
SPEAR-heading
TCR
Adaptimmune
TRANSFORMING T CELL THERAPY
August 2020

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 Quarterly Report on Form 10-Q filed with the Securities and Exchange Commission (SEC) on August 6, 2020 and our other SEC filings.

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.

Responses in 6 solid tumor types confirm potential of SPEAR T-cell platform

Responses in synovial sarcoma, melanoma, head and neck, lung, gastroesophageal, and liver cancers

New Phase 2 trial* in gastroesophageal cancers planned for 1H 2021

Durability and response data in sarcoma support potential for **SPEARHEAD-1** as a registrational trial** – commercial launch planned in the US in 2022

SPEARHEAD-2 combination trial in head and neck cancer:** first trial with SPEAR T-cells and pembrolizumab in sequence with first line systemic therapy

Complete response in ADP-A2AFP Phase 1 trial in a patient with liver cancer***

SURPASS* trial now focused on gastroesophageal, head and neck, bladder, and lung cancer to identify **more indications for late stage development**

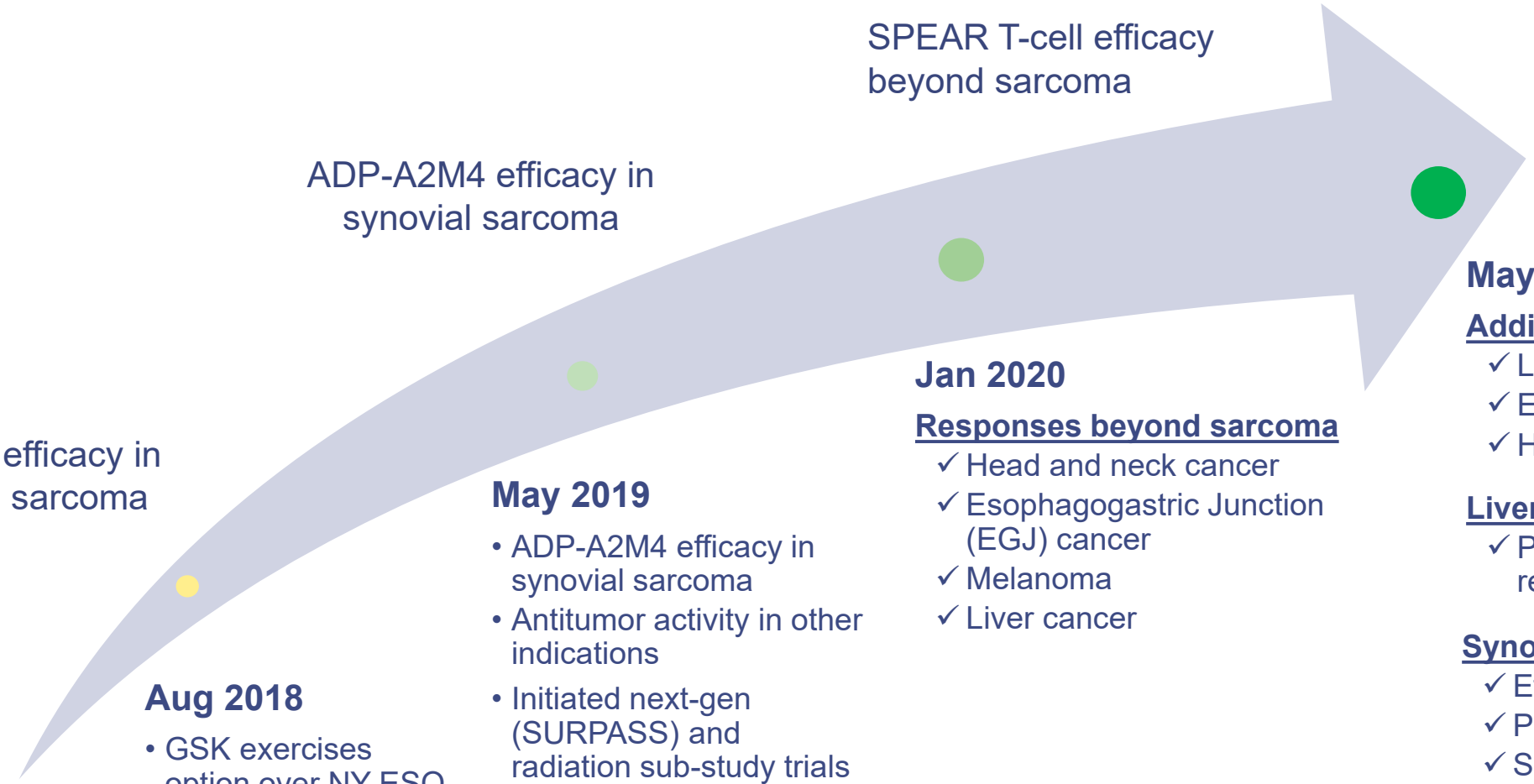
Integrated late-stage cell therapy company with **cash runway into 2022**

* With ADP-A2M4CD8 SPEAR T-cells
** With ADP-A2M4 SPEAR T-cells
***Patient progressed at Week 32

Efficacy in multiple solid tumors

Our journey to responses in six solid tumors with our SPEAR T-cells

Building a pipeline of therapies with efficacy in multiple cancers and on the path to commercialization in 2022



Aug 2018

- GSK exercises option over NY-ESO

May 2019

- ADP-A2M4 efficacy in synovial sarcoma
- Antitumor activity in other indications
- Initiated next-gen (SURPASS) and radiation sub-study trials

Jan 2020

Responses beyond sarcoma

- ✓ Head and neck cancer
- ✓ Esophagogastric Junction (EGJ) cancer
- ✓ Melanoma
- ✓ Liver cancer

May 2020

Additional new responses

- ✓ Lung cancer
- ✓ EGJ cancer*
- ✓ Head & neck cancer*

Liver cancer

- ✓ Previously reported complete response

Synovial sarcoma

- ✓ Efficacy confirmed
- ✓ Promising durability
- ✓ SPEARHEAD-1 intended as registrational trial

* Unconfirmed partial response (PR)
EGJ=Esophagogastric Junction cancer

Broad responses in multiple solid tumors with SPEAR T-cells targeting MAGE-A4

Path to registration in synovial sarcoma, Phase 2 trials in other indications

	Tumor Type (Responses [a] / patients dosed)										
	Overall	Synovial Sarcoma	Head & Neck	EGJ	Lung	Bladder	Melanoma	Ovarian	MRCLS	Gastric	Esophageal
ADP-A2M4 (Phase 1 & sub-study)	11/39 [b]	**8/16** [b]	**1/3**	0/1	1/2	0/2	1/2	0/9	0/2	0/1	0/1
ADP-A2M4CD8 (SURPASS)	**3/4**	0	**1/1** [b]	**2/2** [b]	0	0	0	0/1	0	0	0
Combined	14/43	**8/16**	**2/4**	**2/3**	1/2	0/2	1/2	0/10	0/2	0/1	0/1

