
SPEAR-heading
THE CANCER
REVOLUTION
Corporate Deck
July 2022
Adaptimmune
TRANSFORMING T CELL THERAPY

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, 2021, 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.

Our vision and mission – Arming cell therapies to target solid tumors

Arming Cells.
Against Cancer.
For Good.

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

2022 focus

- BLA submission for afami-cel
- Building a MAGE-A4 franchise
- Scaling up manufacturing capabilities
- Allogeneic progress

Core value drivers: our “2-2-5-2” strategic plan by 2025

Two
marketed SPEAR T-cell products targeting MAGE-A4

- Synovial sarcoma and MRCLS
- Esophageal and EGJ cancers

Two
additional BLAs for SPEAR T-cell products targeting MAGE-A4

- Ovarian cancer
- Additional indications for MAGE-A4 targeted products

Five
autologous products in the clinic

- HiTs
- Next-gen SPEAR T-cells
- New targets
- Broader HLAs
- Next-gen TILs

Two
allogeneic products in the clinic

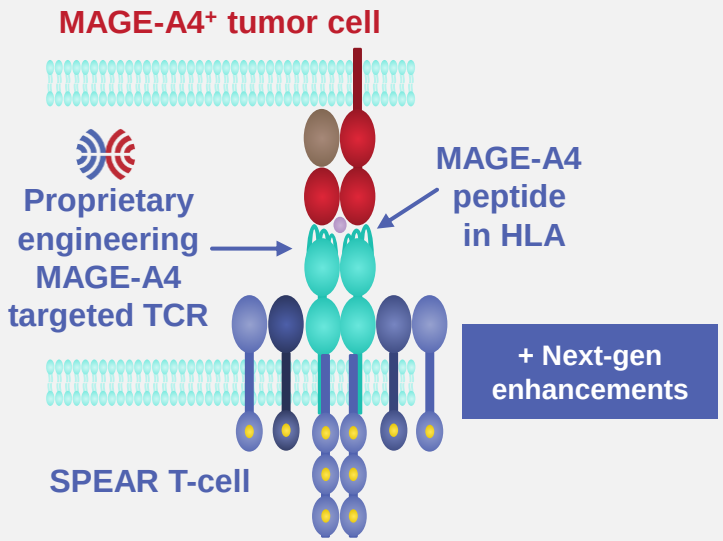
- SPEAR T-cell product targeting MAGE-A4
- HiT mesothelin – partnered with Astellas
- Strategic collaboration with Genentech

Integrated Cell Therapy Capabilities
Research | Preclinical | Translational | Clinical | CMC | Regulatory | Commercial

EGJ: esophagogastric junction cancer; HiT: HLA-independent T-cell receptor (TCR); TIL: tumor infiltrating lymphocyte; CMC: chemistry, manufacturing, and controls

Our MAGE-A4 franchise is the cornerstone of our success

Right target, right TCR, first BLA in 2022, deep autologous pipeline, future allogeneic products



MAGE-A4 is a validated target

- Member of cancer testis antigen family
- Expressed in many solid tumors
- "Clean" target
- Intracellular protein
- **Only addressable with a T-cell receptor**

MAGE-A4 patient population

- Expression levels ranging ~15% to ~70%[1] across broad range of tumors
- **Confirmed responses in**
  - Head and neck
  - Gastroesophageal
  - NSCLC-squamous
  - Synovial sarcoma
  - Melanoma
  - Bladder
  - Ovarian
  - MRCLS
- Potential MAGE-A4 population ~95,000[2]

Afami-cel — **Near term value**

- First-gen product
- Synovial sarcoma and MRCLS
- **BLA to be submitted this year**
- RMAT and PRIME designations
- **Pivotal trial (SPEARHEAD-1) met endpoint**
- 34% (16/47) response rate (CTOS 2021)

ADP-A2M4CD8 — **Medium term value**

- Next-gen product includes CD8 and TCR
- SURPASS (Phase 1) trial focused on NSCLC, H&N, bladder, ovarian and GE
- **SURPASS trial: 36% (8/22) response rate**
- Responses in multiple tumors (ESMO 2021)
- **EGJ & esophageal: SURPASS-2 ongoing**
- **Ovarian: will initiate SURPASS-3 this year**
- Combination with PD-1 inhibitor this year

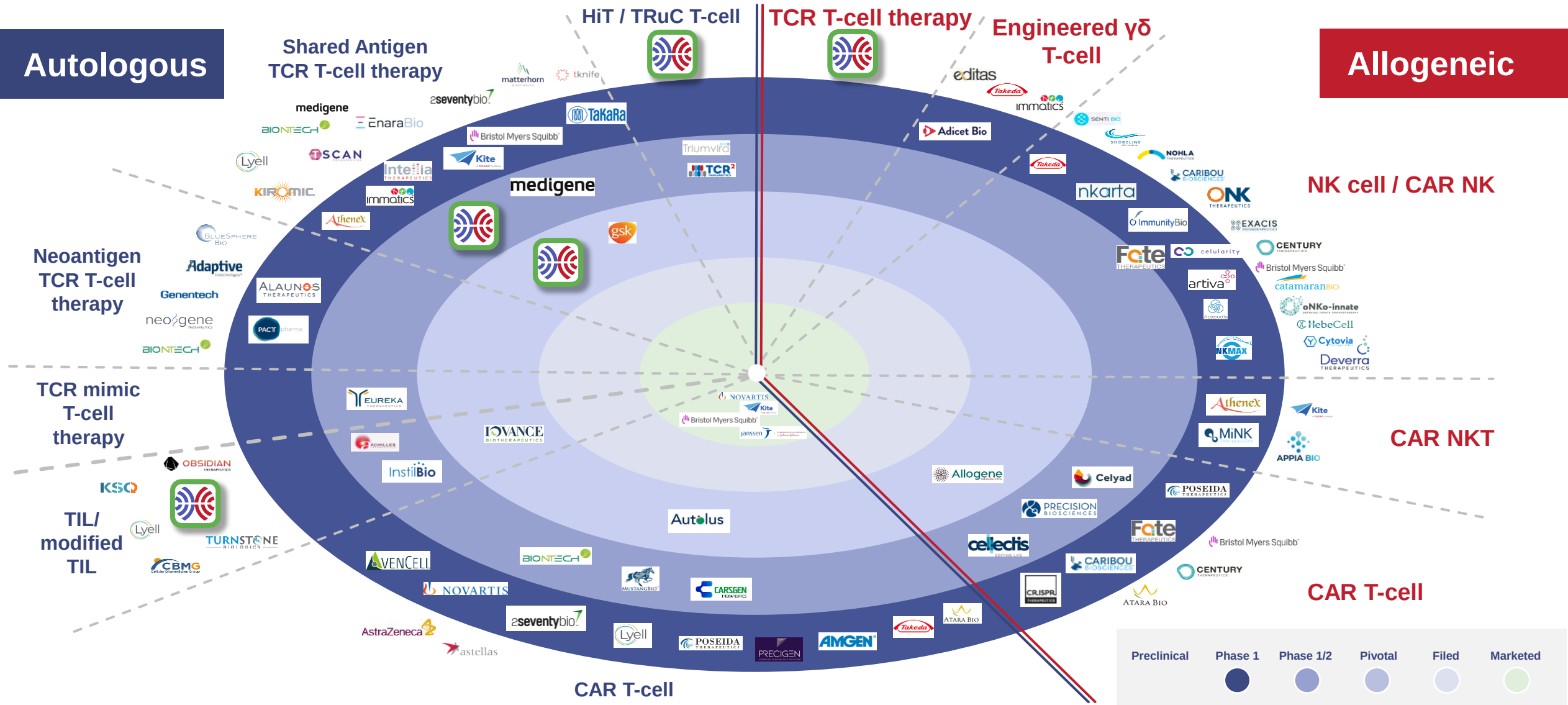
MAGE-A4 — **Long term value**

- **IND for new next-gen therapy (ADP-A2M4N7X19) 2022**
- **First allogeneic product IND 2023**
  - IPSC derived – Uses same TCR
- Increase HLA coverage (HLA A1 and A24) – INDs 2023+

MRCLS: myxoid/round cell liposarcoma; NSCLC: non-small cell lung cancer; TCR: T-cell receptor
1 MAGE-A4 expression based on ADAP samples and expression cut off criteria of ≥30% tumor cells at ≥2+ intensity
2 Annual mortality figures based on American Cancer Society 2020 (US) and Global Can (EU); +synovial sarcoma and MRCLS figures reflect advanced/refractory treatable patients based on internal primary market research

Adaptimmune is uniquely placed to deliver cell therapies for solid tumors

Cell therapy landscape - Overview of select approaches and players



Adaptimmune
TRANSFORMING T CELL THERAPY

A strong autologous clinical pipeline in multiple clinical trials

Goal to submit first BLA for TCR T-cell therapy in 2022

PROGRAM	THERAPY	PHASE 1	PHASE 2/3	
MAGE-A4	**afamitresgene autoleucel** **"afami-cel"** formerly ADP-A2M4	Phase 1 trial Multiple tumors*	**SPEARHEAD-1** Synovial sarcoma, MRCLS	Cohort 1 enrollment complete BLA planned for 2022**
	ADP-A2M4CD8	**SURPASS** Focus on lung, gastroesophageal, head and neck, bladder, and ovarian cancers	**SURPASS-2** Esophageal and EGJ cancers	Initiated in Q3 2021
		Combination with checkpoint inhibitor (nivolumab) Initiated in Q2 2022	**SURPASS-3** Ovarian cancer	Initiating in 2022
AFP	**AFP-A2AFP**	Phase 1 trial Hepatocellular carcinoma		

Ongoing/initiating →

Completed/ceased enrollment —●

* Bladder, Melanoma, Head and Neck, Ovarian, Non-small cell lung cancer (NSCLC), Esophageal, Gastric, Synovial sarcoma, MRCLS

**Planned for synovial sarcoma

MRCLS: myxoid/round cell liposarcoma; EGJ: esophagogastric junction cancer

Adaptimmune TRANSFORMING T CELL THERAPY

Our autologous pre-clinical pipeline to deliver five products to the clinic by 2025

Aiming for curative and mainstream therapies

Platform	Product	Discovery	Preclinical	
Autologous SPEAR T-cells	MAGE-A4 next-gen approaches (IL-7, IL-15, dnTGFbeta, PDE7)			
	ADP-A2M4N7X19 (IL-7/CCL19) Noile-Immune Biotech			IND in 2022
	Undisclosed ALPINEImmuneSciences			
	HLA-A1 MAGE-A4			
	HLA-A24 MAGE-A4			
	New AFP TCRs (HLA-A2 and HLA-A24)			
	PRAME gsk			
TILs	ADP-TILIL7 (TIL IL-7)			CTA submitted
HiTs	HiT targets (e.g., GPC3)			

HiT: HLA-independent T-cell receptor (TCR); TIL: tumor infiltrating lymphocyte

Our allogeneic pipeline for the near future

Making allogeneic cell therapies curative and mainstream for people with cancer

Platform	Product	Discovery	Preclinical
Adaptimmune	Allogeneic T-cells targeting MAGE-A4		
	Other TCRs (inc. next-gen)		
astellas	HiT mesothelin		
	Target 2 (unnamed)		
Genentech	"Off-the shelf" TCR therapy target 1		
	Personalized cell therapy platform		

Adaptimmune

- MAGE-A4 targeted TCR
  - Validated target
  - Broad range of indications
- "Plug and play" platform
  - All wholly owned receptors
  - Next-gen and other enhancements

astellas

- Mesothelin HiT as first product
- Second target nominated but not named

Genentech

- Off-the-shelf T-cell therapies
  - Up to five targets
- Personalized medicine platform
  - Unique targets and receptors based on individual patient tumors

Planned data updates and catalysts for 2022 and beyond

Funded into early 2024

2022

- Initiate Phase 1 trial with next-gen TIL (ADP-TILIL7)* in melanoma
- Initiate Phase 1 trial with next-gen ADP-A2M4N7X19** in multiple indications
- SPEARHEAD-1 update at ASCO
- Initiate Phase 1 ADP-A2M4CD8 combination trial in multiple indications
- Initiate Phase 2 SURPASS-3 trial with ADP-A2M4CD8 in ovarian cancer
- Phase 1 SURPASS trial data at ESMO
- SPEARHEAD-1 data (pooled cohorts 1 and 2) at CTOS
- Submit BLA for afami-cel

Two marketed SPEAR T-cell products targeting MAGE-A4

Two additional BLAs for SPEAR T-cell products targeting MAGE-A4

Five autologous products in the clinic

Two allogeneic products in the clinic

2023 and beyond

- SURPASS Phase 1 full data update
- SURPASS-2 and SURPASS-3 data updates
- Phase 1 next-gen trial updates (ADP-TILIL7 and ADP-A2M4N7X19)
- Preclinical pipeline program data updates
- Additional HLA IND filing and trial initiation
- Filing first IND for allogeneic product targeting MAGE-A4
- Afami-cel launch

All data updates subject to congress acceptance

* in collaboration with CCIT

** in collaboration with Noile-Immune

Roadmap to BLA: SPEARHEAD-1 trial has met primary endpoint

Plan to complete Biological License Application (BLA) submission in Q4 2022

Completed

- ✓ FDA agreement that SPEARHEAD-1 Cohort 1 may be sufficient to support BLA under accelerated approval (2020)*
- ✓ FDA agreement on historical response rate for 2nd line therapy in synovial sarcoma (2020)
- ✓ 100+ patients across trials have received afami-cel
- ✓ Last patient treated in Cohort 1 of SPEARHEAD-1
- ✓ Treatment in Cohort 2 of SPEARHEAD-1 initiated
- ✓ Database lock for primary analysis of SPEARHEAD-1
- ✓ SPEARHEAD-1 has met primary endpoint
- ✓ Pediatric plans agreed with regulatory agencies
- ✓ Nonclinical dossier completed

In Progress

- ☑ Miltenyi Biotec vector facility released for GMP manufacture
- ☐ Vector and T-cell product characterization
- ☐ Method validation for lot release assays (including potency assays)
- ☐ Vector process performance qualification (PPQ)
- ☐ Pre-BLA meeting
- ☐ Clinical dossier
- ☐ T-cell PPQ
- ☐ CMC dossier
- ☐ Pre-market approval (PMA) submission**
- ☐ BLA submission

* FDA agrees that inoperable or metastatic synovial sarcoma is a serious disease. ORR and duration of response (DOR) data from patients with unresectable or metastatic synovial sarcoma in a single-arm trial may be sufficient to provide substantial evidence of effectiveness of a durable response rate to support a request for accelerated approval

**This is a modular submission for the companion diagnostic, with the last piece (clinical piece) targeted for 4Q 2022

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)

