colorectal, Triple Negative Breast Cancer			
PRAME	Indications TBD			
CD70	Indications TBD			



Clinical development decisions driven by data catalysts







A preeminent cell therapy company with specialized capabilities for success

Unique class of medicines



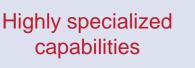
Company capabilities:

- Wholly focused on cell therapies for solid tumors
- Experienced team
- 7 programs taken into clinic -5 ongoing, 1st BLA initiated
- Designed and built from ground up as dedicated cell therapy company
- End-to-end from discovery to delivery

US Philadelphia, PA and Cambridge, MA



- TRuC research
- Autologous cell manufacturing
- Clinical development
- Translational sciences







UK **Oxford and Stevenage**

- TCR and allogeneic research
- Vector manufacturing
- Allogeneic manufacturing



capabilities





Strong balance sheet with cash into 2026 to finance multiple catalysts



Total Liquidity at end of Q2 2023 was ~\$205M*

Cash runway anticipated to early 2026







Advanced autologous engineered TCR program targeting MAGE-A4

Validated target with annual mortality of >82,000¹ patients (US and EU) with MAGE-A4+ tumors

- Clinically validated "clean" target;
 member of cancer testis antigen family
- Expression across broad range of solid tumors confirmed by screening protocol
- In early- and late-phase clinical trials with acceptable safety profile, to date, and responses in multiple solid tumor indications

- Expression levels ranging from ~15% to ~70%² across tumors
- Encouraging responses in:
 - Synovial sarcoma
 - Ovarian
 - Head & neck
 - Bladder
 - Gastroesophageal

- NSCLCsquamous
- Melanoma
- MRCLS

MAGE-A4 target for both first-gen afami-cel and next-gen (ADP-A2M4CD8) programs



Responses in multiple solid tumor indications expressing MAGE-A4

Responses reported with	Indication	Mortality US, UK & EU4*	MAGE-A4	Expression**	Potential MAGE-A4 +ve Patients	Potential MAGE-A4 +ve Patients Factored for HLA***
afami-cel ADP-A2M4CD8	Synovial sarcoma	1,804+	%	67	1,209	496
afami-cel	MRCLS	2,000 ⁺	%	34	680	279
ADP-A2M4CD8	Gastroesophageal (esophageal, EGJ, and gastric)	83,384	%	20	16,677	7,388
afami-cel ADP-A2M4CD8	Head and neck	41,409	%	22	9,110	4,036
ADP-A2M4CD8	Urothelial	52,568	%	32	16,822	7,452
afami-cel	NSCLC - squamous	76,875	%	35	26,906	11,919
afami-cel	Melanoma	19,037	%	16	3,046	1,349
ADP-A2M4CD8	Ovarian	31,558	%	24	7,574	3,355
					TOTAL MAGE-A4: 82,024	TOTAL MAGE-A4 HLA A2: 36,274

Significant potential for SPEAR T-cell franchise targeting MAGE-A4

*Mortality figures based on American Cancer Society 2022 (US) and Global Can (EU4/UK 2020) **MAGE-A4 expression based on ADAP samples and expression cut off criteria of ≥30% tumor cells at ≥2+ intensity. Synovial sarcoma and MRCLS MAGE-A4 expression based on 1,043 patient samples at November 20, 2020 data cut-off and expression of all other tumor types on 6,167 patients, 1,543 tumor samples at November 19, 2021 data cut-off ***HLA A2 expression based on ADAP samples of 41% for synovial sarcoma and MRCLS (1,043 patient samples; data cut-off November 20, 2020) and 44.3% for all other tumor types (6,167 patients, 1,543 tumor samples; data cut-off November 19, 2021) +synovial sarcoma and MRCLS figures reflect advanced/refractory treatable patients based on internal primary market research



Afami-cel BLA Progress; Completion Targeted in Q4 2023



Completed Actions

- ✓ Premarket FDA application (PMA) for the MAGE-A4 CDx assay (with partner)
- ✓ Agreed upon confirmatory evidence plan with FDA; Cohort 2 of the SPEARHEAD-1 trial will act as confirmatory evidence for full approval
 - ✓ Enrollment in Cohort 2 complete
- ▼ Favorable FDA feedback on the commercial T-cell potency assay including agreement on the proposed potency dataset for inclusion in the submission
- Method validation for lot release assays (including potency assays)
- √ Vector process performance qualification (PPQ)



In Progress

- ☐ T-cell process performance qualification (PPQ)
- CMC dossier authoring and preparation

Timing for Rolling Submission



Q4 2022 Preclinical Module Submission Completed



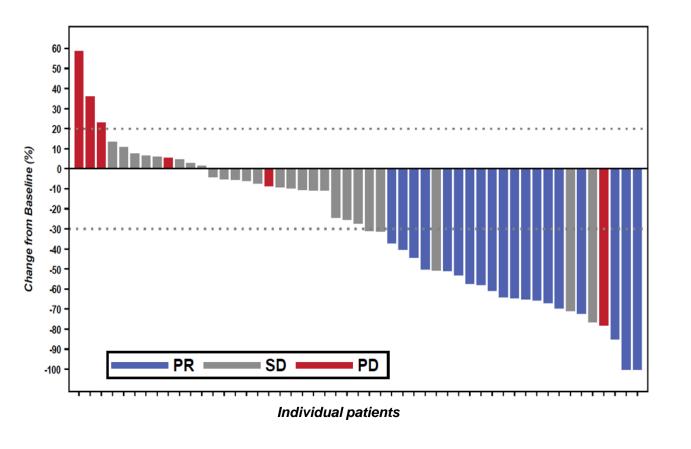
Q1 2023 Clinical Module Submission Completed



Target: Q4 2023
CMC Module/ Full BLA
Submission Complete



Response rate of 38.6% after a single dose of afami-cel in heavily pre-treated patients with metastatic synovial sarcoma





"Adaptimmune's contribution to improving sarcoma patient outcomes is extraordinary and is well-deserved for recognition. The company's work is taking us many steps closer to finding a cure for sarcoma."