SPEARHEAD-1 in synovial sarcoma

SPEARHEAD-2 ADP-A2M4 + pembro in head & neck cancer

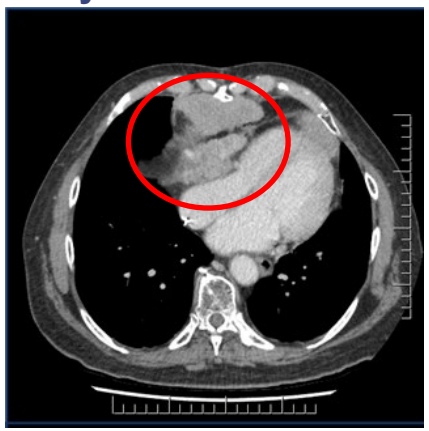
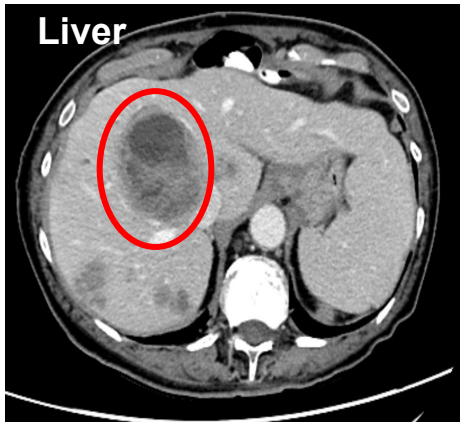
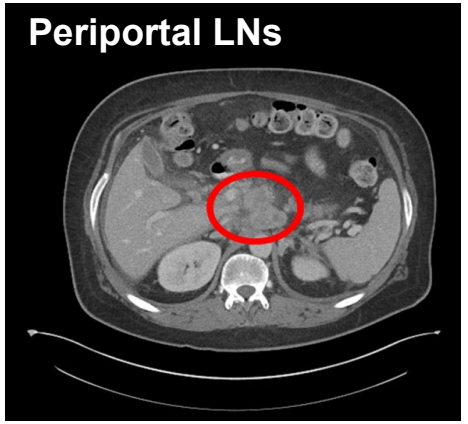
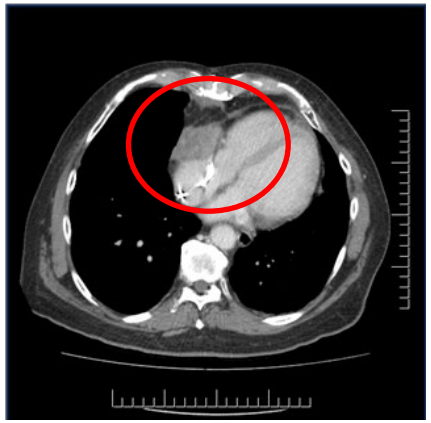
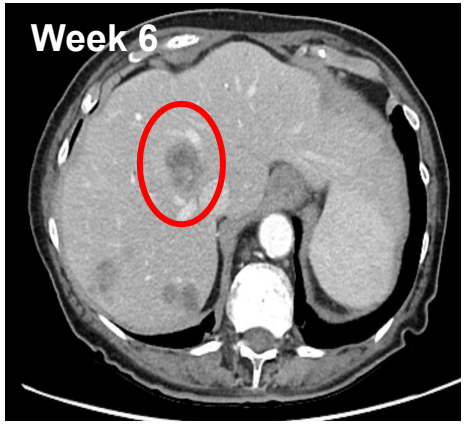
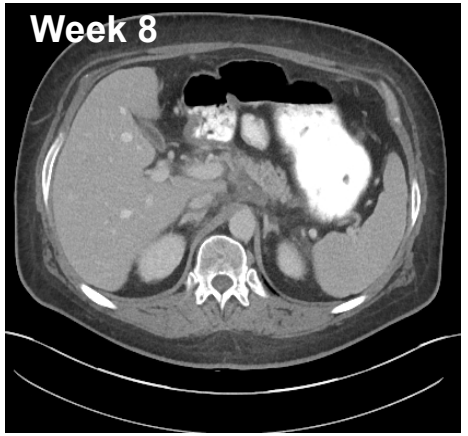
Planned Phase 2 trial in gastroesophageal cancers with ADP-A2M4CD8

Radiation sub-study continues to recruit

SURPASS focus: lung, gastroesophageal, head & neck, and bladder cancers

a: 38 patients from the ADP-A2M4 Phase 1 trial; 1 patient from the radiation sub-study with melanoma
b: Includes an unconfirmed PR as of 20 May 2020; data cut off 06 Apr 2020 (ADP-A2M4); 24 May 2020 (SURPASS)
EGJ=esophagogastric junction cancer; MRCLS=myxoid/round cell liposarcoma

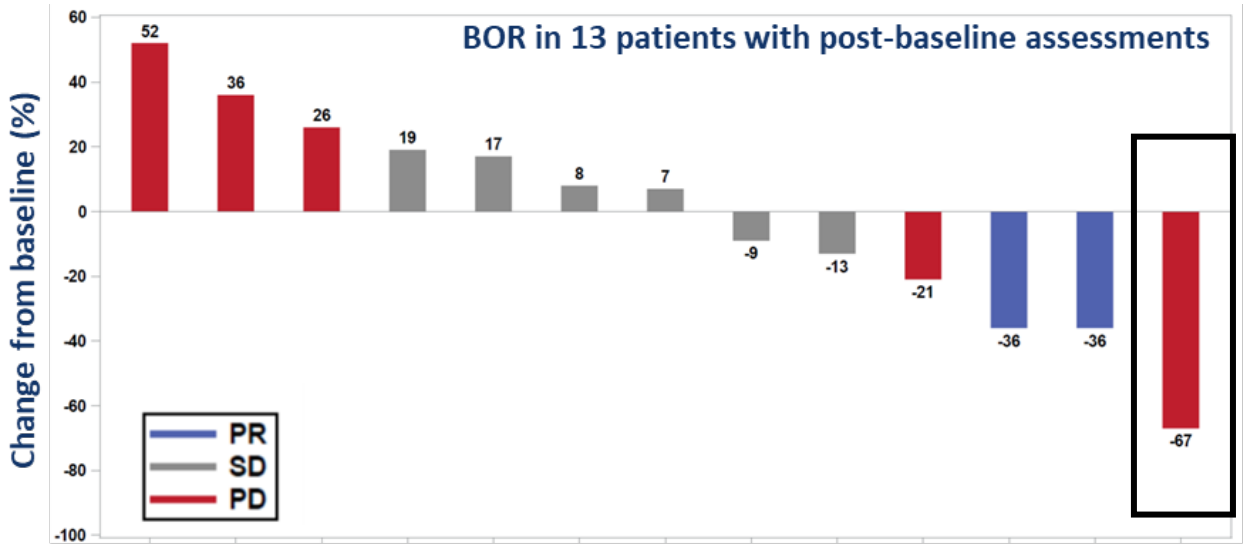
SPEAR T-cells targeting MAGE-A4 can address bulky solid tumors