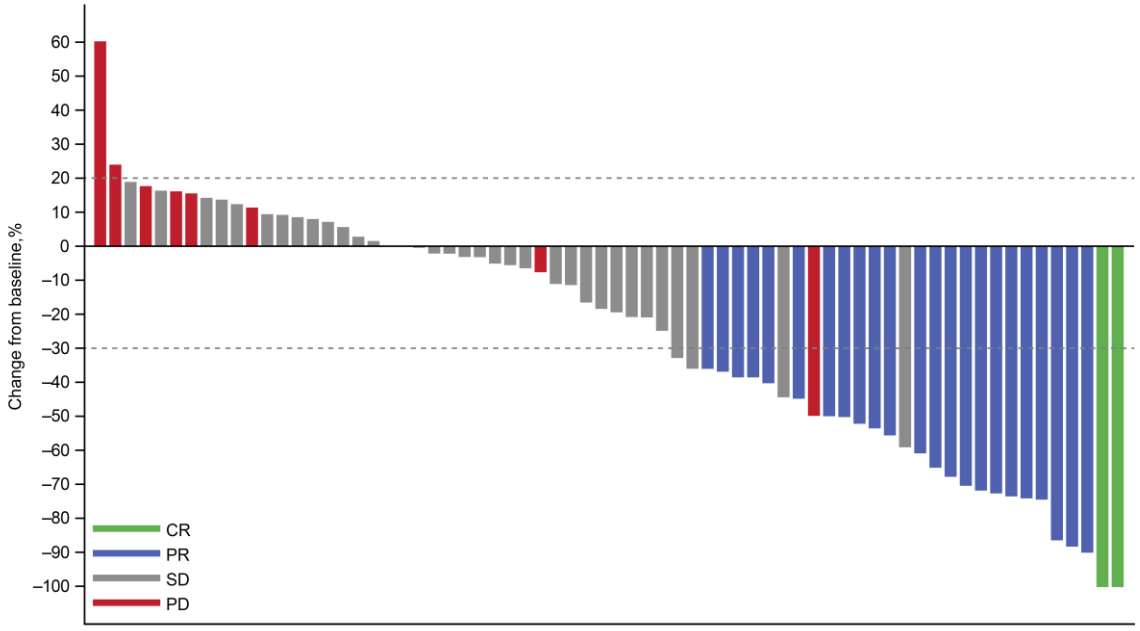
+synovial sarcoma and MRCLS figures reflect advanced/refractory treatable patients based on internal primary market research and will be updated with data from Adaptimmune's SPEARHEAD-1 trial post-CTOS 2022 (subject to Congress acceptance)

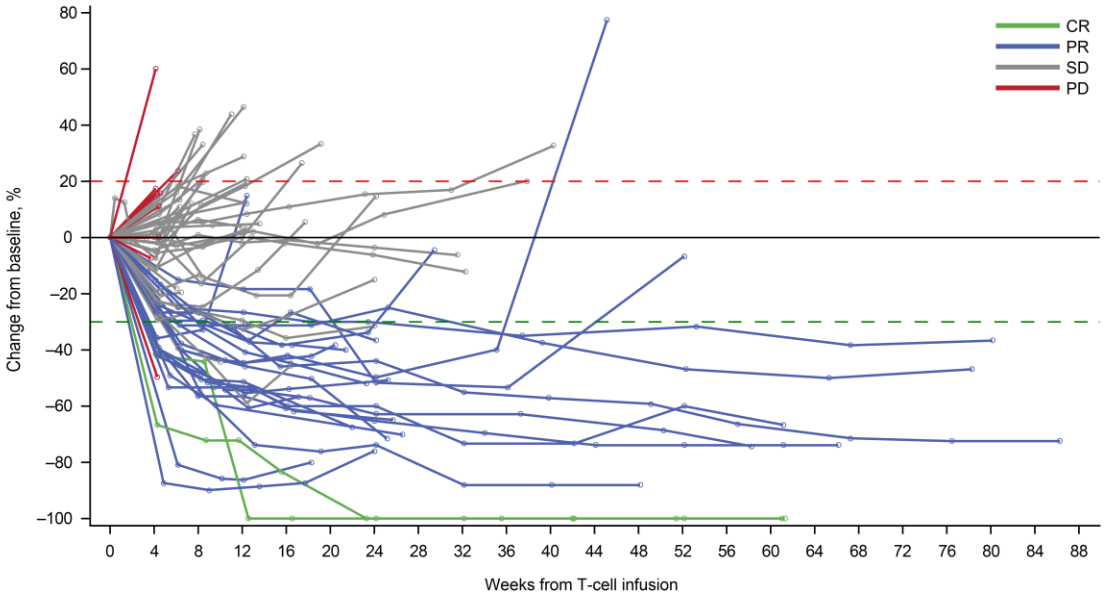
Adaptimmune TRANSFORMING T CELL THERAPY

First-gen MAGE-A4 targeted product (afami-cel) on-track to submit BLA for synovial sarcoma in Q4 2022

Pooled data from 69 patients with synovial sarcoma or MRCLS who received afami-cel

Data from the Phase 1 trial and Cohort 1 of the SPEARHEAD-1 trial





2022 ASCO ANNUAL MEETING

- ✓ ORR was 40.7% (23/59) in synovial sarcoma and 10.0% (1/10) in MRCLS
- ✓ The median duration of response was 52.0 weeks (95% CI: 18.56, N/A)
- ✓ Overall disease control rate was 85.5% (59/69)

CR PR SD PD NE

Data cut off was September 1, 2020 for Phase 1 trial and October 11, 2021 for SPEARHEAD-1
CR, complete response; ORR, overall response rate; PD, progressive disease; PR, partial response; RECIST, Response Evaluation Criteria in Solid Tumors; SD, stable disease.

Adaptimmune TRANSFORMING T CELL THERAPY

Responses were observed across all 9 clinical subgroups

- Higher response rates were observed in patients with:
  - Lower baseline tumor burden (sum of diameters <100 mm vs ≥100 mm)
  - Fewer prior lines of systemic therapy (≤2 vs ≥3)
  - Higher MAGE-A4 tumor H-score (≥200 vs <200)

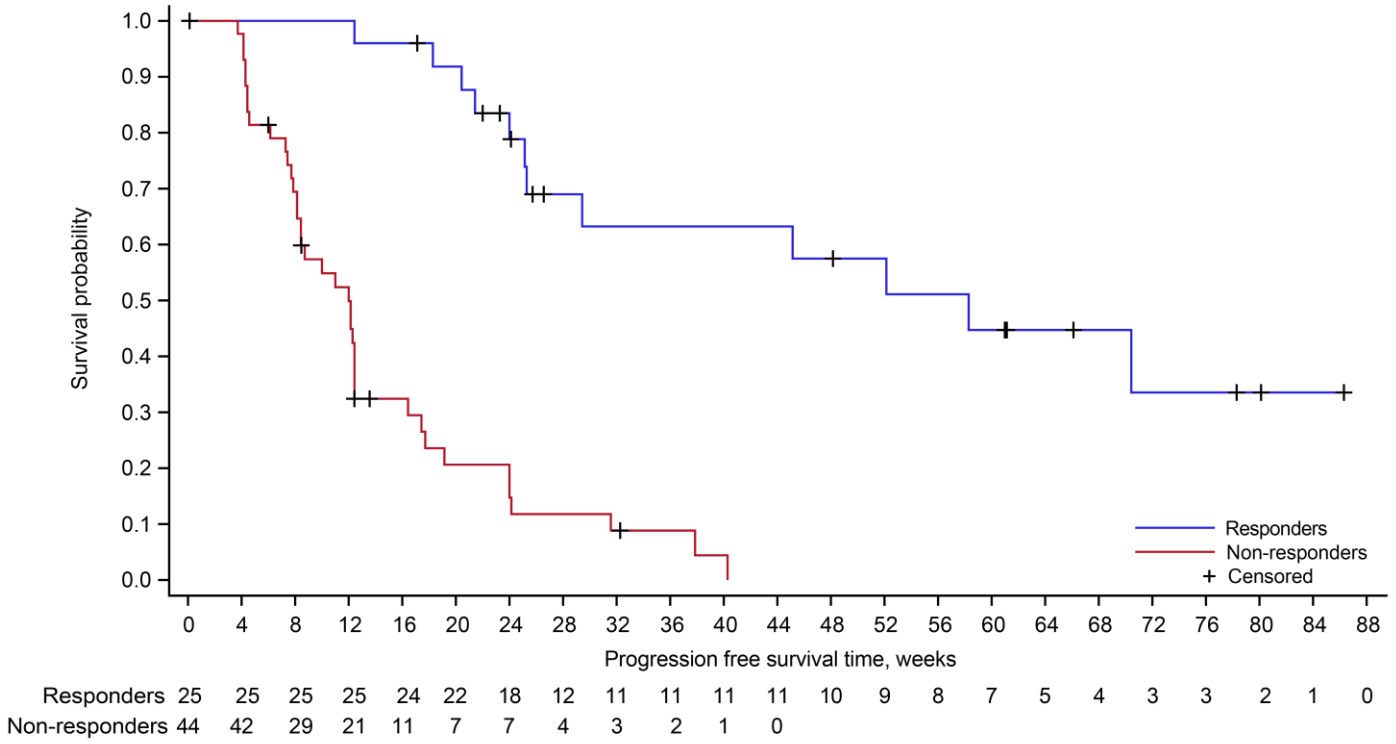
2022 ASCO ANNUAL MEETING

Subgroup	Overall response rate	
Baseline sum of diameters	<100 mm, n=34	≥100 mm, n=35
n (%)	17/34 (50.0)	8/35 (22.9)
95% CI	32.43, 67.57	10.42, 40.14
Prior lines of systemic therapy	≤2, n=35	≥3, n=34
n (%)	17/35 (48.6)	8/34 (23.5)
95% CI	31.38, 66.01	10.75, 41.17
H-score	<200, n=26	≥200, n=43
n (%)	6/26 (23.1)	19/43 (44.2)
95%CI	8.97, 43.65	29.08, 60.12
Bridging therapy	Yes, n=28	No, n=41
n (%)	8/28 (28.6)	17/41 (41.5)
95% CI	13.22, 48.67	26.32, 57.89
Transduced cell dose	$<7\times10^9$, n=28	$\geq 7\times10^9$, n=41
n (%)	9/28 (32.1)	16/41 (39.0)
95% CI	15.88, 52.35	24.20, 55.50
Any grade CRS	Yes, n=50	No, n=19
n (%)	19/50 (38.0)	6/19 (31.6)
95% CI	24.65, 52.83	12.58, 56.55
Age	<40 years, n=27	≥ 40 years, n=42
n (%)	9/27 (33.3)	16/42 (38.1)
95% CI	16.52, 53.96	23.57, 54.36
Sex	Male, n=39	Female, n=30
n (%)	12/39 (30.8)	13/30 (43.3)
95% CI	17.02, 47.57	25.46, 62.57
Geographical region	North America, n=55	Europe, n=14
n (%)	21/55 (38.2)	4/14 (28.6)
95% CI	25.41, 52.27	8.39, 58.10

Response Evaluation Criteria in Solid Tumors (RECIST) v1.1 by investigator review; data cut-off for the Phase 1 trial with afami-cel is September 1, 2020, and October 11, 2021 for Cohort 1 of the pivotal trial SPEARHEAD-1

Median progression-free survival was significantly longer in responders vs non-responders

Pooled data from 69 patients with synovial sarcoma or MRCLS who received afami-cel



2022 ASCO ANNUAL MEETING

- Median progression-free survival (PFS) overall was 18.3 weeks (20.4 weeks in synovial sarcoma)
  - ✓ In responders vs non-responders, median PFS was 58.3 vs. 12.0 weeks (log-rank P<0.0001)
  - ✓ In synovial sarcoma, median PFS was 58.3 weeks in responders vs 11.0 weeks in non-responders

CR, complete response; ORR, overall response rate; PD, progressive disease; PR, partial response; SD, stable disease.

Response Evaluation Criteria in Solid Tumors (RECIST) v1.1 by investigator review; data cut-off for the Phase 1 trial with afami-cel is September 1, 2020, and October 11, 2021 for Cohort 1 of the pivotal trial SPEARHEAD-1

Deep responses observed with afami-cel therapy in the Phase 2 SPEARHEAD-1 trial

On track to file BLA in 2022; trial has met primary endpoint*

- Overall response rate 34% (16/47) per Independent Review
  - ✓ Synovial sarcoma 36% (14/39) and MRCLS 25% (2/8)
  - ✓ Disease control rate of 85%

ctos

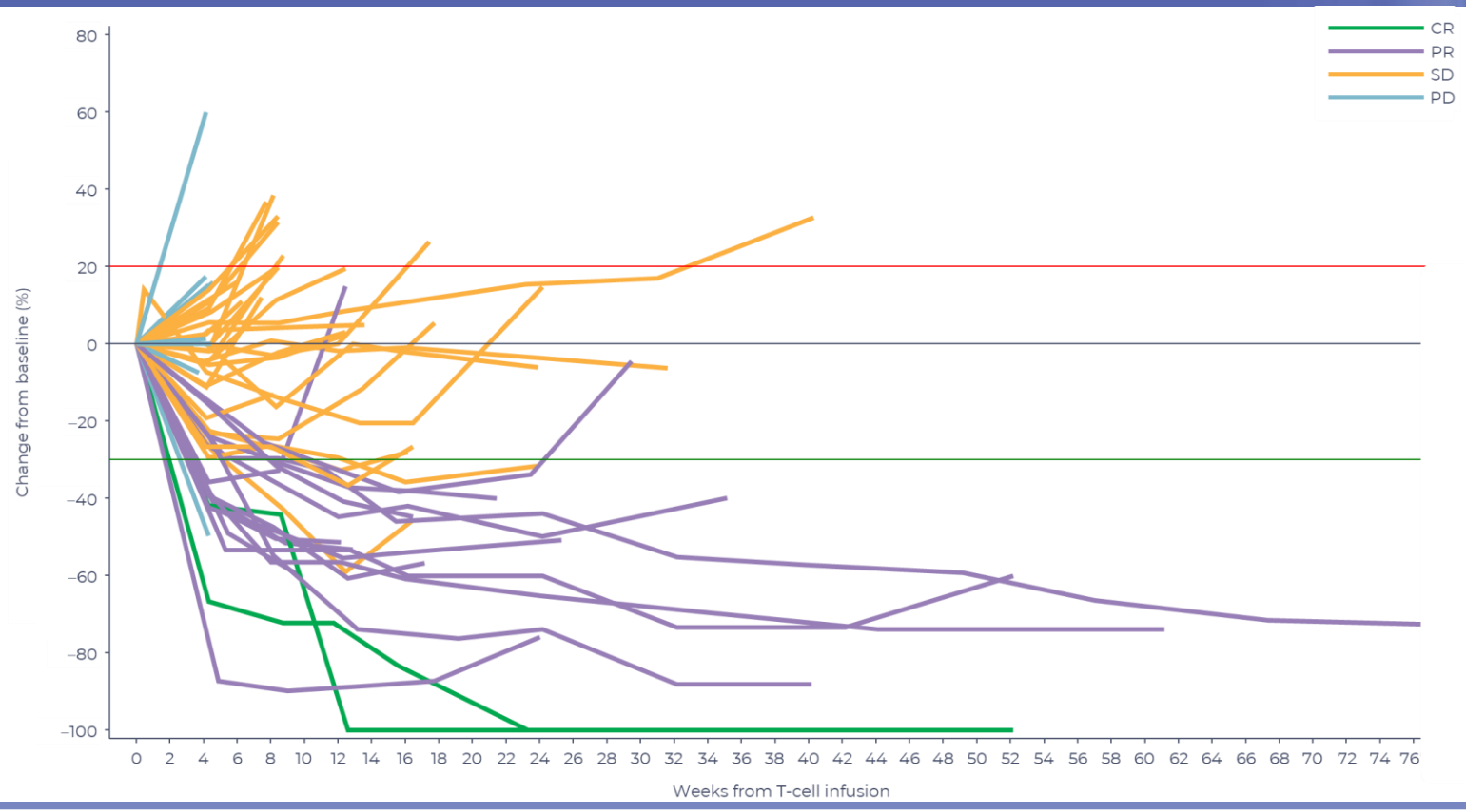
Cohort 1 data. PD, progressive disease. Data represent percent changes from baseline in sum of diameters (sum of the long diameters for non-nodal lesions and short axis for nodal lesions) in target lesions through progression or prior to surgical resection. Three patient scans were pending review by Independent review at the time of the data cut-off

Best overall response by RECIST v1.1; Data cut-off September 1, 2021

* Primary endpoint, ORR by RECIST v1.1 and independent review, will be evaluated using a one-sided exact-based Clopper-Pearson 97.5% confidence interval (CI). If the lower bound of the 97.5% CI exceeds the pre-specified historical response rate, the trial has met the pre-specified threshold for demonstrating efficacy.