Sarcoma Foundation of America (SFA) CEO, Brandi Felser





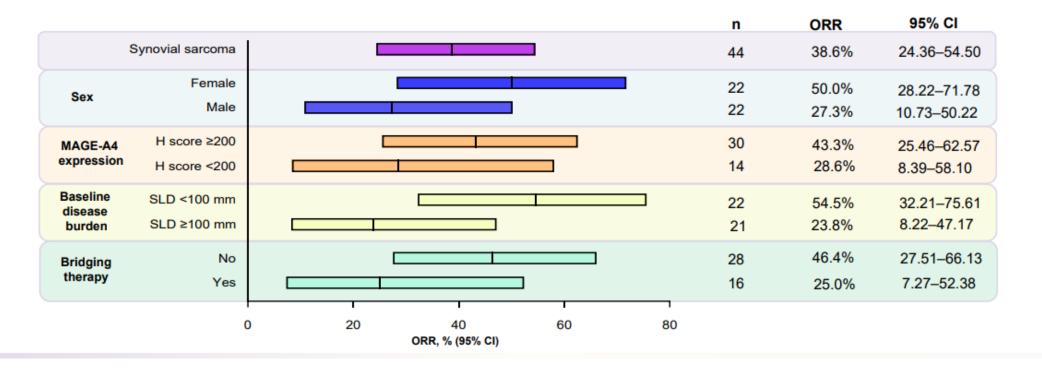
Afami-cel is efficacious in heavily pre-treated patients with synovial sarcoma



SFA Honors Adaptimmune Therapeutics with 2022 Vision of Hope Award



Responses observed across all subgroups. Higher response rates associated with gender, MAGE-A4 expression, lower disease burden

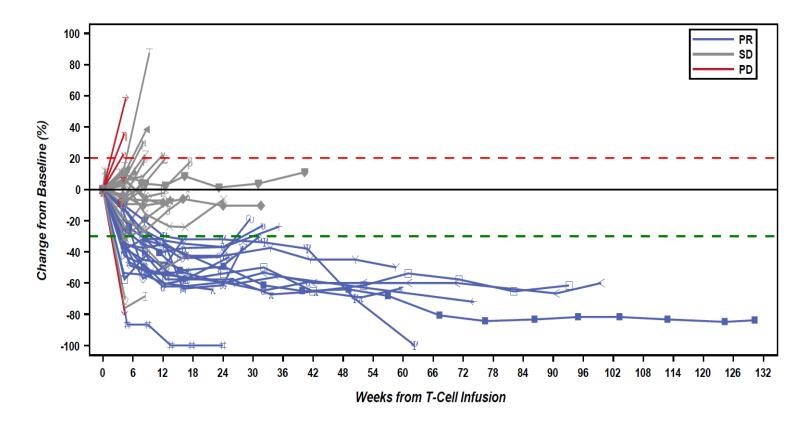




- Higher response rates in **female** patients and those who had **higher MAGE-A4 expression**, **lower disease burden** at baseline, or did **not require bridging therapy**
- Responses were similar among patients stratified by age, number of prior lines of systemic therapy, transduced cell dose, and cytokine release syndrome



Durable responses after a single dose of afami-cel

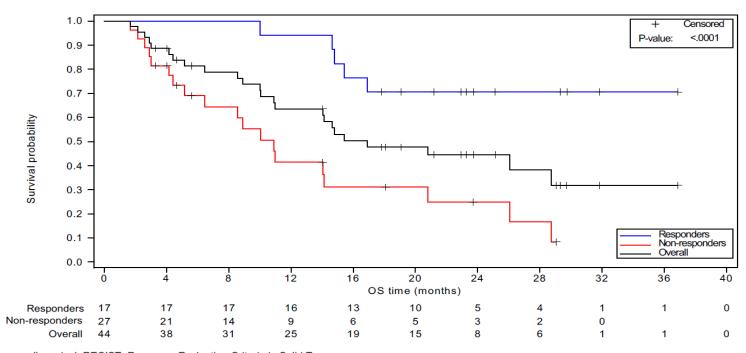




- Time to response is rapid with median time to response of 4.9 weeks
- Median duration of response in synovial sarcoma: 50.3 weeks (range: 11.7–122.0+)



Meaningful survival after afami-cel treatment in synovial sarcoma



OS, overall survival; RECIST, Response Evaluation Criteria in Solid Tumors



- Median Overall Survival 16.9 months (95% CI: 10.9, NE)
- People who respond to afami-cel have a 24-month survival probability of 70%
- **Historical outcomes** are poor for advanced synovial sarcoma with a **median OS of <12 months** in the second line and beyond treatment setting