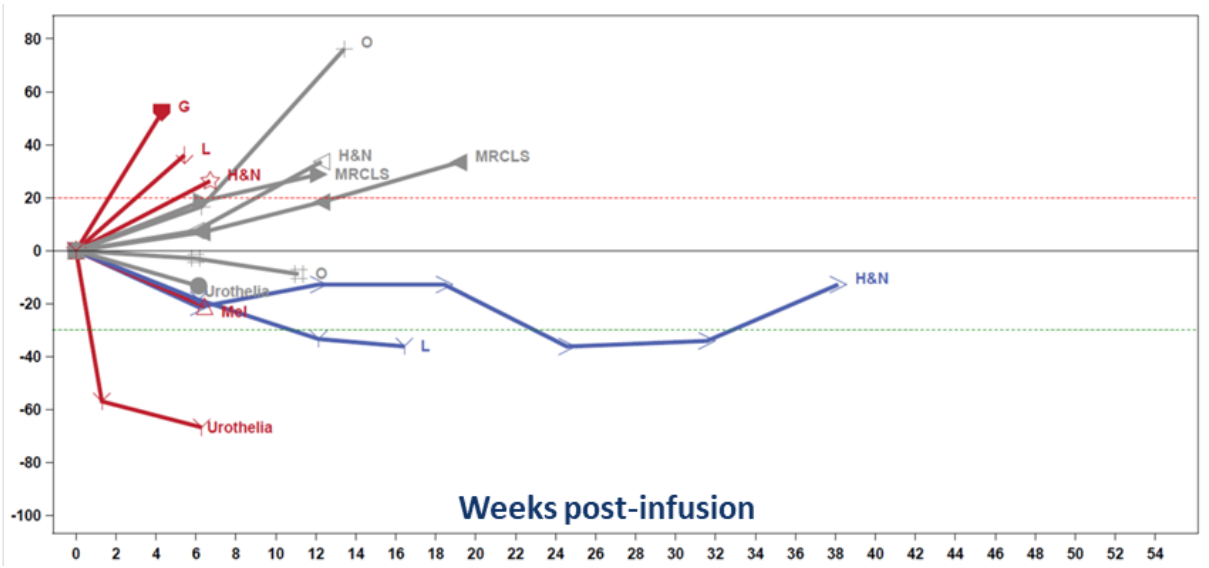
	Synovial sarcoma	Melanoma	Gastroesophageal cancer
Baseline			
Post-treatment			
	cPR **BOR -71% at Week 18**	**cPR** **BOR -42% at Week 10**	**cPR** **BOR -48% at Week 24**

* Confirmed PR now best overall
BOR=best overall response; cPR=confirmed partial response

ADP-A2M4 SPEAR T-cells induce responses and anti-tumor activity in multiple cancers

Responses in lung and head & neck cancer. Tumor reductions in ovarian cancer, bladder cancer, and melanoma.





Confirmed responses in lung cancer and head & neck cancer

Tumor reductions in ovarian cancer, bladder cancer, and melanoma

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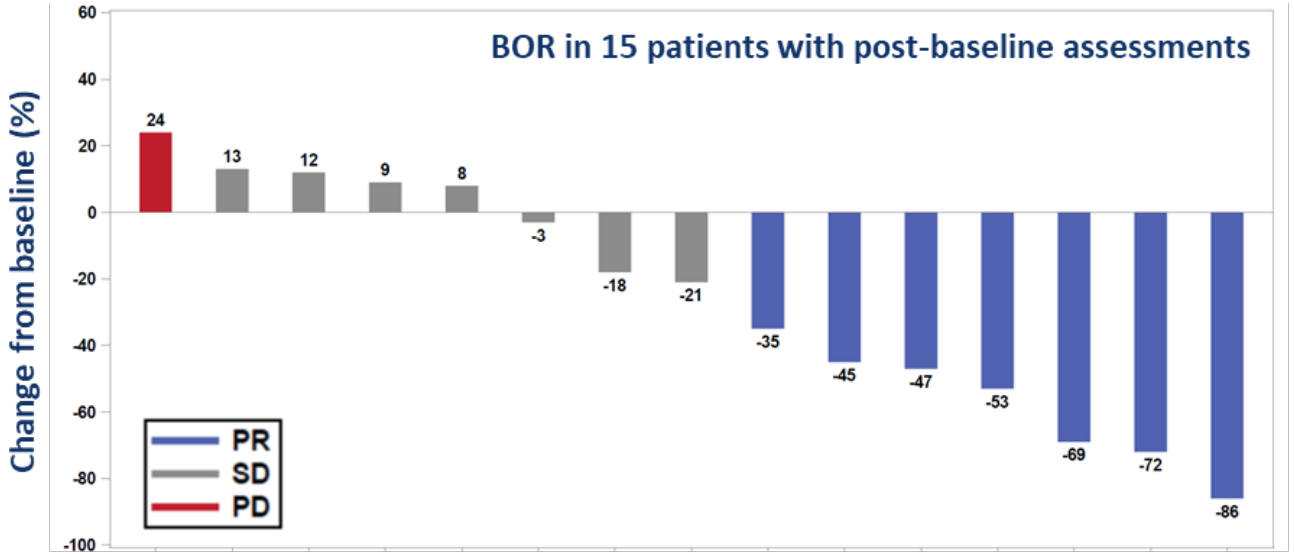
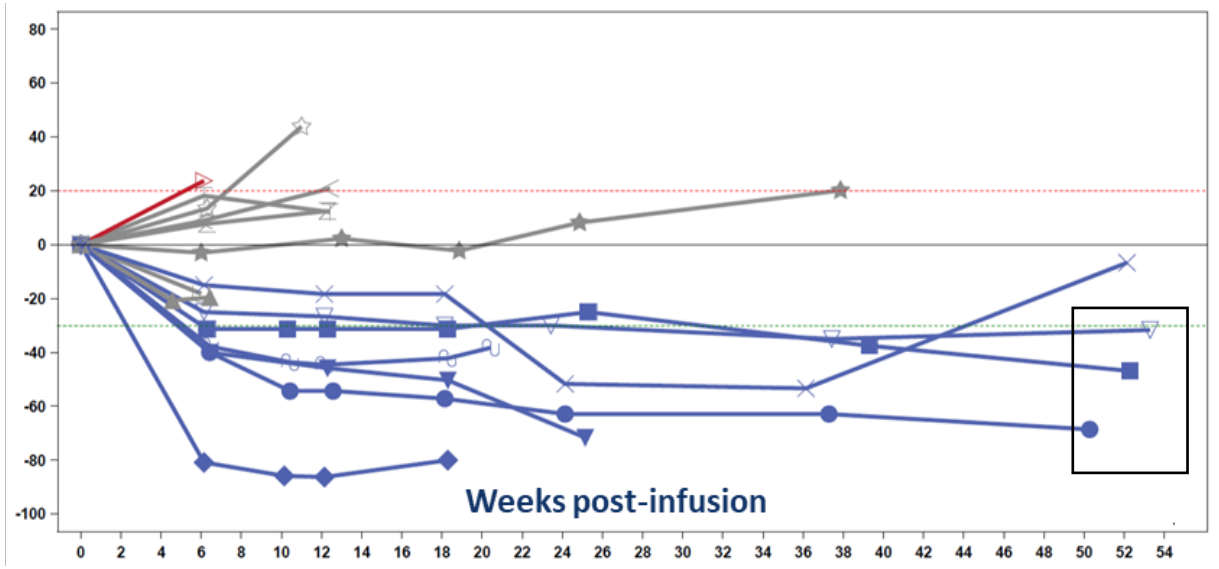
Data from patients in Cohort 3 and expansion phase; Data represent percent changes in sum of diameters in target lesions through progression or prior to surgical resection; Sum of diameters = sum of the long diameters for non-nodal lesions and short axis for nodal lesions; Reponses evaluated by RECIST 1.1; BOR, best overall response; PD, progressive disease; PR, partial response; SD, stable disease; Data cut-off April 6, 2020