Durability encouraging with afami-cel therapy

Best overall response by RECIST v1.1 per investigator review



- Median time to response: 4.9 weeks (range, weeks: 4.1, 12.0)
- Median duration of response: not reached (range, weeks: 4.3+, 65.3+)[+]

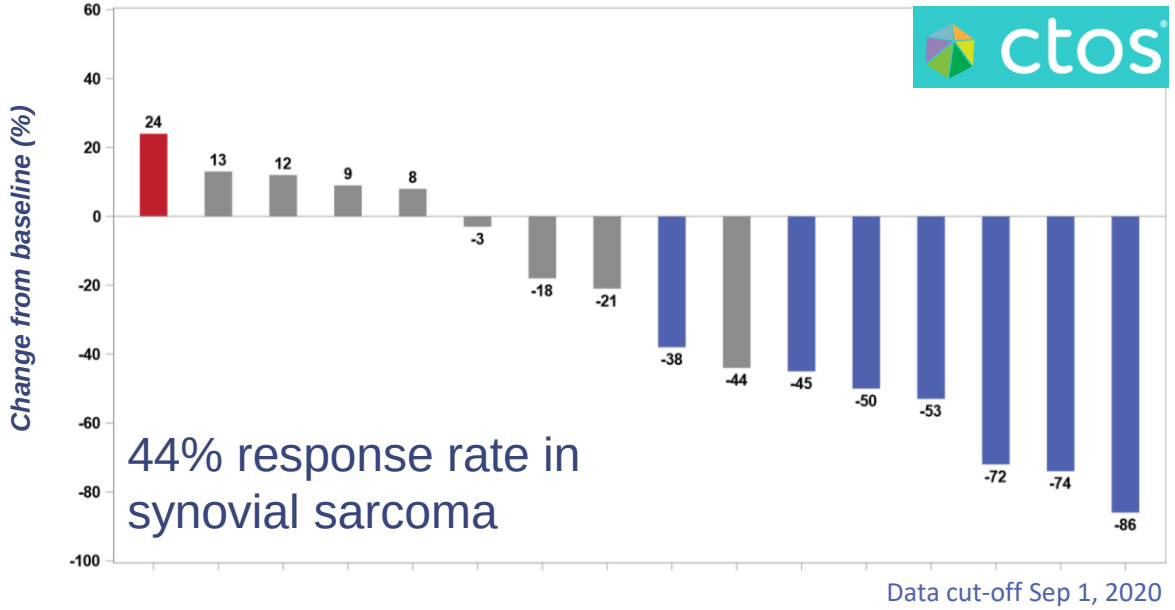
Cohort 1 data. Data represent percent changes from baseline in sum of diameters (sum of the long diameters for non-nodal lesions and short axis for nodal lesions) in target lesions through progression or prior to surgical resection. Follow-up by Independent review was immature as of the data cut-off and is not presented.

Our next-generation SURPASS story
Making a more potent MAGE-A4 targeted T-cell therapy

What we learned from our Phase 1 trial with first-gen TCR T-cell therapy (afami-cel)

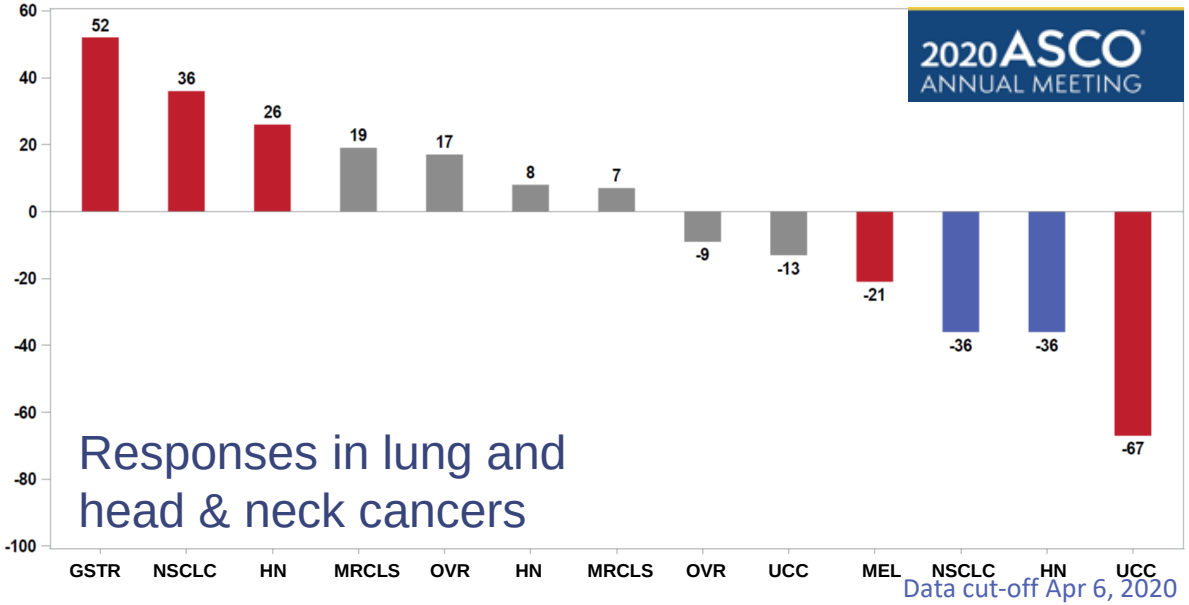
There were signals of efficacy outside of sarcoma, but we needed to increase potency

Phase 1 trial afami-cel (first-gen) synovial sarcoma



Data cut-off Sep 1, 2020

Phase 1 trial afami-cel (first-gen) excluding synovial sarcoma



Data cut-off Apr 6, 2020

First-gen product (afami-cel) showed a strong signal in synovial sarcoma compared to other solid tumor indications

Data represent percent changes from baseline in sum of diameters (sum of the long diameters for non-nodal lesions and short axis for nodal lesions) in target lesions through progression or prior to surgical resection; Reponses evaluated by RECIST v1.1 per investigator assessment; ASCO 2020: Data shown from patients in Cohort 3 and expansion phase; ESMO 2021: Of 25 patients treated, 3 were not evaluable at the time of data cut-off: 2 patients (ovarian or esophageal cancers) did not have post-baseline scans; 1 patient (EGJ) had a post-baseline scan that did not meet the ≥4 weeks duration for stable disease; CR=complete response; PR=partial response; SD=stable disease; PD=progressive disease; NE=not evaluable; GSTR=gastric cancer; EGJ=esophagogastric junction cancer; NSCLC=non-small cell lung cancer; MRCLS=myxoid/round cell liposarcoma; OVR=ovarian cancer; ESPH=esophageal cancer; UCC=urothelial carcinoma or bladder cancer; SS=synovial sarcoma; HN=head and neck cancer

CR PR SD PD NE

Adaptimmune TRANSFORMING T CELL THERAPY

Next-generation T-cell therapy designed to be a more potent product – SURPASS trials

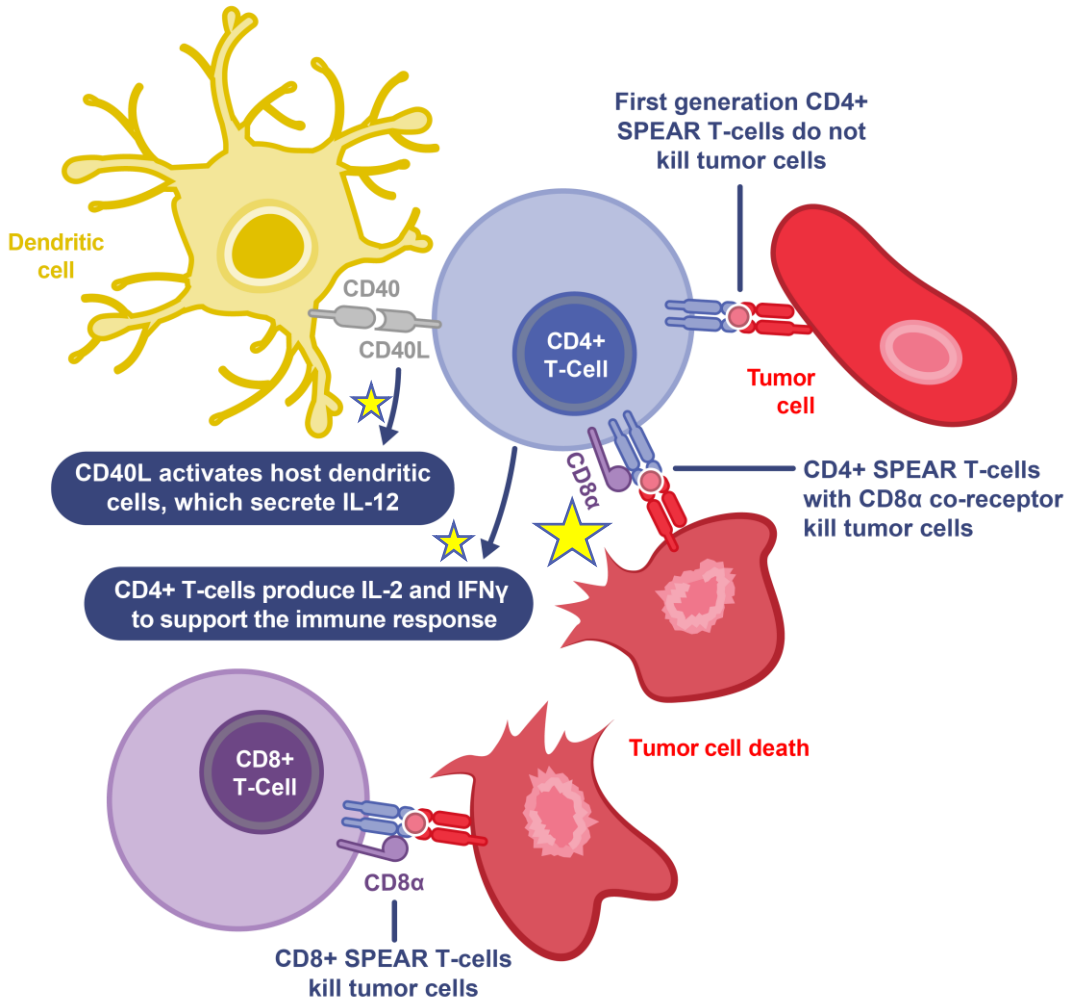
Addition of CD8α co-receptor alongside MAGE-A4 targeted T-cell receptor intended to increase antitumor immune response

ADP-A2M4CD8 is designed to be a more potent product

ADP-A2M4CD8 expresses the same MAGE-A4 targeted TCR as afami-cel along with a CD8α co-receptor

CD4+ helper T-cells can now kill tumor cells and still provide help to engage the broader immune system to fight cancer

Proof-of-concept preclinical data presented at AACR 2019; SURPASS Phase 1 clinical trial initiated July 2019



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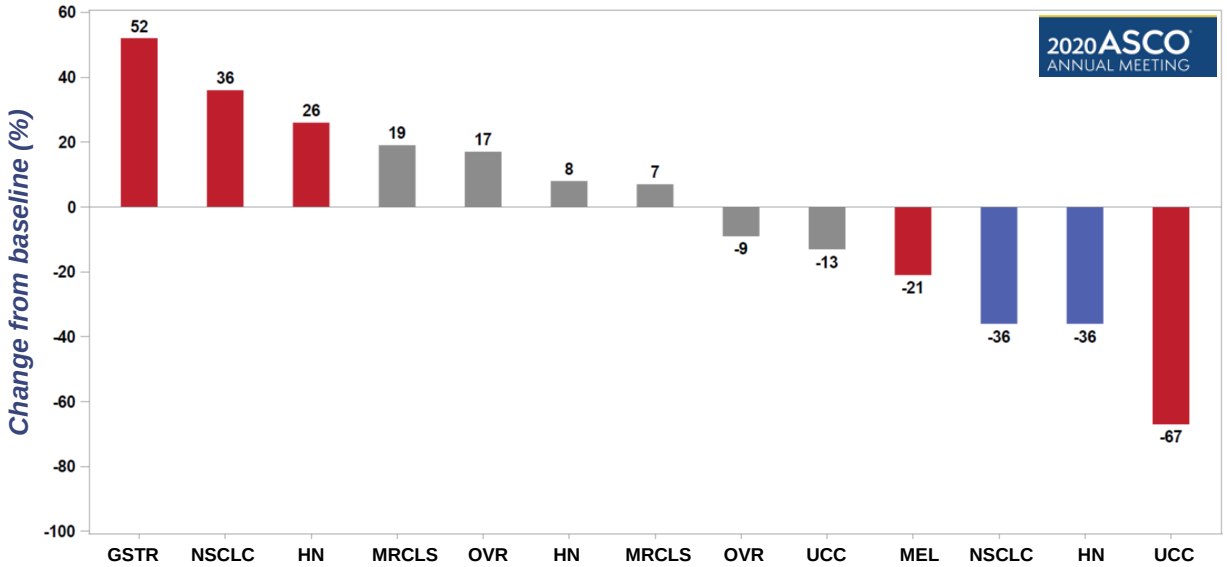
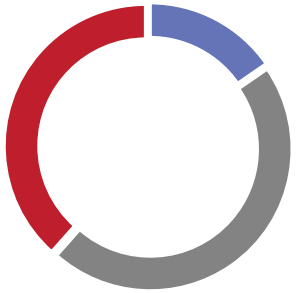
Next-gen MAGE-A4 cell therapy demonstrates more potent antitumor activity than first-gen