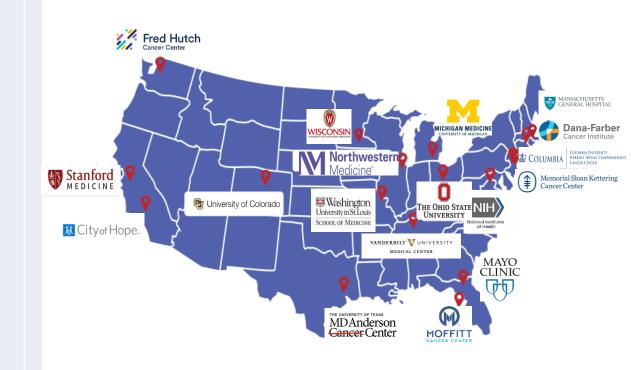
Bringing the potential of afami-cel to patients with synovial sarcoma

Afami-cel is a highly anticipated new treatment option for synovial sarcoma

- Currently very limited options and poor prognosis for advanced patients after 1L: <20% 5-yr survival, <15% ORR
- Adaptimmune has the opportunity to transform treatment, delivering unprecedented ~39% ORR and ~>50 weeks DOR with single dose, in heavily pre-treated patients with advanced disease

Concentrated care, few specialists, and strong experience with afami-cel through engagement in our trials

- About 80 adult Sarcoma Centers of Excellence and 18 afami-cel clinical trial sites in the US
- More than 5 years of clinical experience with afami-cel and fully owned manufacturing, supply, and customer service



Opportunity to establish focused commercialization capabilities

Ultra-targeted approach and highly specialized team, sized and customized to cell therapy in rare disease

Focused

15-20 experienced treatment sites and integrated referral networks across CoEs

Access

Strong value proposition in rare, biomarker targeted population with low budget impact to payers

Reliable

Robust processes, customized to cell therapy, delivering excellent customer experience

Simple

Straightforward testing solution and patient journey from identification to infusion

Caring Boldly

Nimble, specialized, integrated team, passionate to find solutions for patients



- ✓ Afami-cel provides an outstanding opportunity to develop the commercial capabilities we will need as we grow to reach more patients across more indications and achieve long-term business sustainability
 - Opportunity to build capabilities and establish trust as a fully integrated cell therapy organization
 - Nimble to deliver contribution with afami-cel, and scalable to grow for pipeline
 - Enabling faster adoption, lower costs, and excellent experience for next launches, driving towards long-term business sustainability

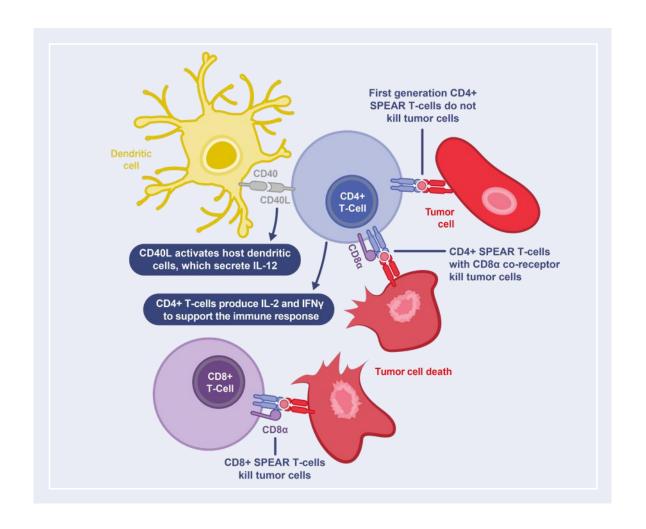




ADP-A2M4CD8 – SURPASS family of trials

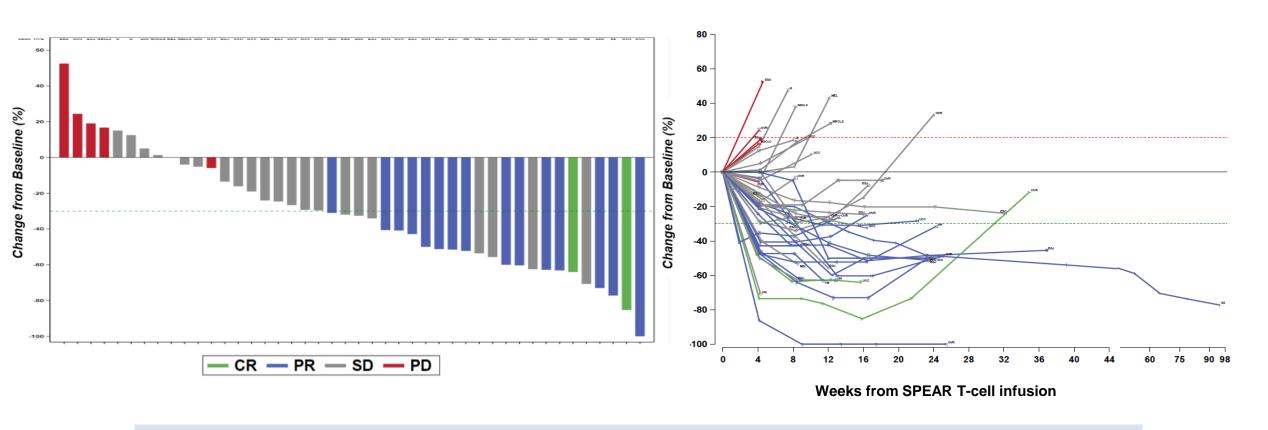
Next-gen product targeting MAGE-A4 designed to be more potent

- ✓ Same MAGE-A4 targeted TCR as afami-cel with the addition of CD8α co-receptor
- ✓ Designed to be more potent and to more effectively engage the broader immune system compared to first-gen
- ✓ Single dose of cells
- ✓ Based on results to date, focusing on ovarian, urothelial and H&N cancers
 - ✓ ORR of 52% across the three tumor types
 - √ ~ 15,000 eligible patients per year (with these three tumors) in the US and EU expressing MAGE-A4 and HLA-A2*