Efficacy in synovial sarcoma with ADP-A2M4 – SPEARHEAD-1 trial intended for registration

Confirmed responses in ~50% of patients with a disease control rate of ~90%





Responses were durable

Median duration of response was ~28 weeks (range: ~12 to 54 weeks)

Additional patient with unconfirmed response after data cut-off

SPEARHEAD-1 Trial intended for registration (futility removed)

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Data from patients in Cohort 3 and expansion phase; Data represent percent changes in sum of diameters in target lesions through progression or prior to surgical resection; Sum of diameters = sum of the long diameters for non-nodal lesions and short axis for nodal lesions; Reponses evaluated by RECIST 1.1
BOR, best overall response; PD, progressive disease; PR, partial response; SD, stable disease; Data cut-off April 6, 2020

Safety with SPEAR T-cells

Patients treated with ADP-A2M4, ADP-A2AFP, ADP-A2M4CD8, ADP-A2M10 (n=77)*

In general, patients have tolerated treatment well with an acceptable safety profile

AEs of special interest included CRS, neurotoxicity, and prolonged cytopenias, which occur at rates consistent with other cell therapies, and are managed in keeping with current guidelines

Most adverse events consistent with those typically experienced by cancer patients undergoing cytotoxic chemotherapy or other cancer immunotherapies

Favorable benefit : risk profile for all products and indications under study

* Data cut-off as of 21 May 2020

Progress towards launch of first therapy in the US in 2022

Aim to complete SPEARHEAD-1 recruitment by 1H 2021

- SPEARHEAD-1 intended to be used for registration
- Recruitment going well
  - Recruiting patients in more than 20 centers in Canada, France, Spain, United Kingdom, and the US
- Enrollment planned to complete 1H 2021
- Positive endorsements from FDA and EMA
  - Orphan Drug Designation (ODD) and PRIME access in Europe
  - FDA's ODD and Regenerative Medicine Advanced Therapy designation

On track for commercialization in the US in 2022

Promising data with ADP-A2AFP at ILC 2020

ADP-A2AFP updated data presented at ILC August 28, 2020

Early data support continued investigation in the expansion phase of this trial

- ADP-A2AFP SPEAR T-cells have been associated with an acceptable safety profile, to date
- No reports of significant T-cell related hepatotoxicity and no protocol-defined DLTs, to date
- Complete response in 1 patient from Cohort 3 who received $5.6x10^9$ transduced cells
  - Sustained reduction in serum AFP
  - Recent progression at Week 32
- Indication of antitumor activity and transient decreases in serum AFP in several patients with best overall responses of stable disease
- Dose-dependent persistence of ADP-A2AFP SPEAR T-cells post-infusion
- Further translational evaluation is ongoing to understand indicators of response

EASL™ The Home of Hepatology

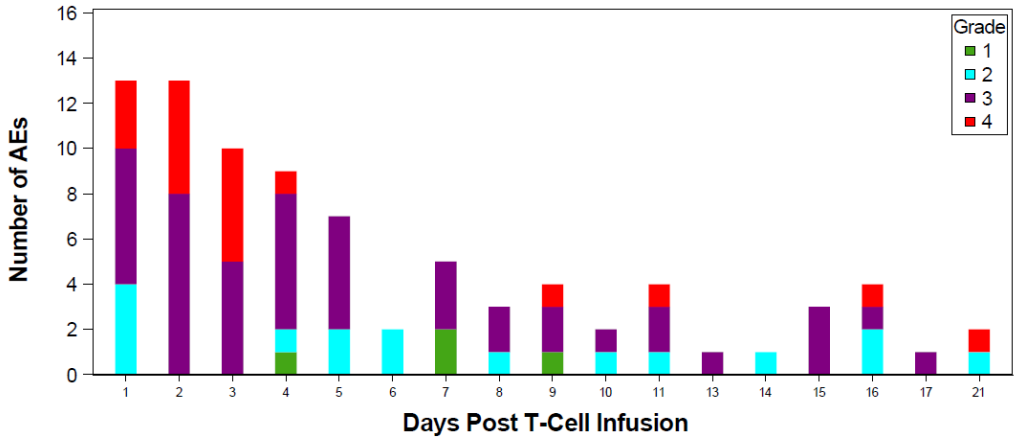
THE DIGITAL INTERNATIONAL LIVER CONGRESS™

27-29 August 2020

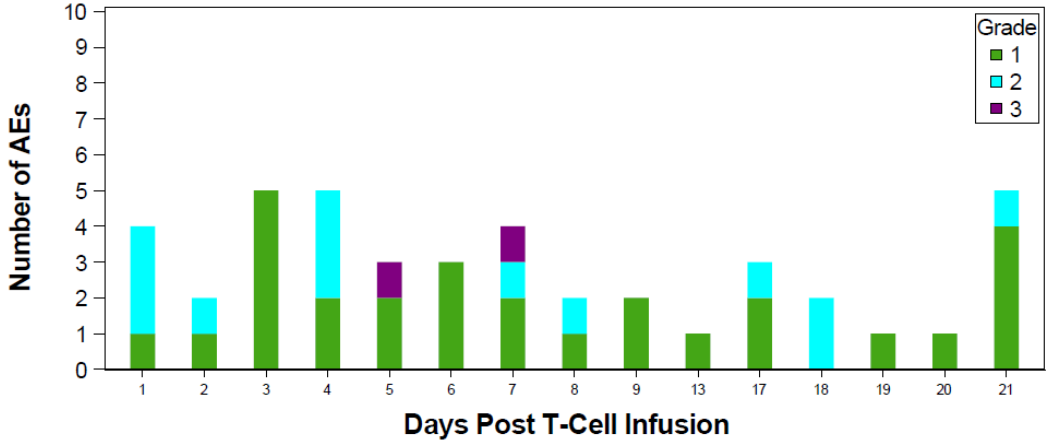
ADP-A2AFP is well-tolerated with no reports of significant T-cell related hepatotoxicity

Most AEs consistent w/ those typically experienced by patients undergoing cytotoxic chemotherapy and/or immunotherapy

Frequency of Adverse Events Over Time (Days)
Hematology Adverse Events



Frequency of Adverse Events Over Time (Days)
Excluding Hematology Adverse Events



Most frequent and severe adverse events were hematologic, trending toward resolution over the first 21 days