Phase 1 trial afami-cel (first-gen) excluding synovial sarcoma



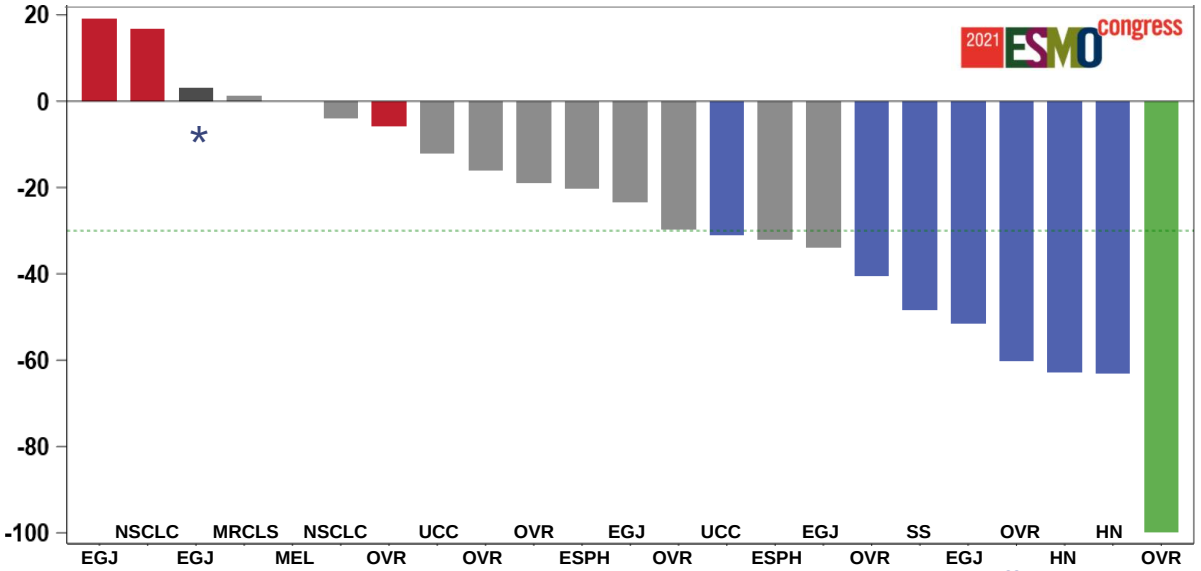
Data cut-off April 6, 2020



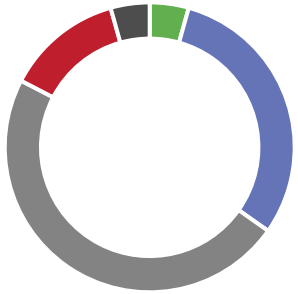
15% (2/13) Response Rate

2 indications: lung and head and neck cancers

Phase 1 SURPASS trial (next-gen)



Data cut-off August 2, 2021



36% (8/22) Response Rate

5 indications: ovarian, bladder, head and neck, gastroesophageal, and synovial sarcoma cancers

Data represent percent changes from baseline in sum of diameters (sum of the long diameters for non-nodal lesions and short axis for nodal lesions) in target lesions through progression or prior to surgical resection; Reponses evaluated by RECIST v1.1 per investigator assessment; ASCO 2020: Data shown from patients in Cohort 3 and expansion phase; ESMO 2021: Of 25 patients treated, 3 were not evaluable at the time of data cut-off: 2 patients (ovarian or esophageal cancers) did not have post-baseline scans; 1 patient (EGJ) had a post-baseline scan that did not meet the ≥4 weeks duration for stable disease; CR=complete response; PR=partial response; SD=stable disease; PD=progressive disease; NE=not evaluable; GSTR=gastric cancer; EGJ=esophagogastric junction cancer; NSCLC=non-small cell lung cancer; MRCLS=myxoid/round cell liposarcoma; OVR=ovarian cancer; ESPH=esophageal cancer; UCC=urothelial carcinoma or bladder cancer; SS=synovial sarcoma; HN=head and neck cancer

CR PR SD PD NE

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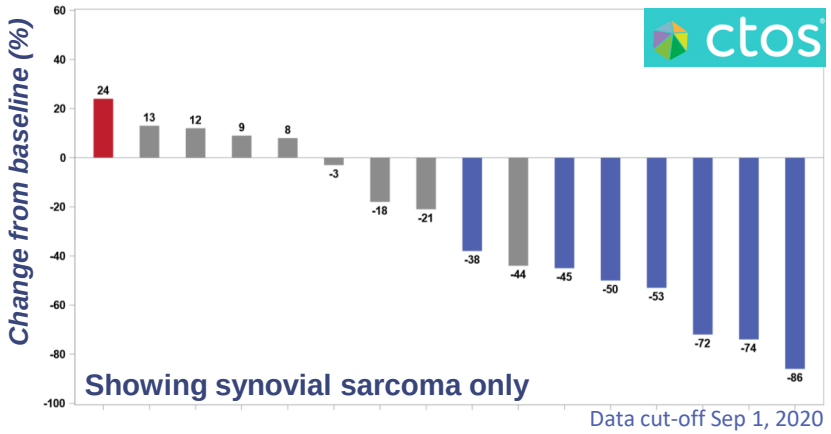
Next-gen product achieves more responses in non-sarcoma indications

Cytokine "heat map" data indicates ADP-A2M4CD8 is a more active product than first-gen outside of sarcoma

Phase 1 trial afami-cel

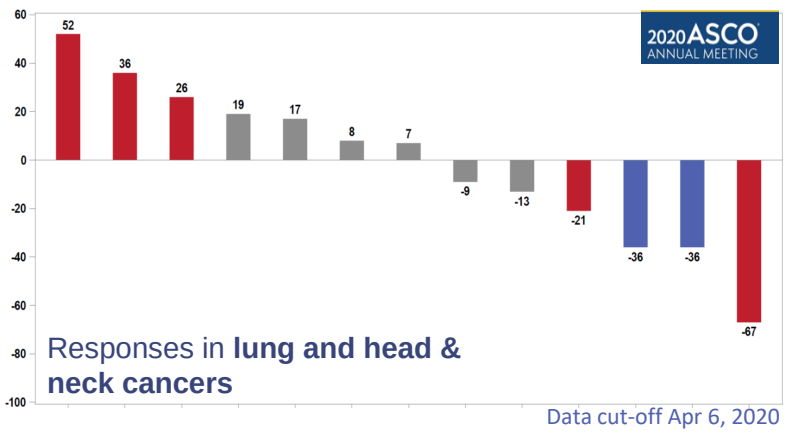
(first-gen) only synovial sarcoma



Data cut-off Sep 1, 2020

Phase 1 trial afami-cel

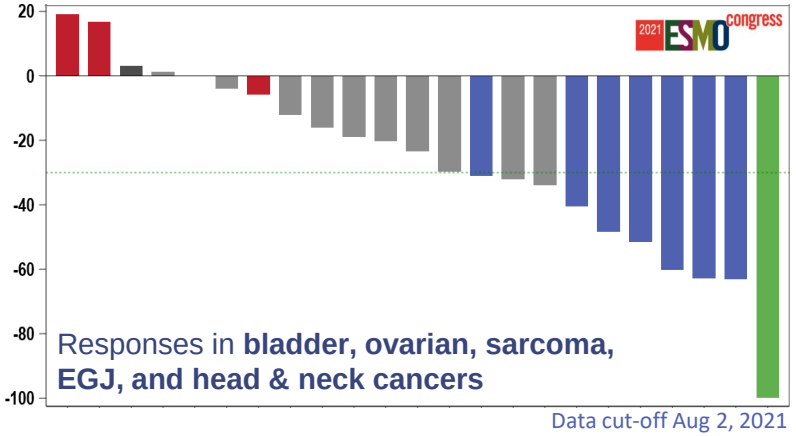
(first-gen) excluding synovial sarcoma



Data cut-off Apr 6, 2020

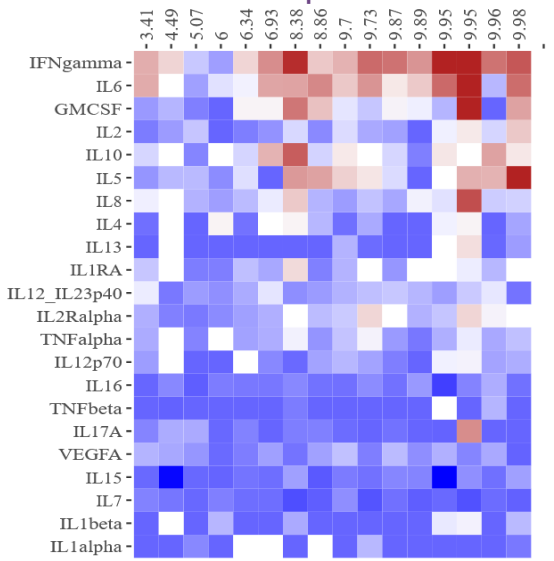
Phase 1 SURPASS trial (next-gen)

multiple solid tumors

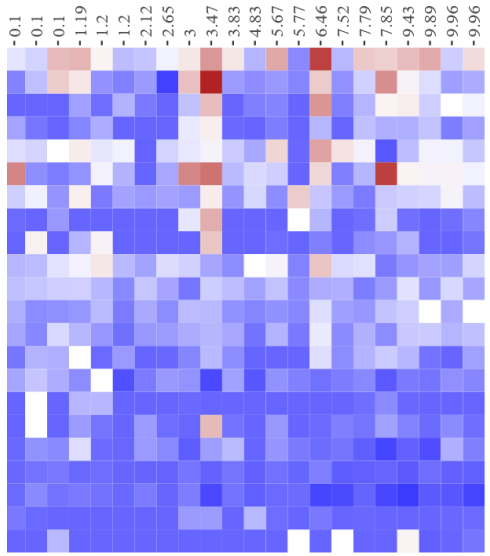


Data cut-off Aug 2, 2021

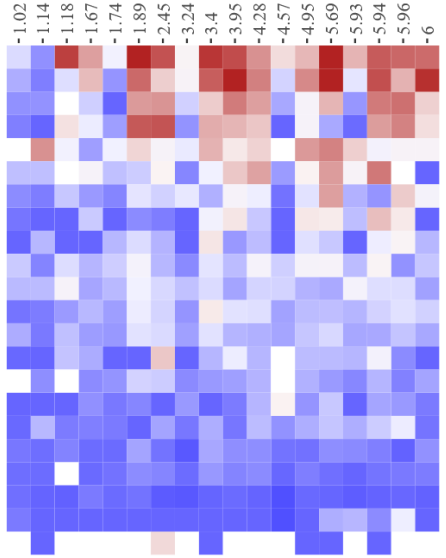
afami-cel pilot - sarcoma



afami-cel pilot – non sarcoma



SURPASS



CR PR SD PD NE

Max fold increase

1 10 100 1000

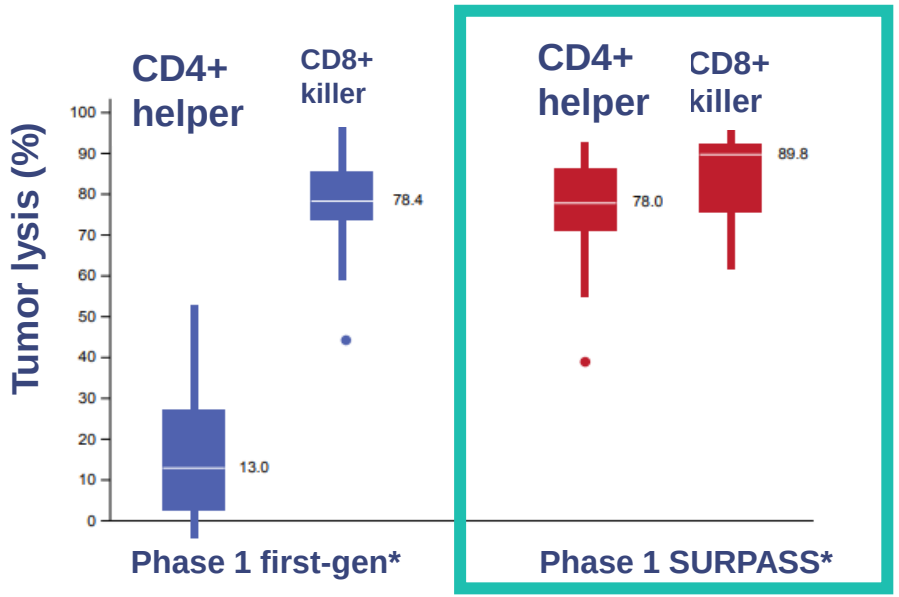
Adaptimmune TRANSFORMING T CELL THERAPY

Next-gen product is more potent than first-gen and has potential to better engage the immune system

Data are consistent with preclinical proof-of-concept data for ADP-A2M4CD8 (AACR 2019)

Tumor cell killing with next-gen manufactured product

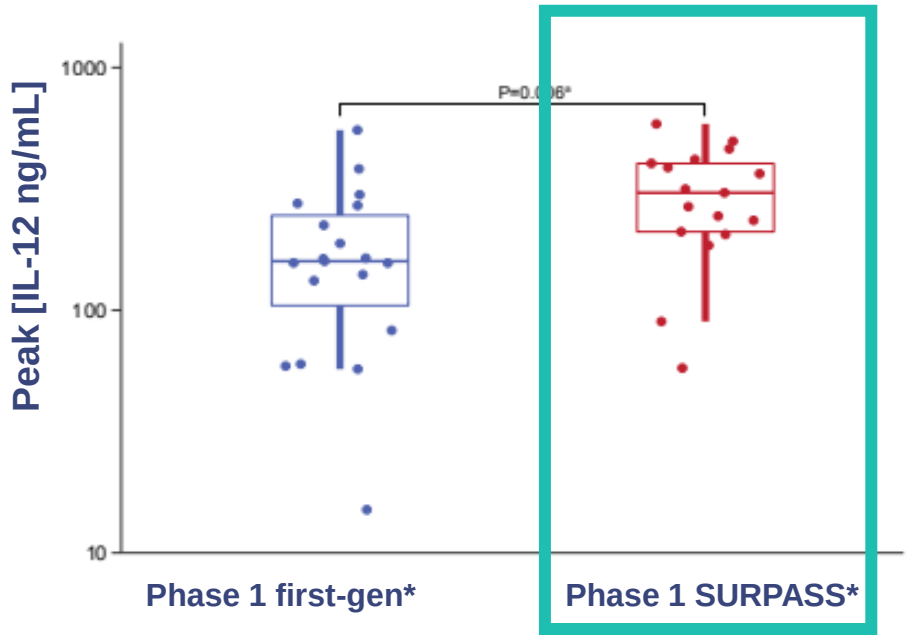
Next-gen CD4+ SPEAR T-cells kill as well as CD8 cells *in vitro*