Results consistent: 37% response rate in SURPASS Ph 1 trial



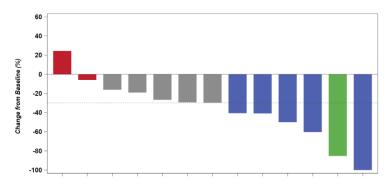
- 52% response rate in focus areas of ovarian, urothelial, and head & neck cancers (13/25)
- 75% response rate in focus areas of ovarian, urothelial, and head & neck cancers in patients with 3 or fewer prior lines of therapy (9/12)



52% ORR in Ovarian, Urothelial and H&N

Ovarian

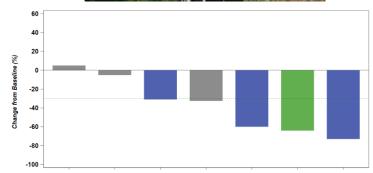




- 1 confirmed CR and 5 confirmed PRs; ORR 43% (6/14)
- Current platinum-resistant SOC ~13% response rate
- Median PFS 3-4 months

Urothelial

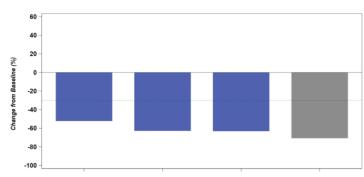




- 1 confirmed CR and 3 confirmed PRs; ORR 57% (4/7)
- Current SOC in 2nd line ~20% response rate with checkpoint inhibitor
- PFS of only ~2 months with pembrolizumab

Head and Neck*





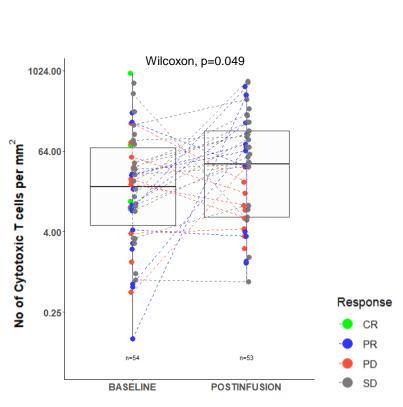
- Deep antitumor responses;
 3/4 confirmed PRs
- Current SOC 1st line pembrolizumab (CPS≥1): 19% response rate and median PFS 3-5 months

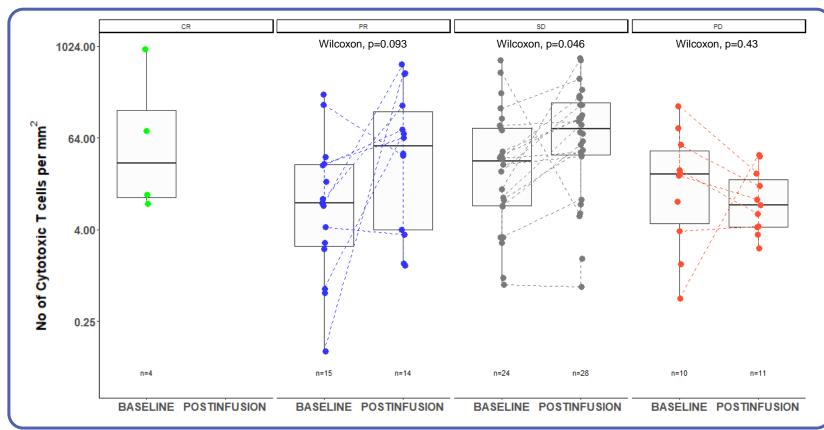






SPEAR T-cell therapy drives CD8+ (cytotoxic) T-cells to infiltrate tumors, and correlates with response



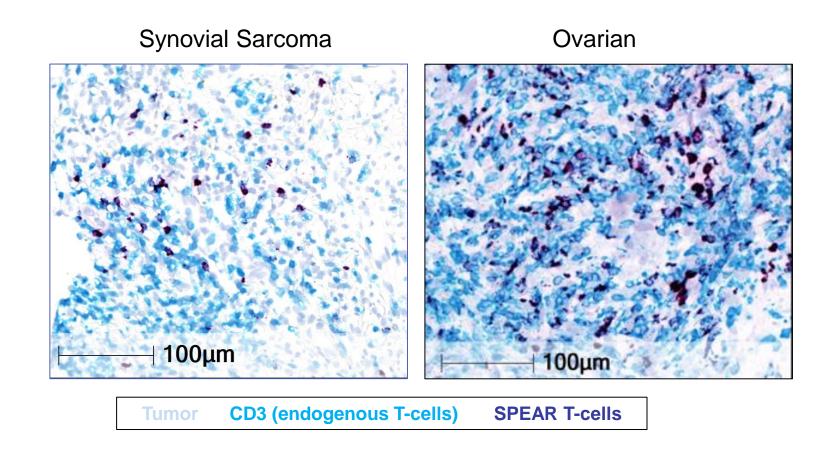


- Responders had lowest baseline infiltration of cytotoxic T-cells -- but greatest post infusion increase
- Potentially "less experienced" tumors have developed fewer mechanisms of resistance



After a single dose: engineered T-cells are present in solid tumors

Other immune cells are also recruited, indicating engagement of the broader immune system in antitumor activity