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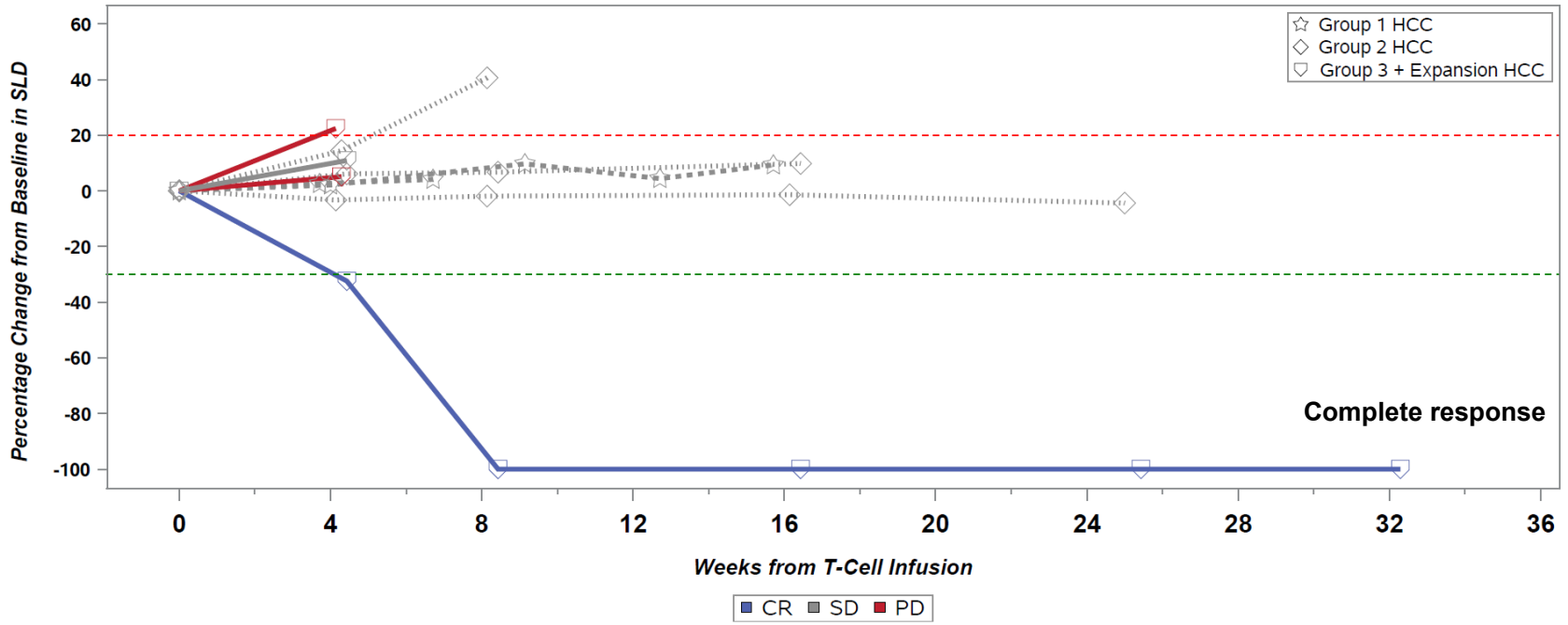
One patient with a complete response out of four patients with HCC treated at 5B or more cells

Early data support continued investigation in the expansion phase of this trial



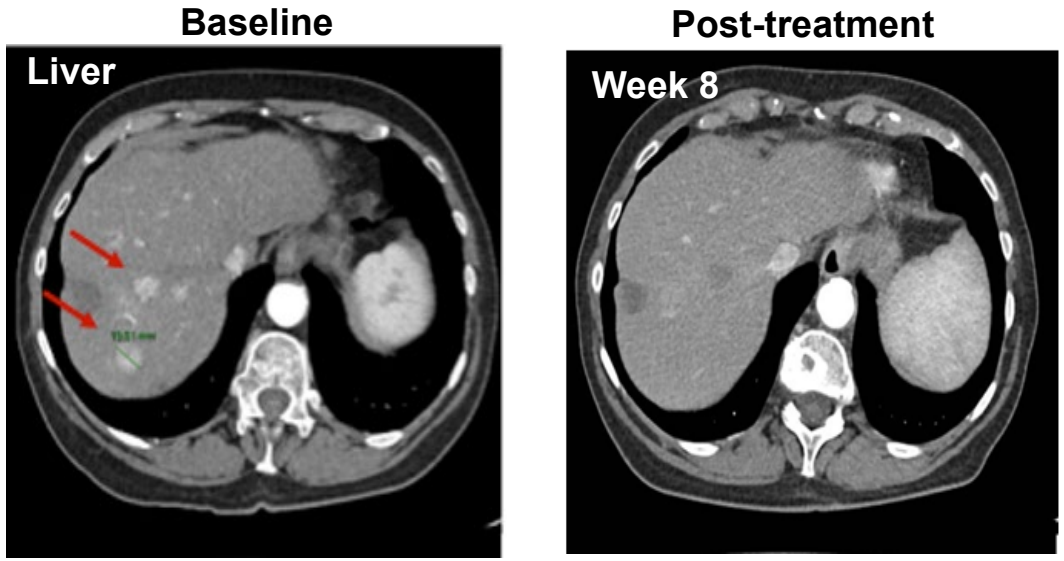
Best overall response	Group 1 (n=2)	Group 2 (n=3)	Group 3 and expansion (n=4)
Complete response	0	0	1 (25%)*
Stable disease	2 (100%)	3 (100%)	1 (25%)
Progressive disease	0	0	2 (50%)