[a] Unpaired non-parametric Wilcoxon rank-sum test

IL-12 in patient serum after receiving next-gen

Consistent with engagement of broader immune system



2021 ESMO congress

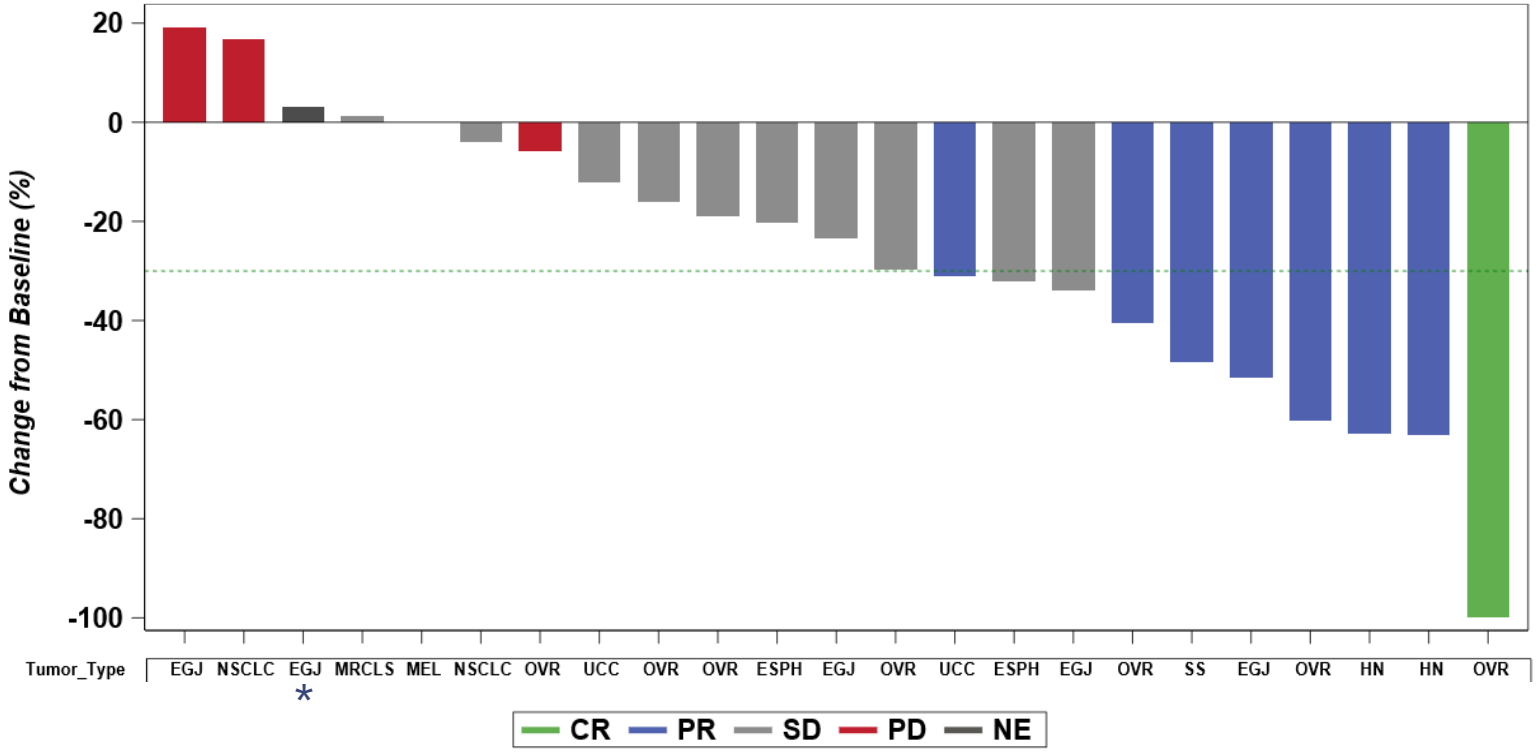
Data cut-off August 2, 2021

CR=complete response; PR=partial response; SD=stable disease; PD=progressive disease; NE=not evaluable; * excludes patients with synovial sarcoma; Data represent percent changes from baseline in sum of diameters (sum of the long diameters for non-nodal lesions and short axis for nodal lesions) in target lesions through progression or prior to surgical resection; Reponses evaluated by RECIST v1.1 per investigator assessment

SURPASS data ESMO 2021

Responses with ADP-A2M4CD8 in 5 solid tumor types in SURPASS Phase 1 trial

Initial efficacy is very promising with response rate of 36% (8/22*) and 86% (19/22*) disease control



Data supports next-gen hypothesis, MAGE-A4 target, and potential of SPEAR T-cells in multiple solid tumor indications for people with cancer

Data represent percent changes from baseline in sum of diameters (sum of the long diameters for non-nodal lesions and short axis for nodal lesions) in target lesions through progression or prior to surgical resection; Reponses evaluated by RECIST v1.1 per investigator assessment; Of 25 patients treated, 3 were not evaluable at the time of data cut-off: 2 patients (ovarian or esophageal cancers) did not have post-baseline scans; 1 patient (EGJ) had a post-baseline scan that did not meet the ≥4 weeks duration for stable disease; CR=complete response; PR=partial response; SD=stable disease; PD=progressive disease; NE=not evaluable; EGJ=esophagogastric junction cancer; NSCLC=non-small cell lung cancer; MRCLS=myxoid/round cell liposarcoma; OVR=ovarian cancer; ESPH=esophageal cancer; UCC=urothelial carcinoma or bladder cancer; SS=synovial sarcoma; HN=head and neck cancer

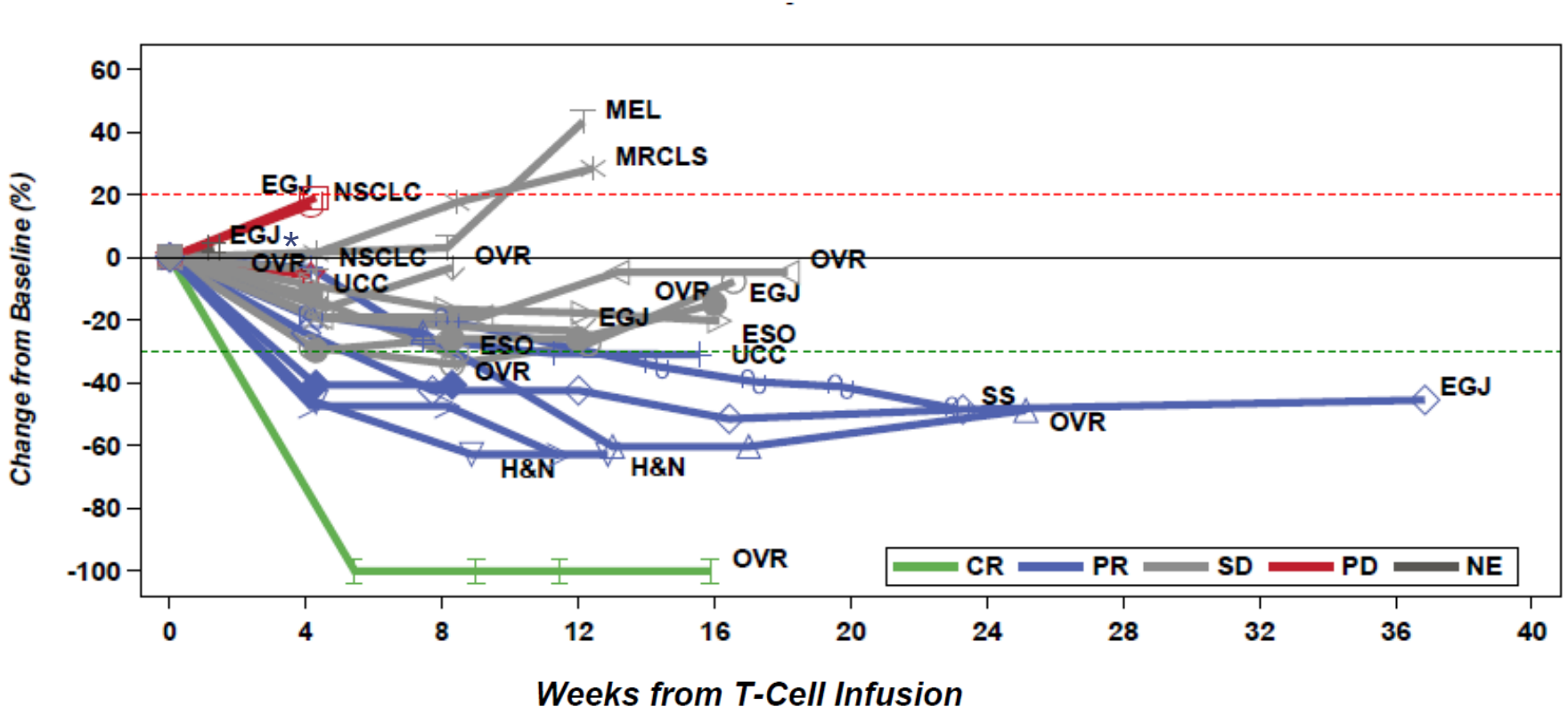
2021 ESMO congress

Data cut-off August 2, 2021; * post-baseline scan for 1 patient (EGJ) did not meet the ≥4 weeks duration for stable disease

Adaptimmune
TRANSFORMING T CELL THERAPY

Initial durability with ADP-A2M4CD8 is encouraging and will continue to evolve

Several patients receiving clinical benefit for 24 weeks or more post-infusion



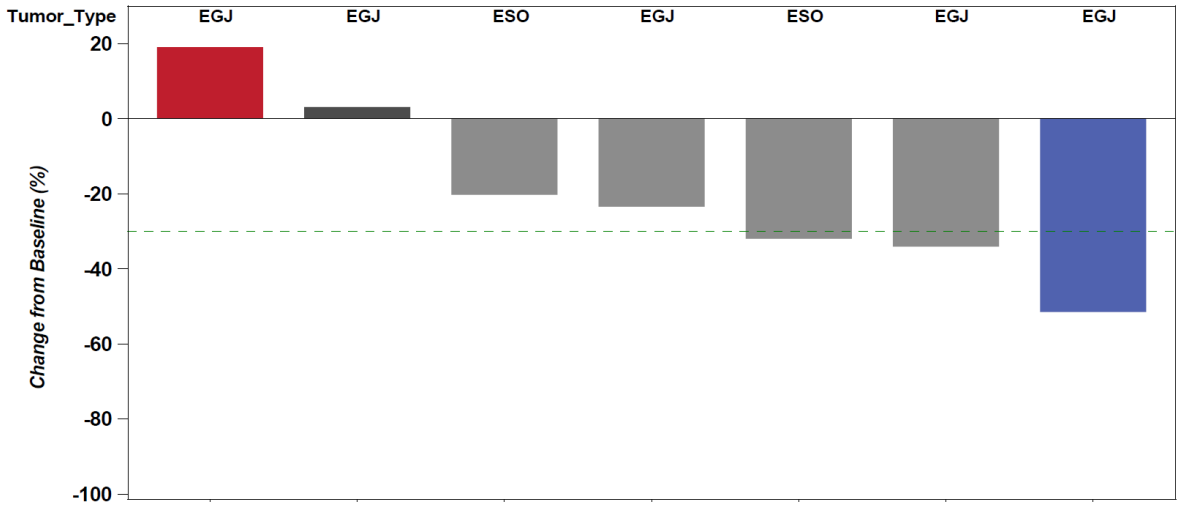
- Some patients experience continued reductions in tumors over several months post-infusion
- Median duration of response not reached

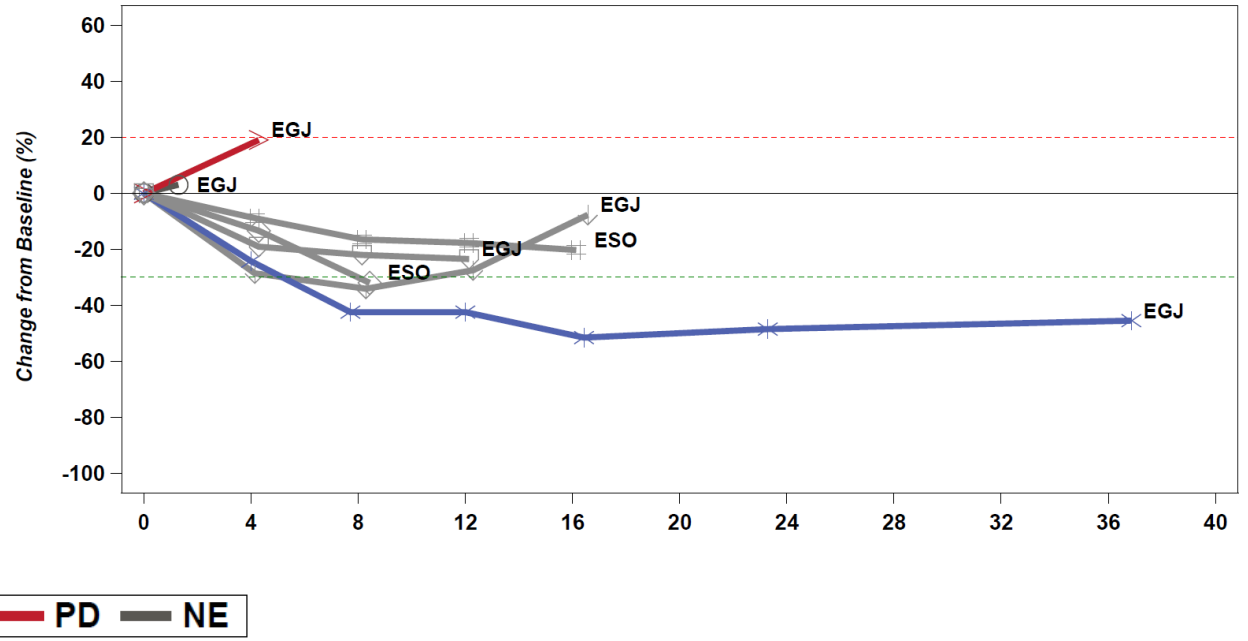
Data represent percent changes from baseline in sum of diameters (sum of the long diameters for non-nodal lesions and short axis for nodal lesions) in target lesions through progression or prior to surgical resection; Reponses evaluated by RECIST v1.1 per investigator assessment; Of 25 patients treated, 3 were not evaluable at the time of data cut-off: 2 patients (ovarian or esophageal cancers) did not have post-baseline scans; 1 patient (EGJ) had a post-baseline scan that did not meet the ≥4 weeks duration for stable disease; CR=complete response; PR=partial response; SD=stable disease; PD=progressive disease; NE=not evaluable; EGJ=esophagogastric junction cancer; NSCLC=non-small cell lung cancer; MRCLS=myxoid/round cell liposarcoma; OVR=ovarian cancer; ESPH=esophageal cancer; UCC=urothelial carcinoma or bladder cancer; SS=synovial sarcoma; HN=head and neck cancer

Data cut-off August 2, 2021 * post-baseline scan did not meet the ≥4 weeks duration for stable disease

Data in esophageal and EGJ cancers confirm potential of Phase 2 SURPASS-2 trial

Data from patients with advanced esophagogastric junction (EGJ) or esophageal cancers





Data represent percent changes from baseline in sum of diameters (sum of the long diameters for non-nodal lesions and short axis for nodal lesions) in target lesions through progression or prior to surgical resection; Reponses evaluated by RECIST v1.1 per investigator assessment

Phase 2 SURPASS-2 trial for patients with EGJ or esophageal cancers has initiated