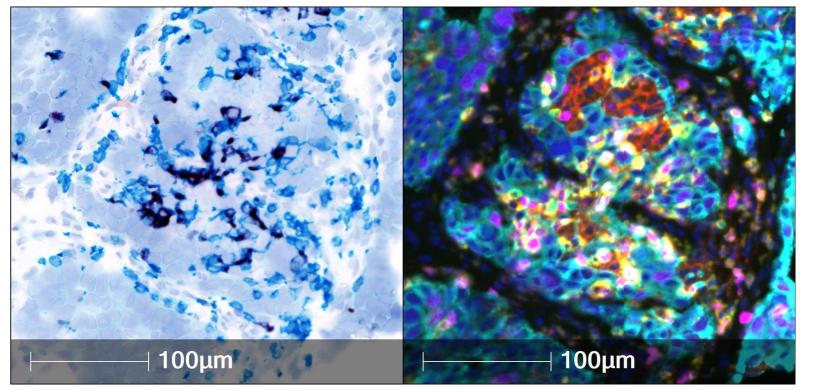


Translational data supports use of checkpoint inhibitor combination

Analysis of tumor biopsy shows upregulation of PD-L1 and other inhibitory markers in non-responding patient

Significant **engineered T-cell** infiltration into tumor

Further staining demonstrates high levels of T-cell activation alongside PD-L1+ tumor cells



CD3 - T-cell Marker
CD4 - Helper T-cell marker
CD8 - Cytotoxic T-cell marker
Ki67 - Proliferation marker
PD-L1 - Immune evasion marker
Granzyme B - Activation marker
FoxP3 - Regulatory T-cell
marker
PanCK- Tumour marker

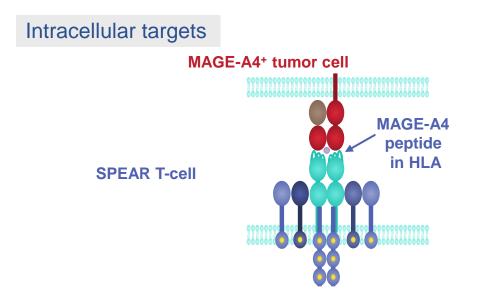
Tumor CD3 (endogenous T-cells) SPEAR T-cells

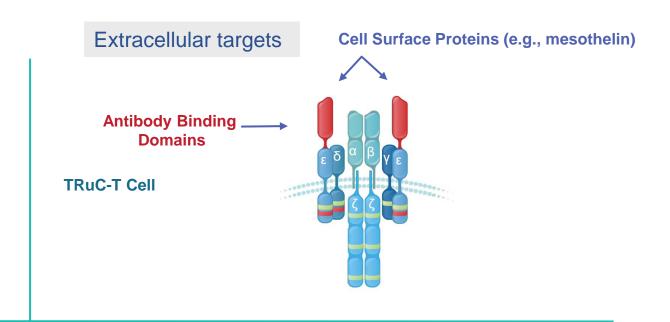




Complementary platforms drive broad access to solid tumors

Clinically validated cell therapies in solid tumors all utilize the full TCR complex





SPEAR T-cell Platform proprietary engineered TCR targeting MAGE-A4

Optimized affinity TCRs and next-gen modifications

TRuC® Platform (T-Cell Receptor Fusion Constructs) targeting MSLN

Single-domain antibody, fused to the CD3-epsilon leveraging endogenous TCR signalling



Phase 2 autologous engineered TRuC program targeting Mesothelin

Validated target with annual mortality of ~215,000 patients* across multiple target indications

- Mesothelin (MSLN) is a highly expressed surface protein antigen expressed across a broad range of solid tumors
- Unique characteristics of TRuC program support treatment of patients with tumors expressing MSLN, no limitations by HLA subtype
- TRuC cells are engineered for fast and efficient efficacy, migration and durable responses

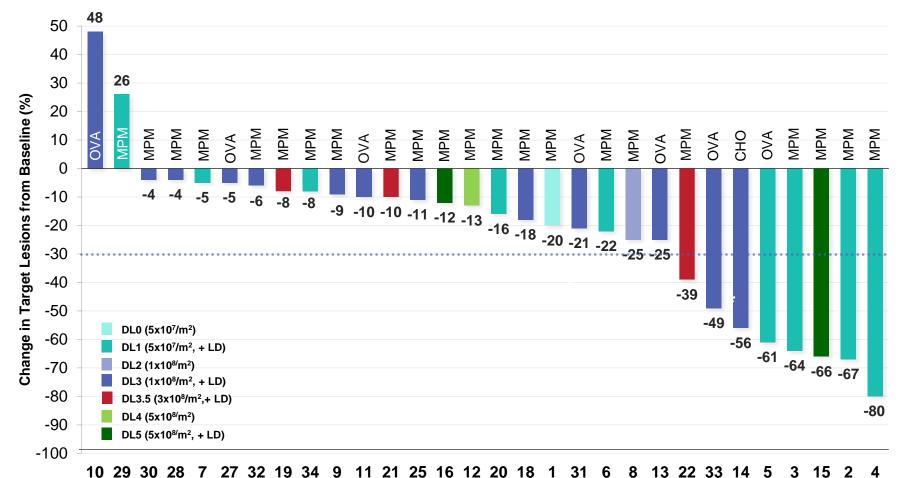
- Expression levels ranging from ~20% to ~76%² across tumors including:
 - ~ 58% of Ovarian cancer patients
- Others include:
 - Pancreatic
 - Triple Negative Breast (TNBC)
 - Colorectal
 - Mesothelioma
 - NSCLC
 - Cholangiocarcinoma