Data cut-off 06 July 2020
* Patient progressed at Week 32

Complete response in a patient with advanced liver cancer

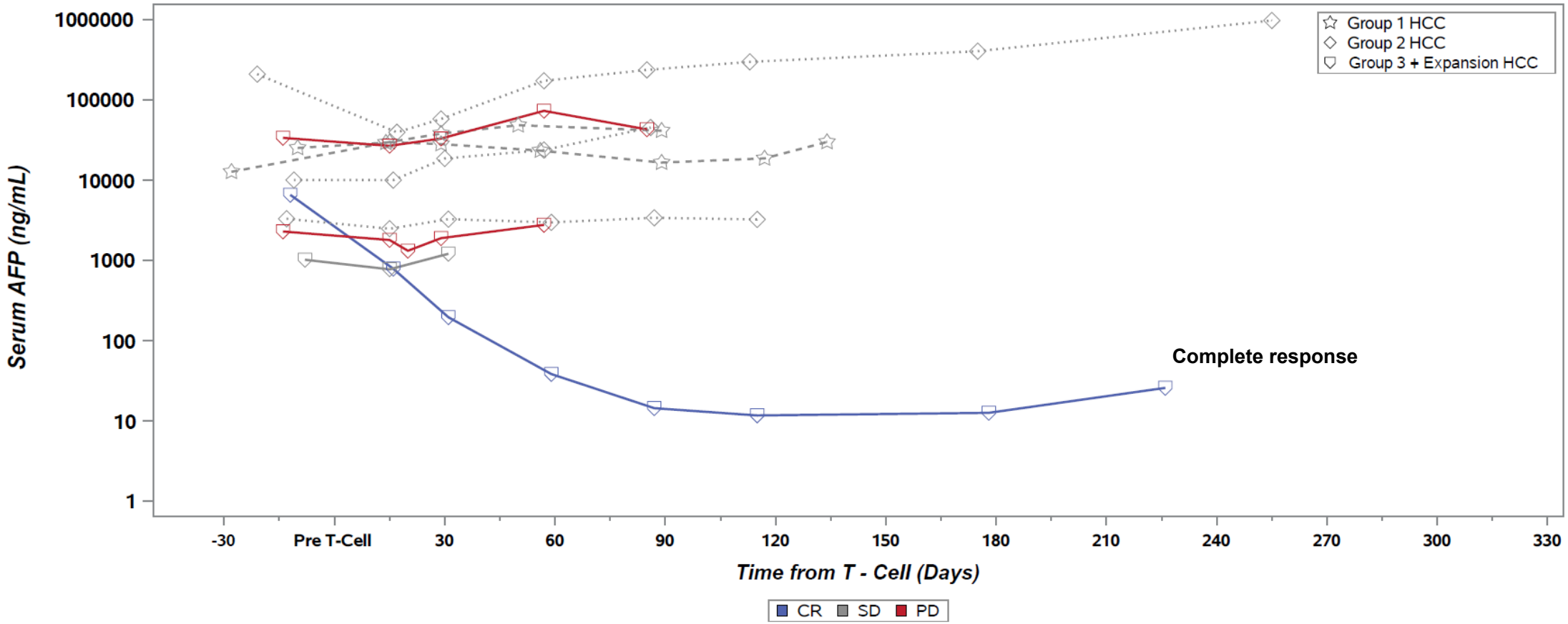
Response lasting more than 6 months

- 66-year-old female, advanced hepatocellular carcinoma
- Diagnosed in February 2015
- History of cirrhosis and Hepatitis C
- Prior treatments
  - Radiofrequency Ablation (2016); Durvalumab (Apr – Oct 18); Sorafenib (Feb – Jun 19)
- Baseline serum AFP = 5398 IU/mL
- Relatively low burden of disease
- $5.6x10^9$ transduced cells in Cohort Group 3
- Well-tolerated
- **Confirmed complete response**
  - Target lesions absent at Week 8 and AFP near normal range
- Disease progression at Wk 32 (new liver lesions)

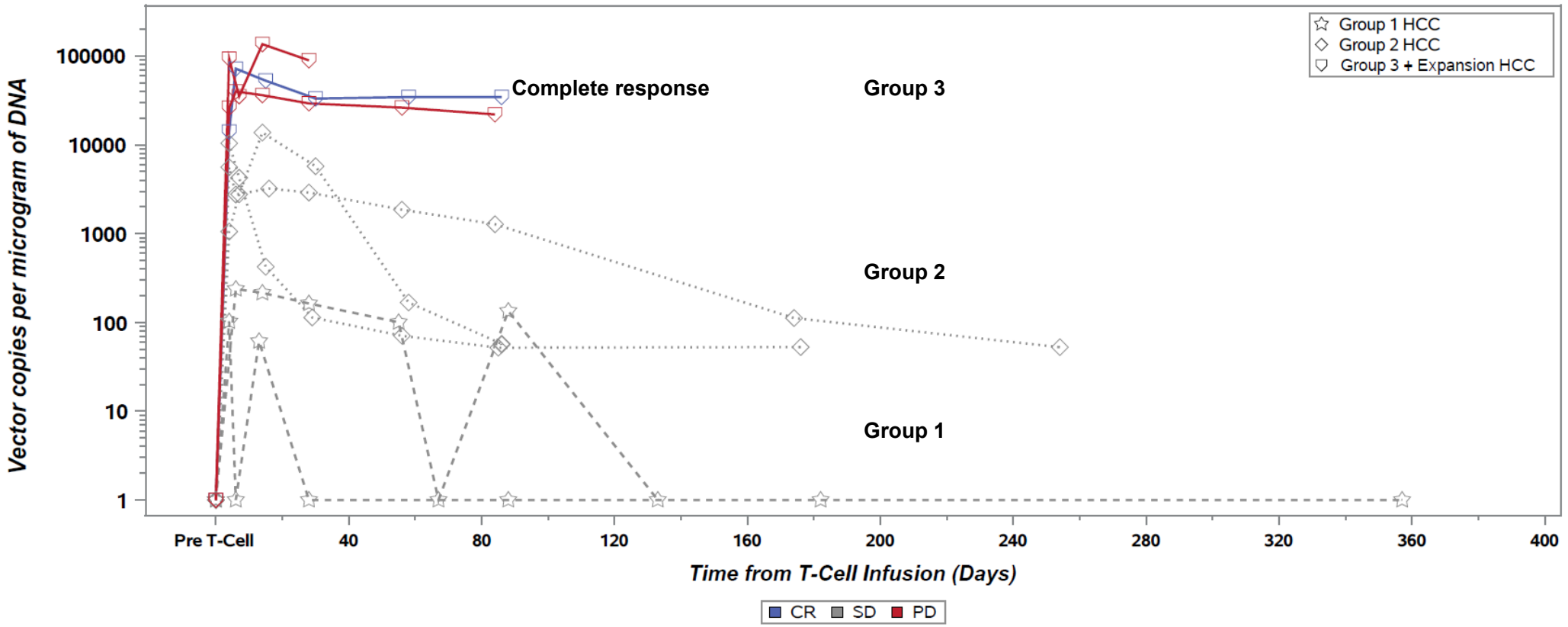


Several patients had transient AFP reductions over the first 30 days

Complete response was associated with sustained AFP reduction



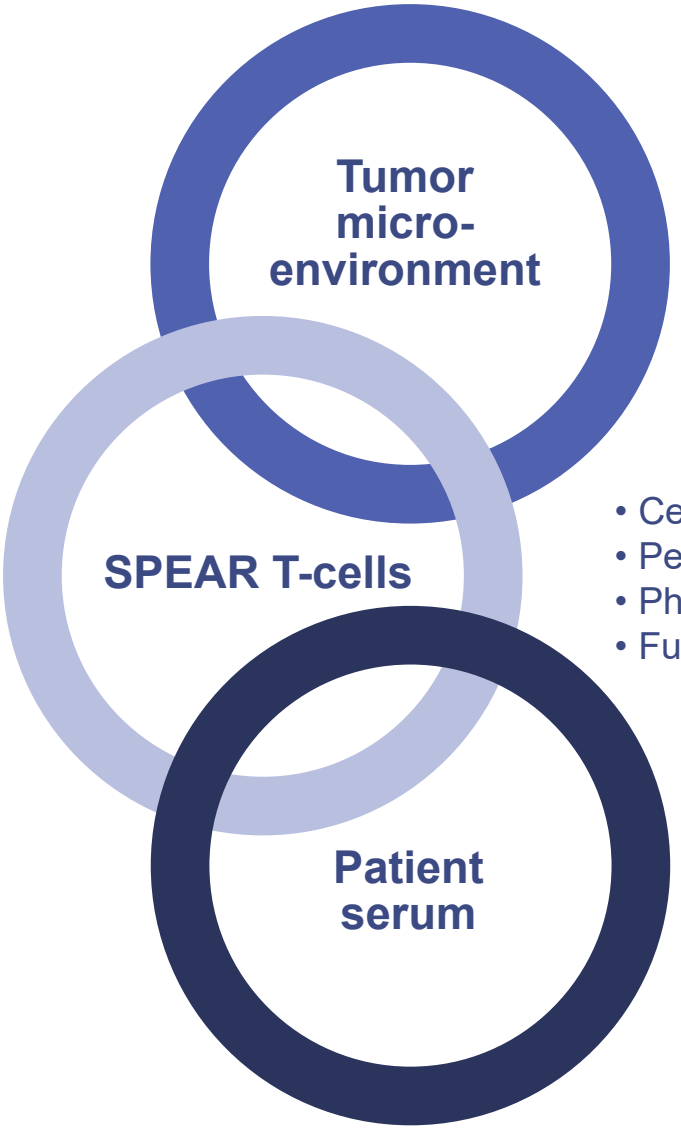
Persistence of gene-modified T-cells targeting AFP corresponds with cell dose