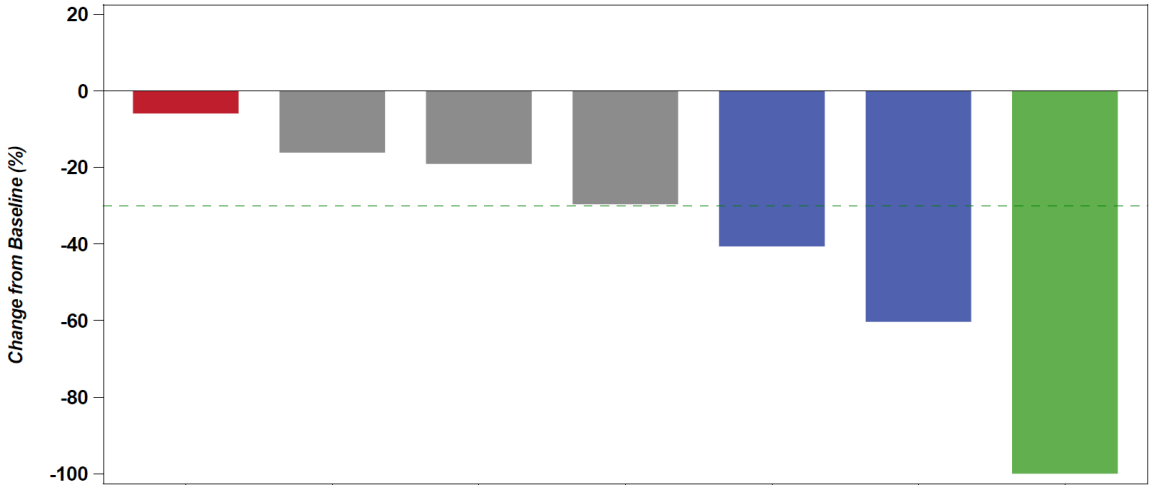
2021 ESMO congress

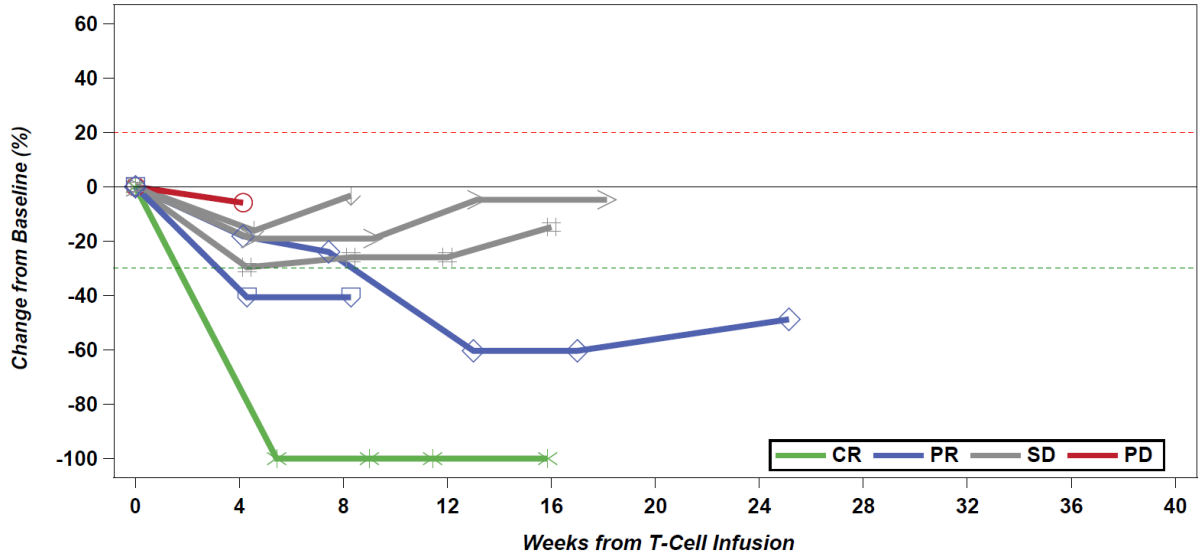
Adaptimmune
TRANSFORMING T CELL THERAPY

Reductions in target lesions in all evaluable patients with ovarian cancer

Out of 7 evaluable patients – one complete response, 2 partial responses, and 3 stable diseases

Data from patients with platinum-ineligible ovarian cancer





CR PR SD PD

Data represent percent changes from baseline in sum of diameters (sum of the long diameters for non-nodal lesions and short axis for nodal lesions) in target lesions through progression or prior to surgical resection; Reponses evaluated by RECIST v1.1 per investigator assessment

Will initiate SURPASS-3 for patients with ovarian cancer in 2022

2021 ESMO congress

Adaptimmune TRANSFORMING T CELL THERAPY

Safety with our MAGE-A4 targeted products

Acceptable safety profile for first-gen afami-cel and next-gen ADP-A2M4CD8

SPEAR T-cells targeting MAGE-A4

- Adverse events reported are consistent with those experienced by people with cancer undergoing chemotherapy, immuno-oncology therapy and/or adoptive cell therapy

- Adverse events of special interest (listed below) are generally manageable with supportive care and mitigation strategies
  - Cytokine release syndrome (CRS)
  - Neurotoxicity including immune effector cell-associated neurotoxicity syndrome (ICANS)
  - Prolonged cytopenia following lymphodepletion and SPEAR T-cell therapy

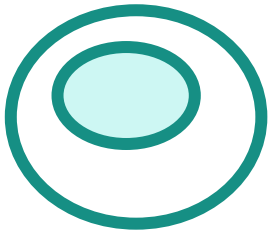
Afamitresgene autoleucel (“afami-cel”) and ADP-A2M4CD8 are associated with an acceptable safety profile for the indications under investigation

Our allogeneic platform and strategic collaboration with Genentech

Current focus for ADP-iTA2M4 is scaling the differentiation process prior to manufacturing

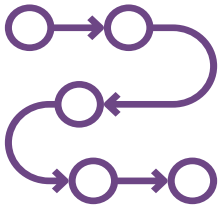
New GMP facility is under construction in preparation for producing material for clinical trial

1 → 2 → 3 → 4 → 5 → 6

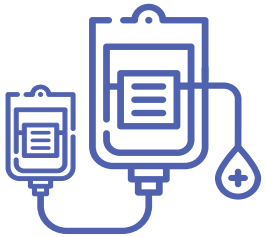


iPSC Cell line

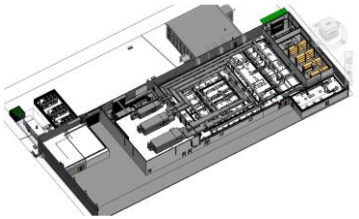
Gene Editing



Differentiation Process



Scale Up



GMP facility
(open by end 2022)

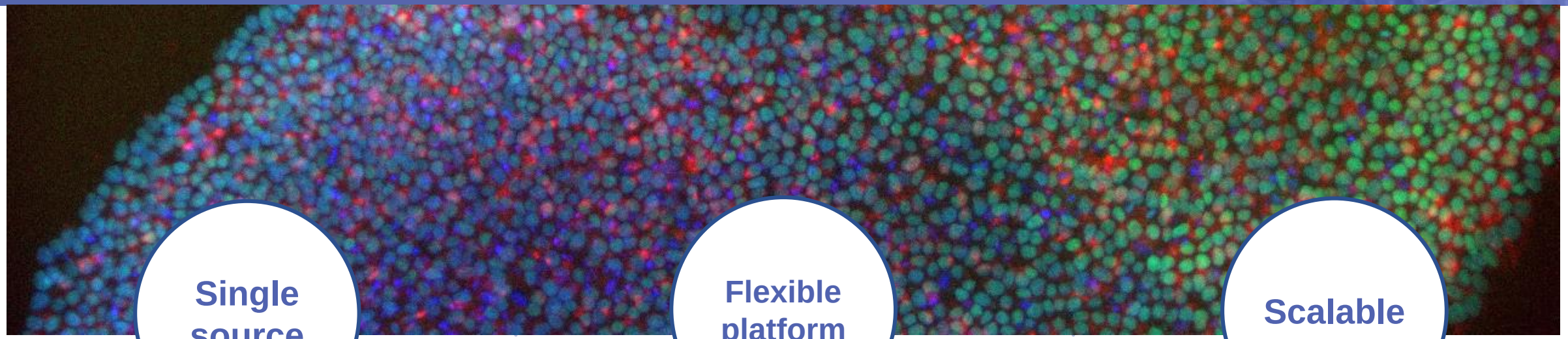
Clinical trial
(IND by end 2023)

Adaptimmune
TRANSFORMING T CELL THERAPY

iT-cell platform provides controlled, consistent off-the-shelf products

How we will deliver one product suitable for multiple patients on demand

1



Single source

- iPSCs from single donor stem cells
- High proliferative potential
- **Reproducible** starting material

Flexible platform

- Overcomes lentivector capacity limit
- **Flexibility** to add multiple next-gens or edits

Scalable

- Single cell line for characterization
- Defined media composition
- **No serum or feeder lines**

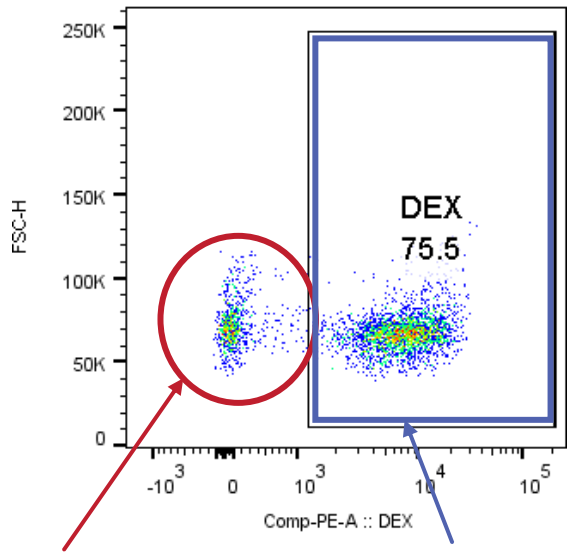
Removing RAG gene eliminates native TCR to prevent GvHD

Recent gene editing progress ensures only MAGE-A4 targeted TCR is present – cloning ensures all iT-cells have edit

Clone 1 – RAG intact

Both native TCR and
engineered ADP-A2M4 TCR present

Flow cytometry
(surface protein expression)

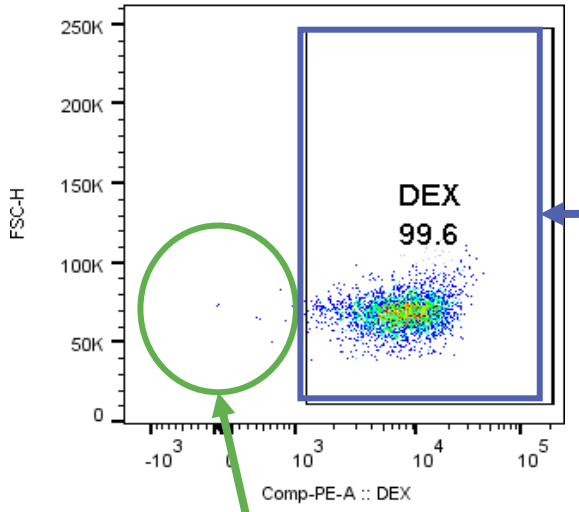


Native TCR =
GvHD risk

Engineered
ADP-A2M4 TCR

Clone 2 – RAG knockout

Only engineered
ADP-A2M4 TCR present



Engineered
ADP-A2M4 TCR

Loss of native TCR
confirmed by TCR
repertoire analysis
(PCR assay)

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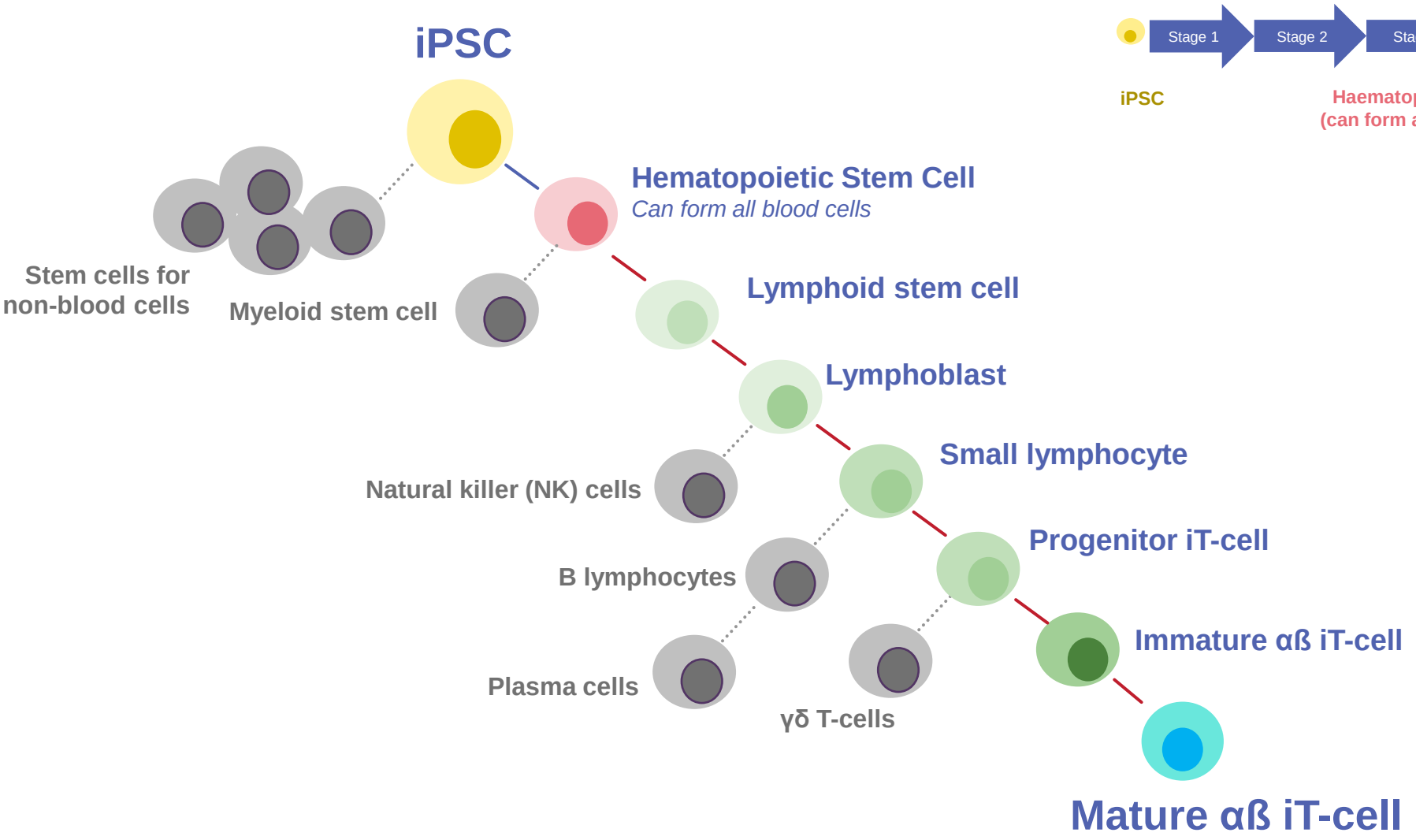
TRANSFORMING T CELL THERAPY

We chose to make αß T-cells from stem cells because they work in solid tumors

Differentiation path to mature αß T-cells is one of the longest for any lymphoid cells