Mesothelin is target for both first-gen gavo-cel and next-gen (TC-510) programs



Consistent tumor regression in patients with gavo-cel





^{*} Tumor volume decrease based on best response assessed Patients

Data Cutoff – September 9, 2022

Blinded Independent Central Review

	All	gavo-cel + LD
ORR	20%	22%
MPM ORR	18%	21%
Ovarian ORR	29%	29%

DCR = PR or SD lasting at least 3 months

Ovarian Cancer Results

ORR: 29% (gavo-cel + LD)

PFS: 5.8 months

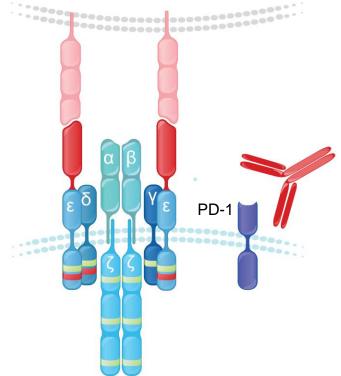
OS: 8.1 months



Improving gavo-cel efficacy: combination with anti-PD1 and next-gen enhancements (TC-510)

gavo-cel + anti-PD1

Re-invigorate TRuC-T cells

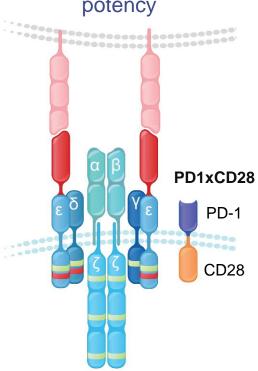


Ph 2 trial in combination with nivolumab in ovarian cancer and mesothelioma with opportunity for redosing with cells

TC-510 = gavo-cel plus PD1xCD28 switch in dose escalating in Ph1 studies in multiple indications

PD1xCD28 Switch

Maintenance of T cell potency



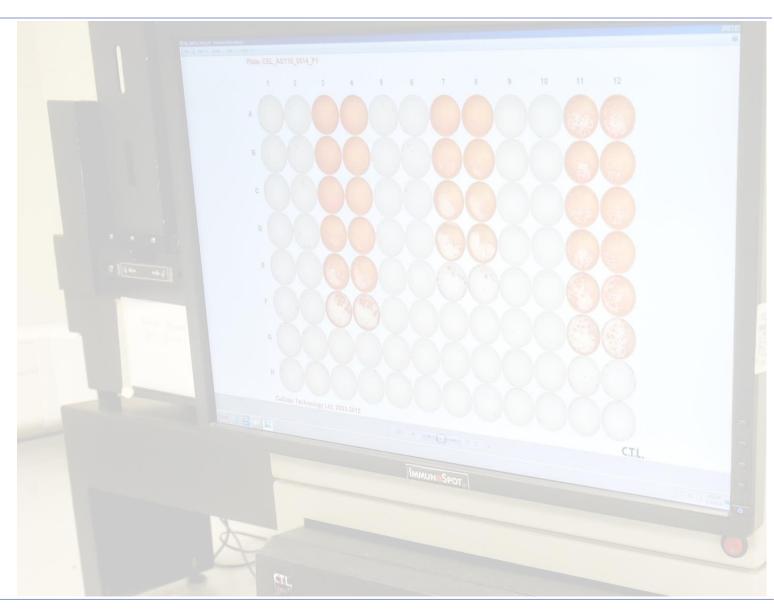
- Enhances T cell activity in tumor microenvironment
- Delays T cell exhaustion

Enhances gavo-cel and TILs in the tumor microenvironment





Preclinical autologous programs targeting PRAME and CD70 and next-gen toolbox





Preclinical autologous engineered TCR program targeting PRAME

Validated target with annual mortality of >160,000¹ patients (US and EU) with PRAME+ tumors

- Clinically validated "clean" target; member of cancer testis antigen family
- Unique opportunity in a broader range of tumors than other targets
- First-gen in preclinical development to be IND-ready in 2023
- Considering next-gen approaches and potential synergy with MAGE-A4

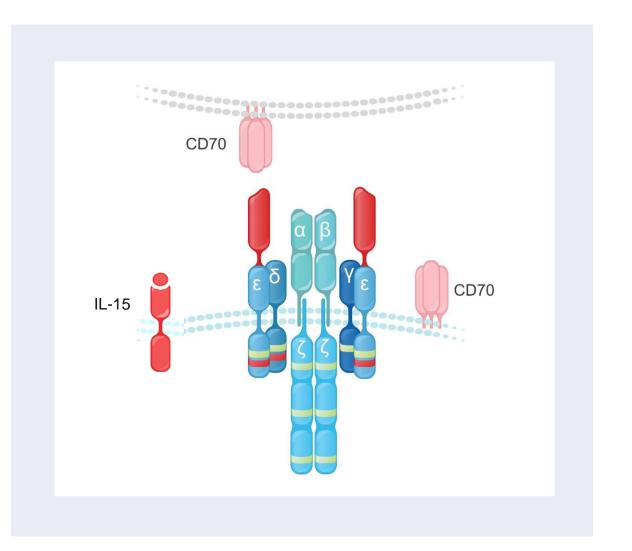
- Highly expressed across a broad range of solid tumors including:
 - Breast
 - NSCLC
 - Kidney
 - Gastroesophageal