Translational Research

Connecting the dots to build better therapies for people with cancer

Cutting edge translational research informing our current clinical trials and next-gen approaches



- Antigen expression and presentation
- SPEAR T-cell infiltration into tumor
- Other immune cells in tumor
- Resistance mechanisms

- Cell fitness
- Persistence
- Phenotype
- Function

- Cytokines
- CRS indicators
- SPEAR T-cells expansion

Will initiate combo trial with ADP-A2M4 and checkpoint inhibitor

- PD-L1 expression seen post-therapy*

Radiation sub-study of ADP-A2M4 Phase 1 trial

- Potentially increase immune cell trafficking

SURPASS trial – Next-gen SPEAR T-cells

- Expressing CD8α to increase potency
- Improving manufacturing parameters

Preconditioning regimen

Informing design of next-gen SPEAR T-cells

*SITC 2019

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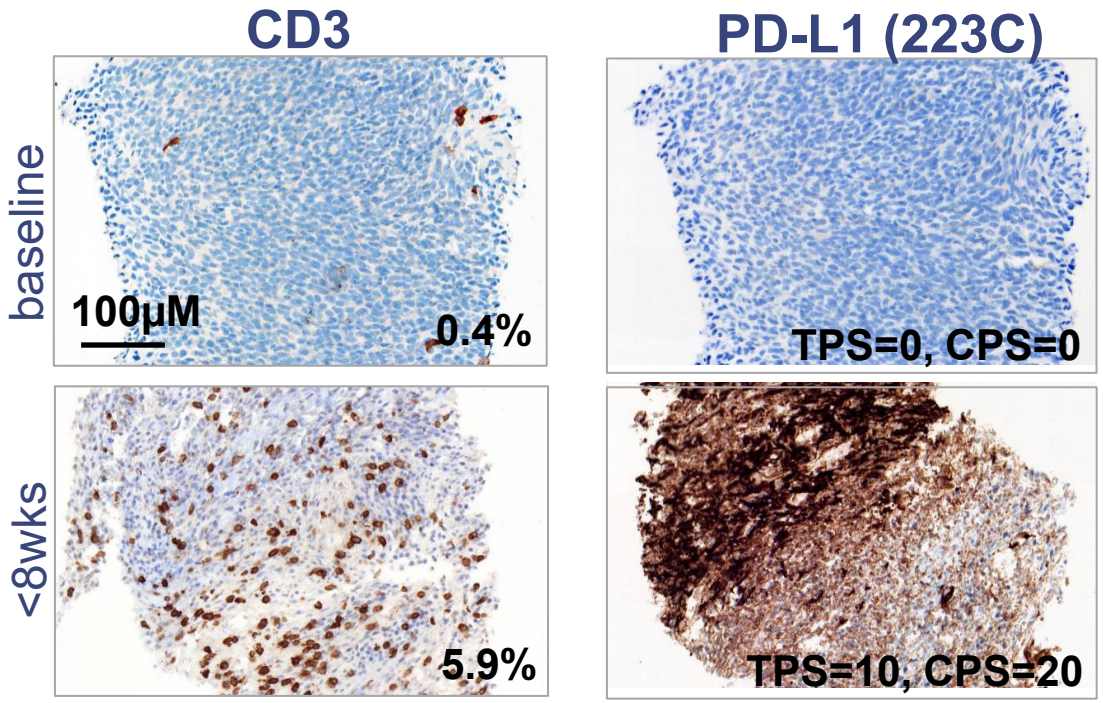
T-cell infiltration into tumors results in increased PD-L1 expression

SPEARHEAD-2 will test the combination of ADP-A2M4 and anti-PD-1

- ADP-A2M4 may synergize with anti-PD-1 therapy
  - PD-L1 is observed in 85% of metastatic H&N squamous cell cancers with no prior systemic therapy
  - Response rate for anti- PD-1 therapy (pembrolizumab) for H&N patients is low (19%)
  - Combo study SPEARHEAD-2 in Head and Neck Cancer with ADP-A2M4 in 2020



Beyond our current clinical pipeline

Beyond our current therapies in clinical trials

Our allogeneic program as well as partnerships for next-gen cell therapies

Our allogeneic program

This source of T-cells, combined with engineering expertise, enables new generation of off-the-shelf T-cell therapies

- Produce T-cells from stem cells that kill cancer targets*
- Can be used with any engineered T-cell (TCR and CAR-T)
- Process does not use human serum or stromal cell lines
- Enables scale-up, GMP manufacture of edited off-the-shelf lines
- Agreed first collaboration program target for which the companies will develop an allogeneic HLA independent TCR (HiT) therapy

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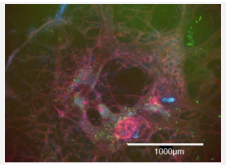


CD34 (red) CD3 (green) nuclei (blue)

Partnerships for next-generation therapies

Noile-Immune Biotech

Proliferation inducing and migration enhancing (PRIME) technology

- Next-gen cells would secrete cytokines IL-7 and CCL19
- Improve proliferation / trafficking of SPEAR T-cells & patient's own T-cells into tumors

ALPINEImmuneSciences

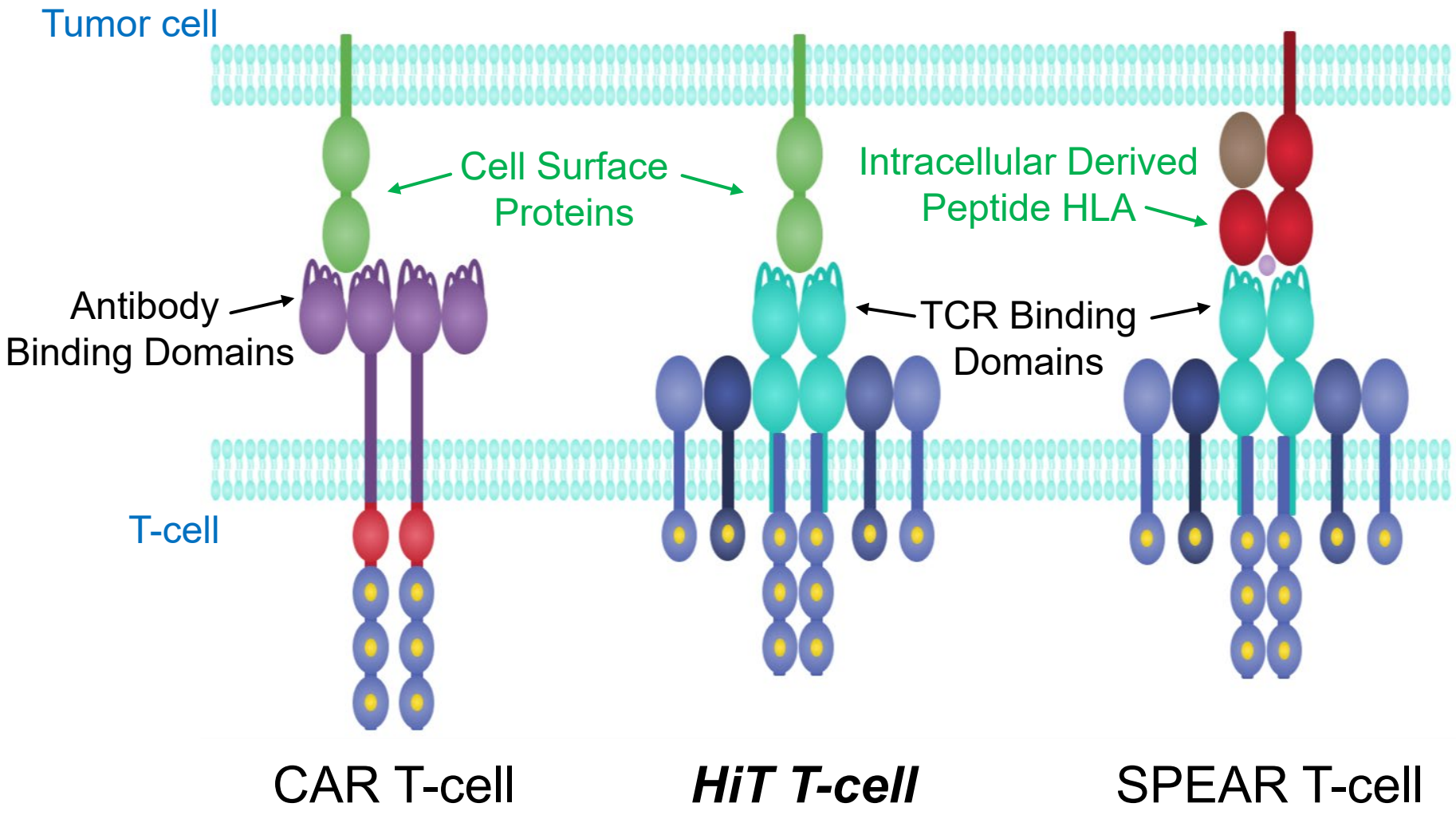
Secreted & transmembrane immunomodulatory proteins (SIP™ and TIP™)