3

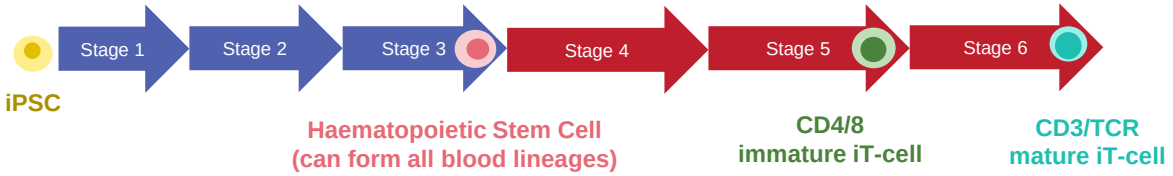


Our proprietary differentiation process produces functional, mature iT-cells

Adaptimmune
TRANSFORMING T CELL THERAPY

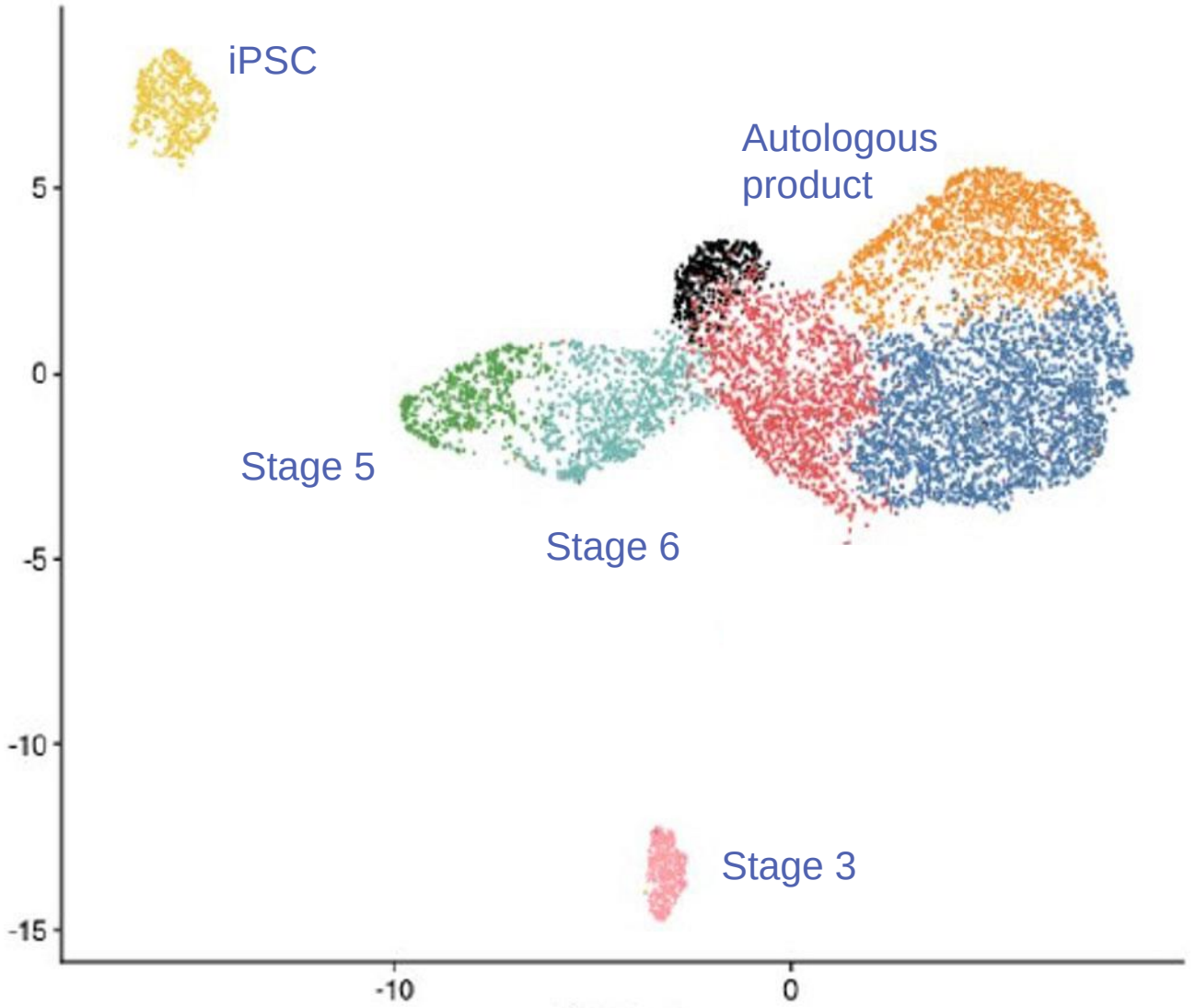
Autologous product sets the standard for making functional allogeneic iT-cells

Proprietary differentiation process produces mature iT cells approaching genetic phenotype of autologous product



Our autologous T-cell products work in solid tumors

Single-cell gene analysis and clinical data provide map to ideal allo iT-cell



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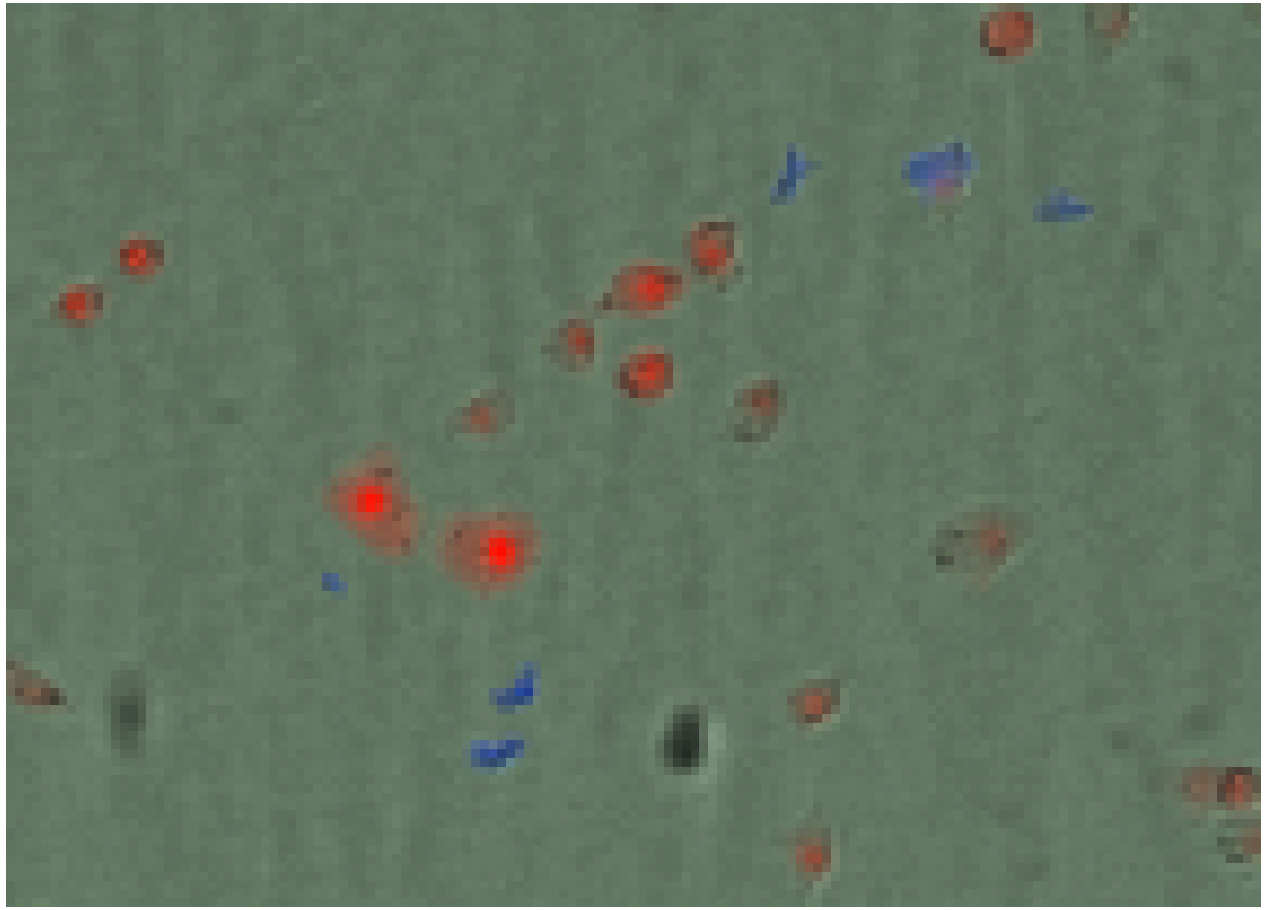
TRANSFORMING T CELL THERAPY

iT-cells can kill target more than once; the type of activity needed to treat solid tumors

Serial killing of tumor cells is a hallmark of mature, functional, effector T-cells

3



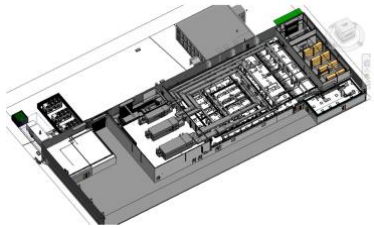
Adaptimmune
TRANSFORMING T CELL THERAPY

Our fully integrated cell production expertise puts us on quick path to allogeneic scale up

We know how to build world-class manufacturing facilities to supply products for the clinic

Allogeneic facilities at Milton Park, UK

- Research
- Process development



- Allogeneic manufacturing

Aim to open by end of 2022

Leveraging successful build out of two autologous facilities in last 4 years

Navy Yard, US

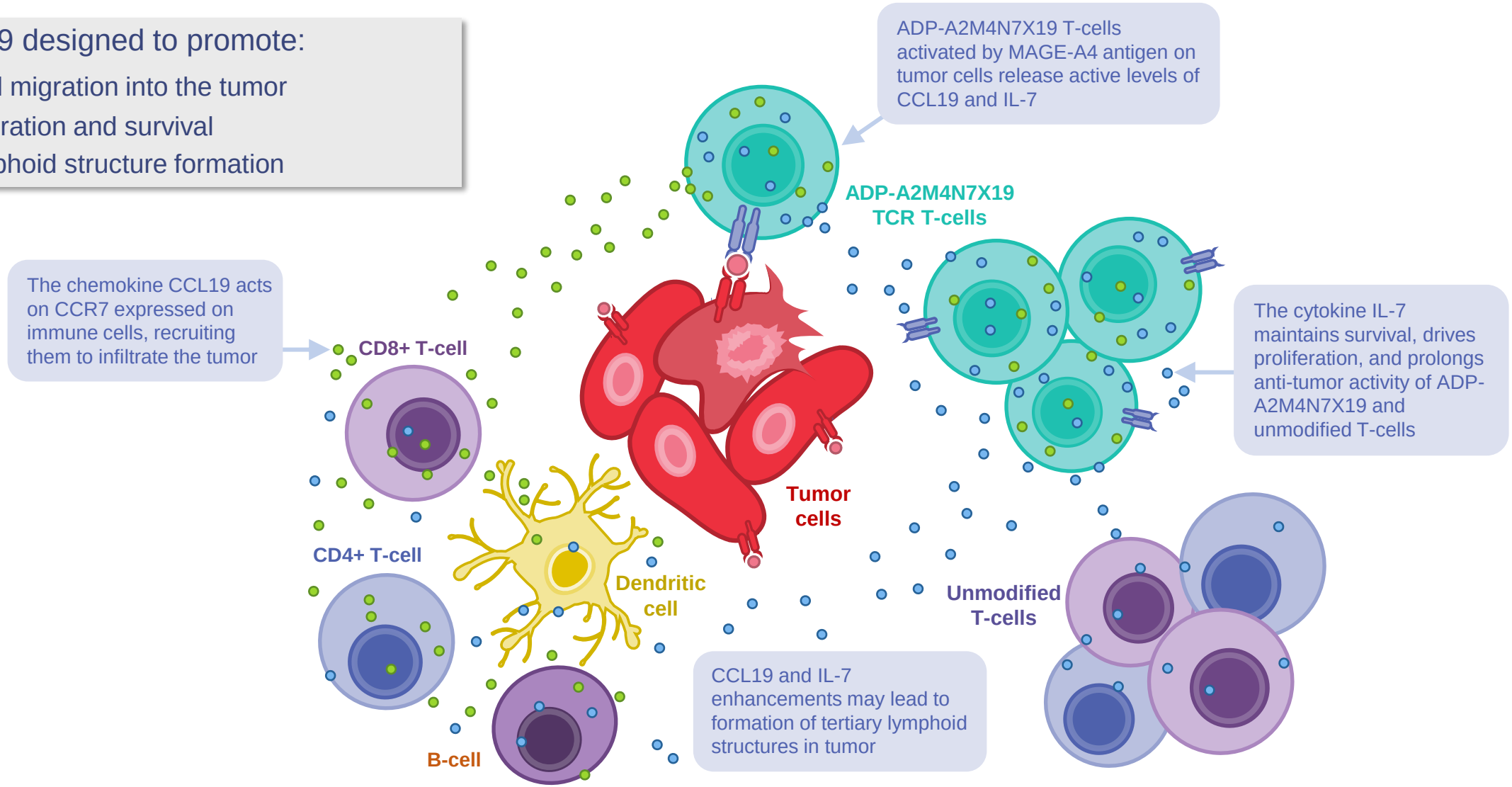
Stevenage, UK

Preclinical pipeline

ADP-A2M4N7X19: Next-generation MAGE A4 product designed co-expressing IL-7 and CCL19*

To enhance the efficacy and persistence of SPEAR T-cells

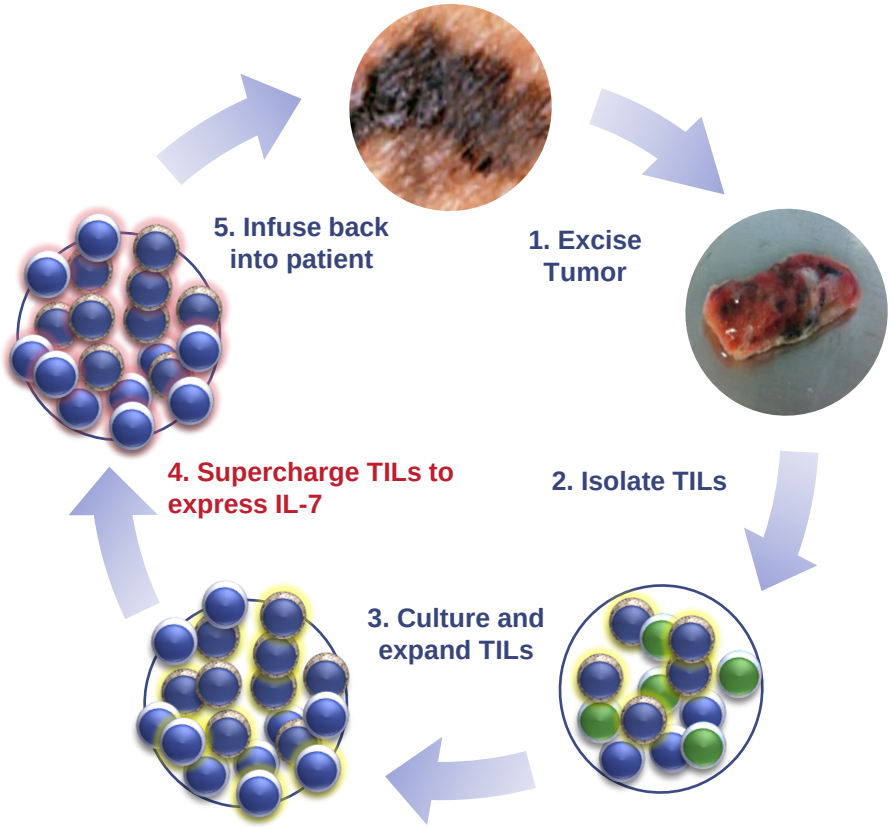
- IL-7 and CCL19 designed to promote:
  - Immune cell migration into the tumor
  - T-cell proliferation and survival
  - Tertiary lymphoid structure formation