- Melanoma
- Endometrial
- Ovarian
- Gastroesophageal Head & neck



TC-520 targeting CD70: Next-gen approach to attractive target

- ✓ Versatile target expressed in:
 - hematological malignancies: acute myeloid leukemia (AML), lymphoma
 - solid tumors: renal cell carcinoma (RCC),
- Expression in normal cells limited to a subset of activated T-cells, B-cells and dendritic cells
- ✓ Path to first-in-class autologous CD70 cell therapy with membrane bound IL-15 to enhance persistence
- Clinically validated target: POC demonstrated in AML with αCD70 mAb in AML (argenx)





Innovative toolbox to improve depth and durability of responses

Next-generation platform approaches



Persistence, trafficking T-cell effectiveness

- CD8
- Checkpoint inhibitors
- IL15
- IL7 + CCL19*



Overcoming tumor microenvironment

- PD-1 switch
- Checkpoint inhibitors
- dnTGFbeta
- SiP and TiP technology**



Multi-targeting and platform approaches

- Overlapping target screening (e.g., MAGE-A4, MSLN and PRAME in ovarian cancer)
- Dual targeting
- Allogeneic platforms



Cell therapy manufacturing and supply for engineered TCR T-cells



Patient cell journey for autologous engineered TCR T-cell products

Current GMP manufacturing time of ~10 to 14 days



Identification and enrollment in the trial

Collection to cryopreservation ~2 days







- ✓ WBC collection (apheresis)
- ✓ Courier to manufacturing facility
- Cryopreservation



GMP manufacturing ~10 to 14 days





√ Thaw WBCs and isolate T-cells

✓ Lentiviral transduction of SPEAR TCR

√ Cryopreserve dose prior to release testing







To clinical site for infusion





Apheresis to product release ~30 days

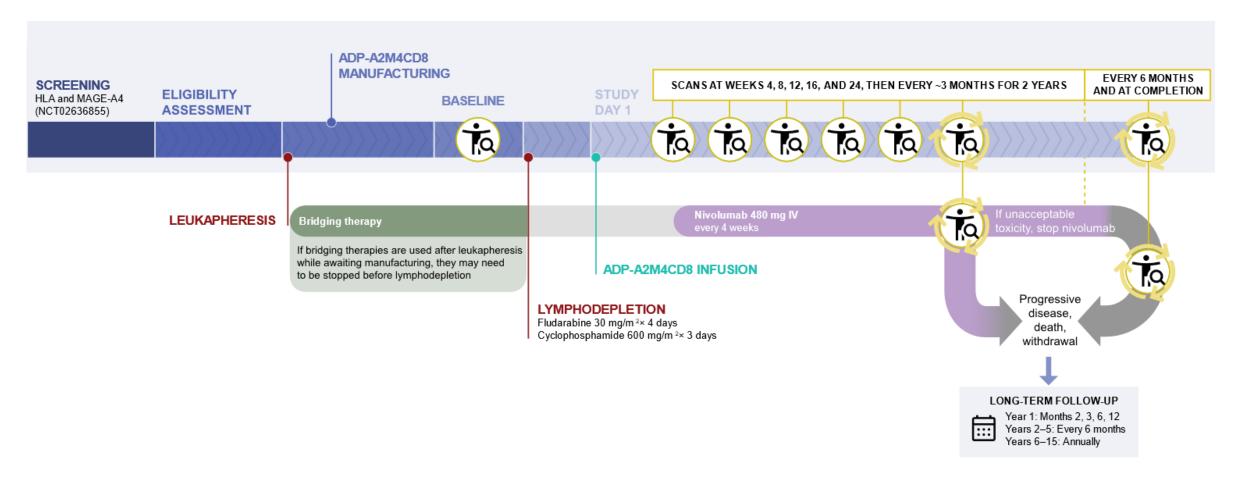
√ T-cell expansion





SURPASS Phase 1 (NCT04044859): ADP-A2M4CD8 TCR T-cell therapy as monotherapy or in combination with nivolumab

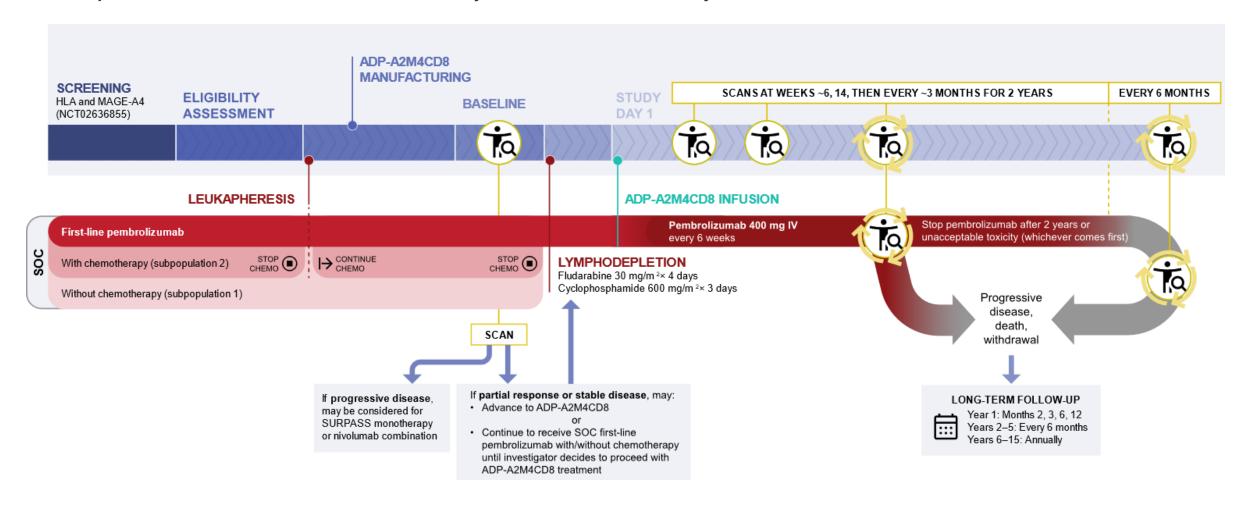
Focus on patients with urothelial carcinoma, head and neck carcinoma, ovarian carcinoma