- Engage further rapid and flexible immunomodulatory mechanisms
- Enable the development of next-gen SPEAR T-cells with enhanced antitumor potential

* ASGCT 2020

Novel Platform Technology: HLA-independent TCRs (HiTs)

Natural TCRs that bind directly to cell surface protein targets



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Adaptimmune is a fully integrated late-stage cell therapy company

Three therapies in 4 clinical trials in 10 solid tumors

Goal to launch first TCR T-cell therapy in 2022

Program	Therapy	Preclinical	Phase 1	Phase 2/3
MAGE A4	ADP-A2M4	★	**Phase 1 trial** Multiple tumors* ★ **Radiation sub-study*** Multiple tumors**	**SPEARHEAD-1** Synovial sarcoma, MRCLS RMAT & ODD EU ODD and PRIME **SPEARHEAD-2** Head & neck Combo with pembro *Initiating in 2020*
	ADP-A2M4CD8	★	**SURPASS** Focus on lung, gastroesophageal, head & neck and bladder cancers	**Phase 2 trial** Gastroesophageal cancers *Initiating in 2021*
AFP	ADP-A2AFP	★	**Phase 1 trial** Hepatocellular carcinoma	
Allogeneic/ HiT	-			

★Completed stage

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

** Site specific protocol amendment with MD Anderson Cancer Center

MRCLS=myxoid/round cell liposarcoma; HiT=HLA-independent T-cell receptor (TCR)

Integrated T-cell therapy company with end-to-end capabilities

World class capabilities for designing and delivering cell therapies

- Leading platform for T-cell therapy in solid tumors
  - TCR T-cell biology and product optimization
  - Leading iPSC-based off-the-shelf (allogeneic) platform
  - Expert translational group
- Experienced oncology drug development team
  - Strategic alliance with MD Anderson Cancer Center
  - T-cell regulatory expertise
- Fully integrated cell & vector manufacturing capabilities
- Commercial build-out

Philadelphia (Navy Yard)

- GMP cell manufacturing, clinical / regulatory, translational sciences

Milton Park, UK

- Research, preclinical development, CMC process development
- Corporate headquarters

Stevenage, UK

- Cell and Gene Therapy Catapult Manufacturing Center
- GMP vector manufacturing

Financial Guidance funded into 2022

Total liquidity of ~$419 million*

Raised ~$244 million in June 2020

Funded into 2022

* As of 30 June 2020 - 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.

Catalysts in 2020 and beyond

Date updates expected, funded into 2022, and multiple business development opportunities

2H 2020

EASL THE DIGITAL INTERNATIONAL LIVER CONGRESS™ 27-29 August 2020

- Safety update on Cohorts 1 & 2 of ADP-A2AFP Phase 1 trial ✓
- Update on Cohort 3 of the ADP-A2AFP Phase 1 trial ✓
- Update on ADP-A2AFP Expansion Cohort ✓
- Updates on dose escalation cohorts from SURPASS trial*
- Investor Day (virtual) November 20, 2020
- Additional durability and translational data from patients with synovial sarcoma from ADP-A2M4 Phase 1 trial*

1H 2020

- Responses in solid tumors outside sarcoma ✓
- Co-development and co-commercialization agreement with Astellas ✓
- Data update from allogeneic program at scientific meeting ✓
- Full presentation of ADP-A2M4 Phase 1 trial ✓
- Initiation of ADP-A2M4 with pembro. in combination trial in head & neck cancer ✓

AMERICAN SOCIETY of GENE & CELL THERAPY

2020 ASCO ANNUAL MEETING

2021 and beyond

- Next products into clinic
- Data from SPEARHEAD-1
- Phase 2 trial in gastroesophageal cancer**
- Update on ADP-A2M4 Phase 1 radiation sub-study*
- Update on ADP-A2AFP (Expansion and non-HCC)*
- Phase 2 trials in additional indications
- ADP-A2M4 launch in sarcoma in the US in 2022
- Allogeneic program update

*at medical conferences
** with ADP-A2M4CD8


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Agreement with Astellas to co-develop / co-commercialize stem-cell derived allogeneic T-Cell therapies

Includes both TCR and CAR-T

- Co-development and co-commercialization of up to three T-cell therapies*
  - Astellas will fund research and co-development through completion of Phase 1
  - After Phase 1, companies may agree to progress with co-development and co-commercialization, either company can opt out
- Leverages Astellas' adeno-associated virus (AAV) gene and HLA editing
- Leverages Adaptimmune's stem-cell derived allogeneic T-cell platform
- Adaptimmune may receive up to **$900 million**:
  - An **upfront payment of $50 million**
  - Up to $148 million per cell therapy upon achieving certain clinical and regulatory milestones
  - Up to $110 million based on sales milestones
- In addition, Adaptimmune will receive:
  - Research funding of up to $7.5 million per year
  - Tiered royalties on net sales in the mid-single to mid-teen digits

*Excludes SPEAR T-cells in preclinical or clinical trials or those being developed for other partners

GSK collaboration and financials

- NY-ESO IND transition in August 2018
  - Adaptimmune received ~$26 million upon completion of transition
  - NY-ESO may also provide development milestones up to $500 million
- PRAME may provide development milestones up to $300 million
- GSK also has potential to nominate 2 additional targets
  - Adaptimmune could receive up to $325 million in development milestones for each of those additional programs
  - Adaptimmune would also receive tiered-sales milestones and mid-single to low-double-digit royalties on worldwide net sales of each product
  - GSK can also nominate two HLA programs per nominated target, and can nominate a 5th target if they take a next-gen program forward