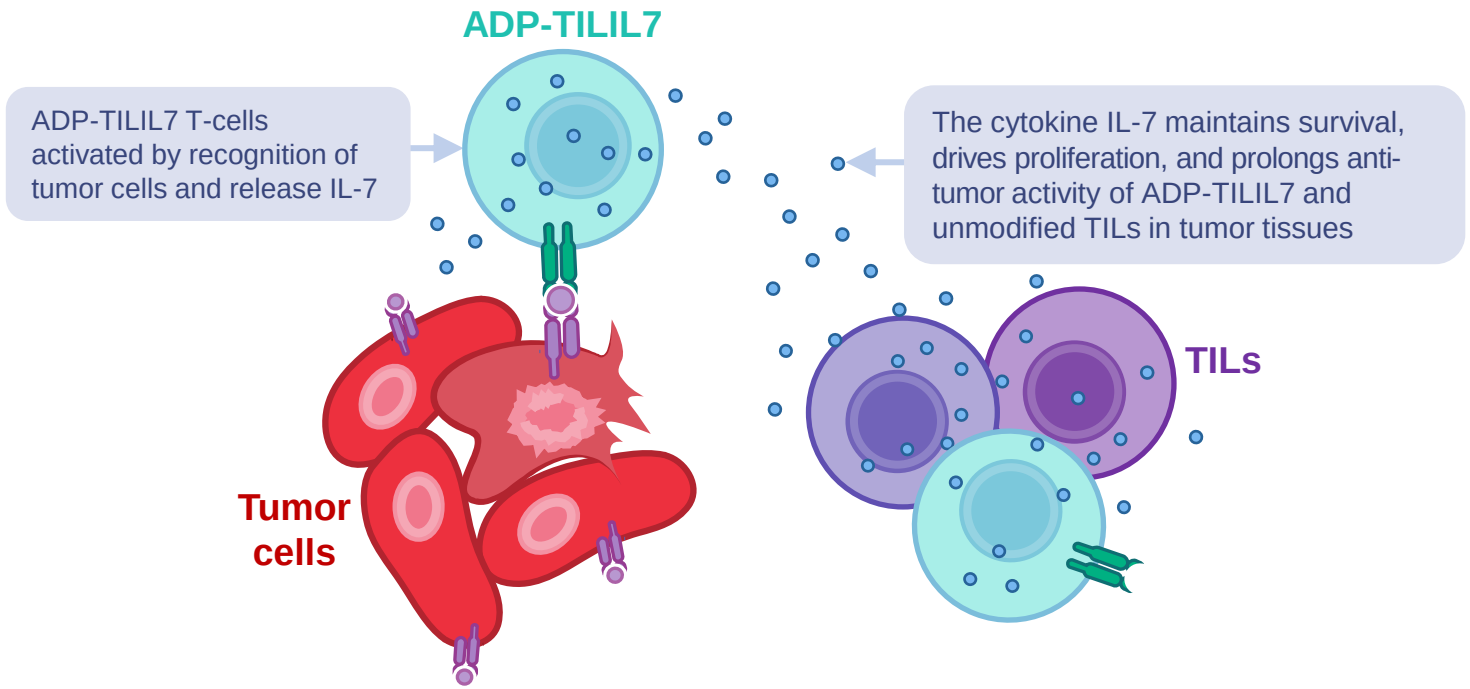
* Licensed technology from Noile-Immune Biotech

Working with CCIT to develop next-generation ‘supercharged’ TILs co-expressing IL-7

Partnership and single-center trial with CCIT, Denmark (leading TIL therapy center)



- TIL therapy is efficacious in solid tumors, including melanoma
  - Aim to transform patient responses with a next-generation TIL product
  - Builds on TCR discovery, next-gen product development and manufacturing
  - Broad market potential



TIL=tumor infiltrating lymphocyte

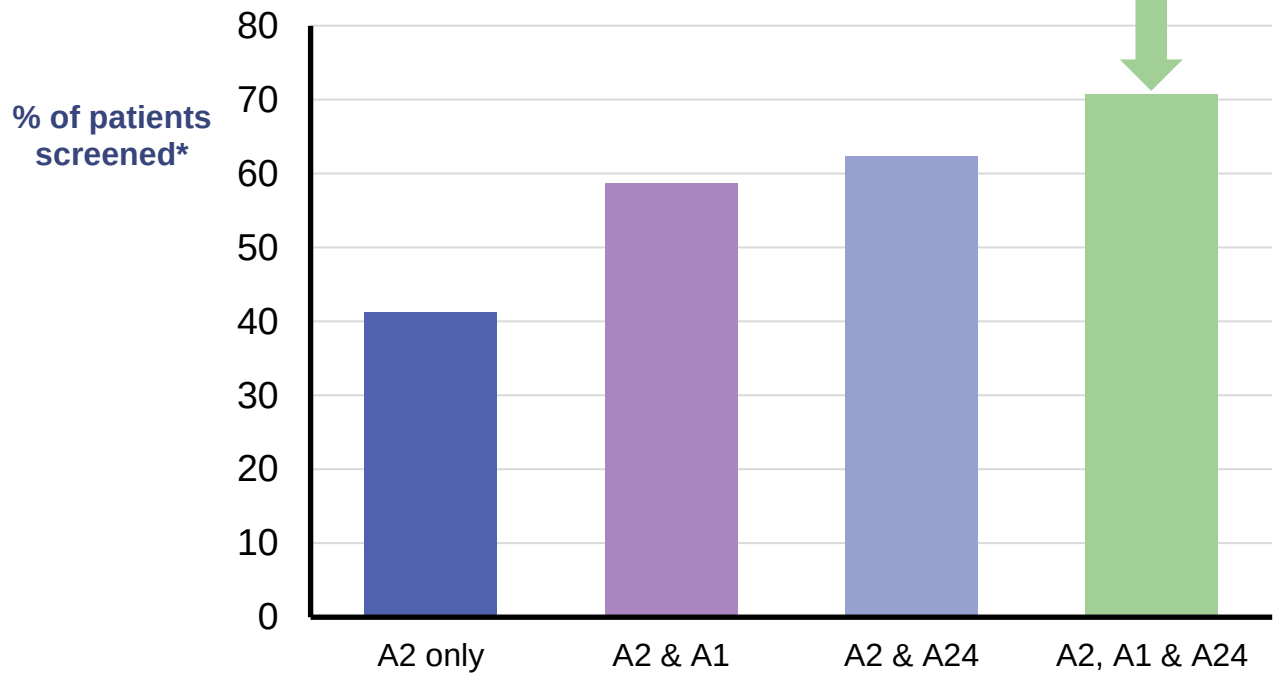
Increase treatable patient population with products targeting additional HLA types

Towards mainstream therapy

Single HLA allele frequency in patients

MAGE-A4		
	• **HLA-A*02**	**41%**
	• HLA-A*01	**25%**
	• HLA-A*24	**26%**

> 70% patients treatable with products targeting HLA-A*02, *01 and *24



*HLA data taken from first 1,043 patients screened in our trials

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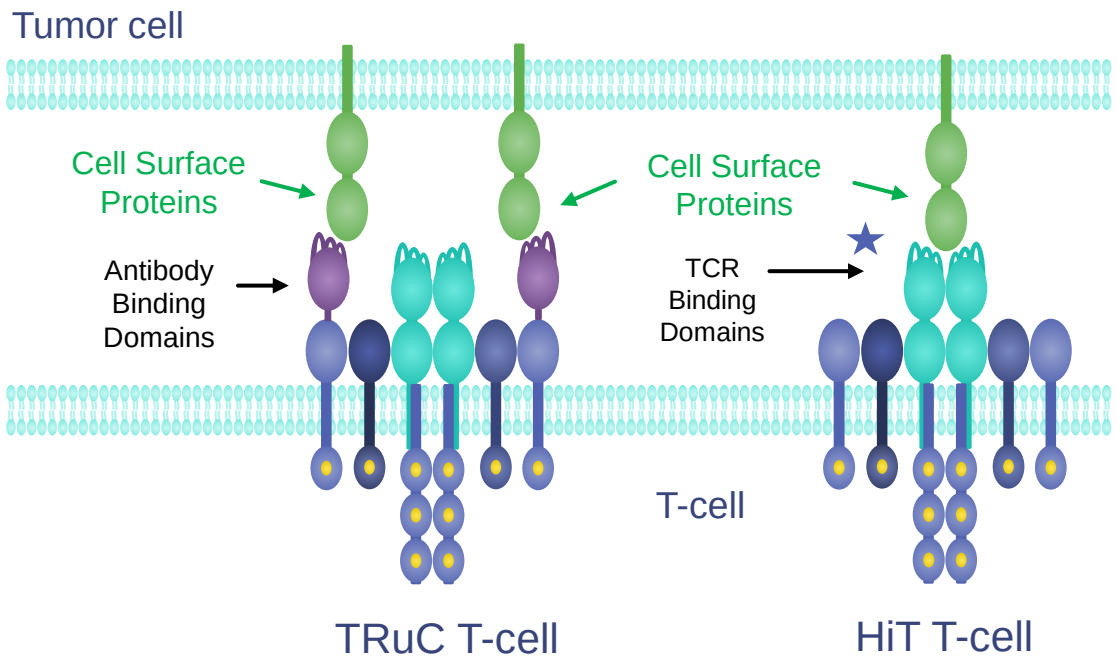
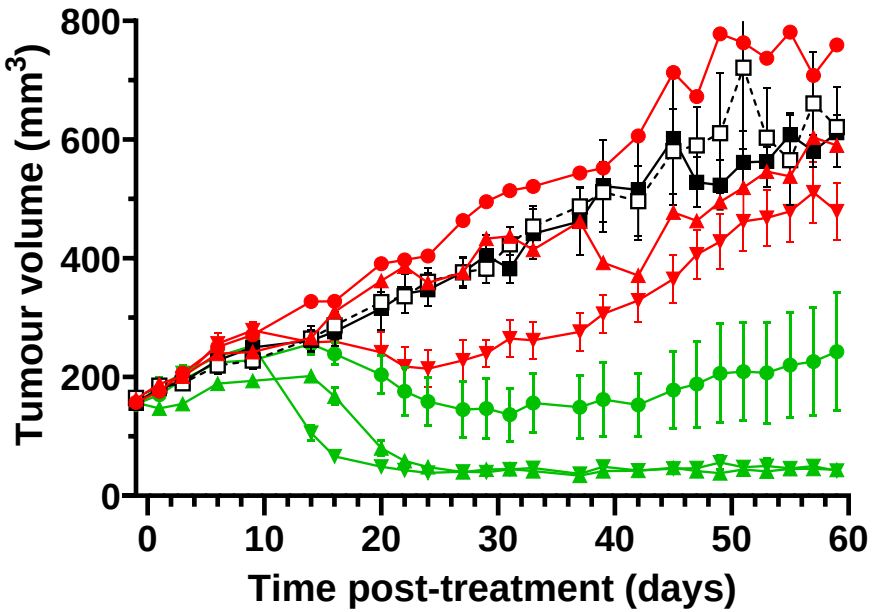
HiT induces strong, dose-dependent and persistent tumor regression *in vivo*

HiT outperformed TRuC in a mouse tumor model





- untreated
- Non-transduced T-cells

Control

- 0.3 x10^6 T cells
- 1 x10^6 T cells
- 3 x10^6 T cells

TRuC / **HiT**

Mean ± SEM, n = 6–8 per group

All T-cells manufactured with Adaptimmune proprietary technology

HiT, HLA-independent TCR; HLA, human leukocyte antigen; TRuC, TCR fusion constructs; All T-cells manufactured with Adaptimmune proprietary technology

Supplying cell therapies to patients

Leading capabilities for designing and delivering cell therapies

Integrated, internal capabilities are the foundation for long-term value creation

~500 FTEs*

Philadelphia

- Autologous product manufacturing
- Clinical Development
- Commercial
- Corporate

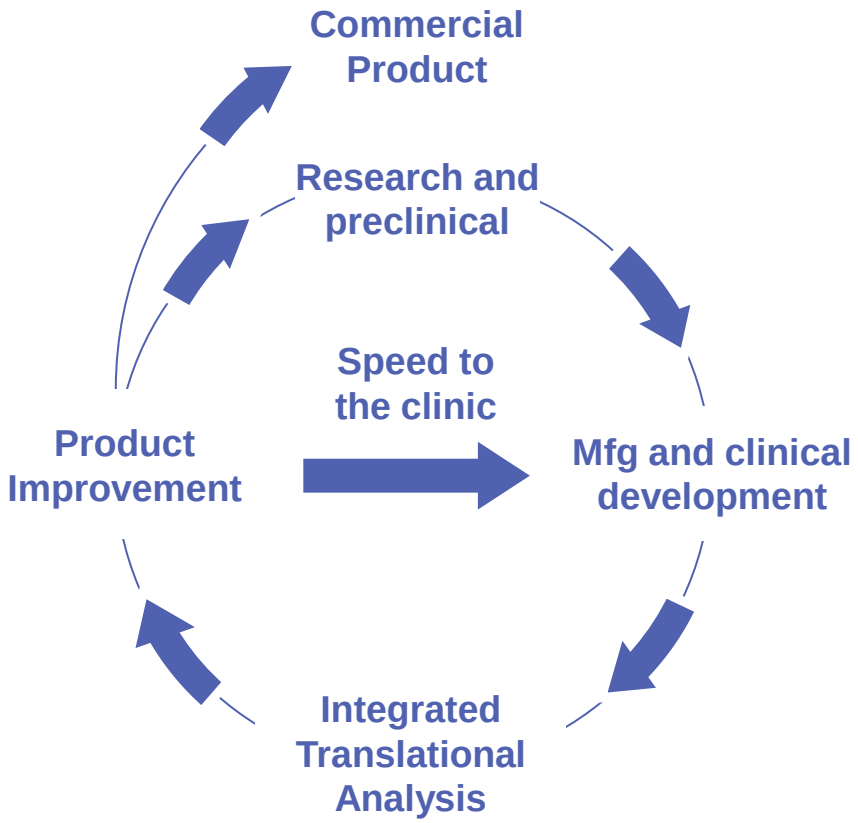
Milton Park

- Pipeline Research
- Allogeneic research
- Process and analytical development
- Corporate

Stevenage

- Dedicated GMP Lentiviral vector manufacturing

Speed of innovation



* As of February 2022

The patient cell journey for autologous SPEAR 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
- ✓ T-cell expansion
- ✓ Cryopreserve dose prior to release testing

- ✓ Release testing

To clinical site for infusion

Apheresis to product release ~30 days

WBC=white blood cell; TCR=T-cell receptor

Manufacturing and supply as a key integrated capability

Ready to supply the future of cell therapy and deliver results for patients

Experienced cell therapy team

- Successfully manufactured 100's of autologous batches in-house for patients across multiple tumor types
- Deep expertise in process and analytical development, manufacturing and supply

Secured supply for commercial and clinical trials

- Internal and external lentiviral vector manufacturing
- Internal autologous product manufacturing and quality testing
- Building internal allogeneic product manufacturing facility

Scalable infrastructure "People, Processes, and Technology"

- Digitized autologous Patient Journey in place
- Autologous product capacity for nearly 1,000 patients per year
- Capabilities for continuous improvement

Improved Patient Experience and Wider Access

Company overview and financials

Cash runway into early 2024

Total Liquidity at end of Q1 2022 was ~**$304M***

Well-financed and ready to execute on broad range of opportunities/value drivers

* As of March 31, 2022 - Total Liquidity (a non-GAAP financial measure) is the total of cash and cash equivalents and marketable securities, which is explained and reconciled to the most directly comparable financial measures prepared in accordance with GAAP in our Quarterly Report on Form 10-Q filed with the SEC on May 9, 2022.


SPEAR-heading
THE CANCER
REVOLUTION
Adaptimmune
TRANSFORMING T CELL THERAPY
Corporate Deck
July 2022