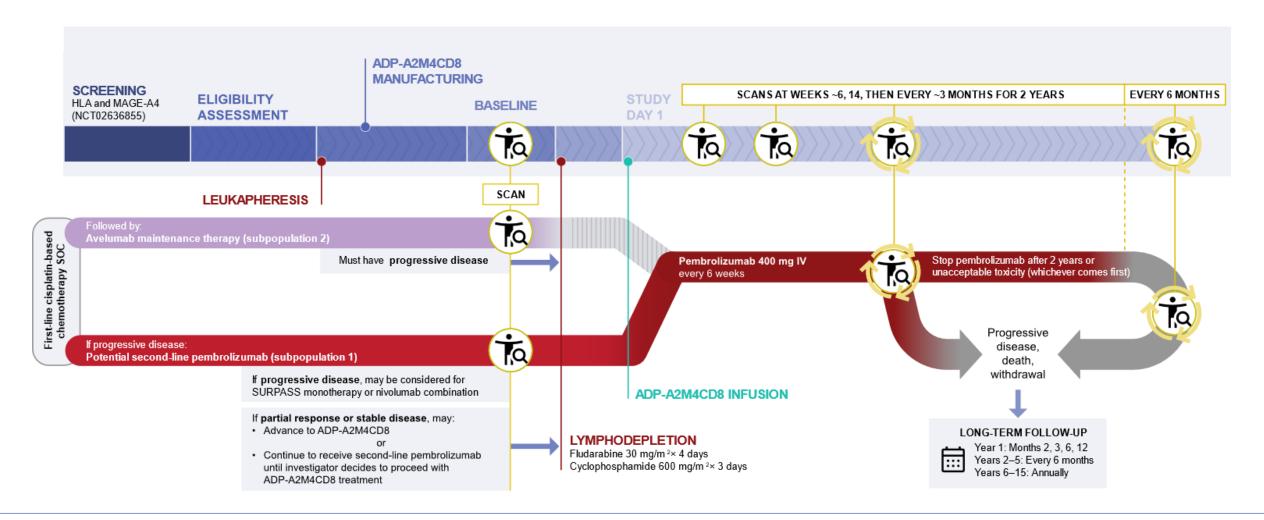
SURPASS Phase 1 (NCT04044859) new H&N cohort: First-line ADP-A2M4CD8 TCR T-cell therapy in combination with pembrolizumab

In patients with unresectable locally advanced or newly metastatic H&N tumors with CPS≥1



SURPASS Phase 1 (NCT04044859) new urothelial cohort: Second-line ADP-A2M4CD8 TCR T-cell therapy in combination with pembrolizumab following first-line cisplatin-based chemotherapy

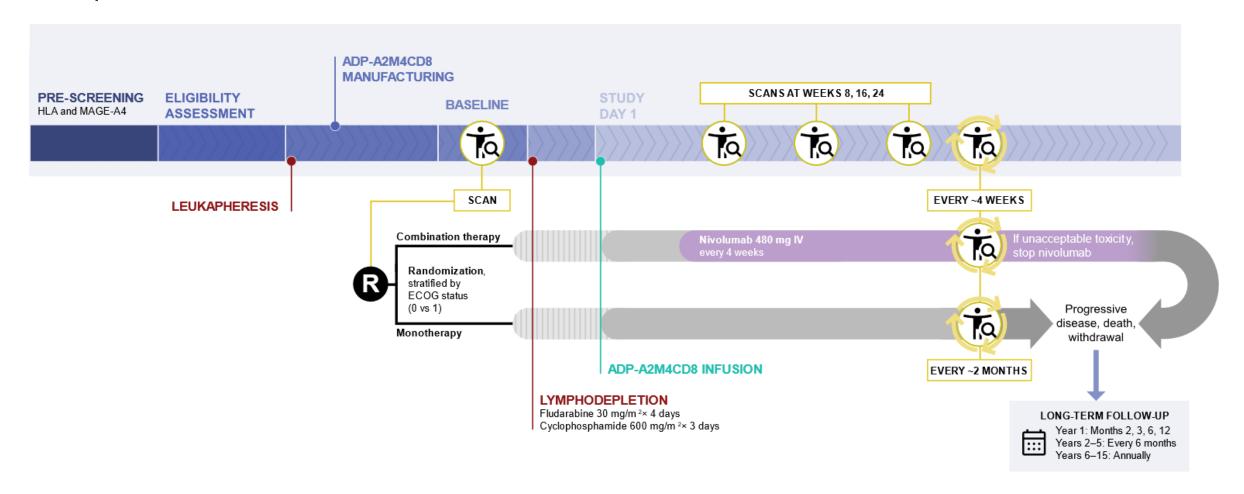
In patients with unresectable, locally advanced, or newly metastatic urothelial tumors





SURPASS-3 Phase 2 (NCT05601752): Randomized ADP-A2M4CD8 TCR T-cell therapy alone or in combination with nivolumab

In patients with recurrent ovarian carcinoma





August 2023

