## **ESMO SARCOMA AND RARE CANCERS**

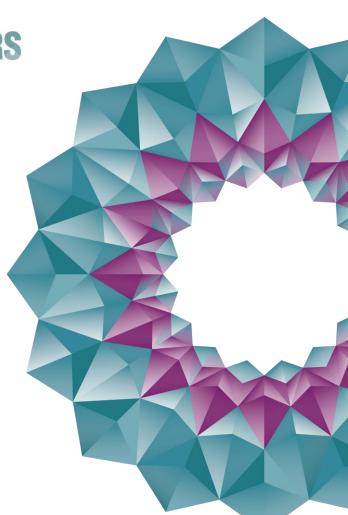
**Annual Congress** 

#### HEALTH STATE IMPACTS OF AFAMITRESGENE AUTOLEUCEL THERAPY (AFAMI-CEL) IN ADVANCED SYNOVIAL SARCOMA AND MYXOID/ROUND CELL LIPOSARCOMA: SPEARHEAD-1 COHORT 1 ANALYSIS

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### **DISCLOSURES**

- Michael Wagner discloses consulting fees for scientific advisory boards from Aadi Bioscience, Adaptimmune, Deciphera, Epizyme, and PharmaEssentia
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### INTRODUCTION

Afami-cel is an investigational autologous TCR T-cell therapy for treatment of HLA-A\*02–eligible patients whose tumors are positive for the cancer testis antigen, MAGE-A4

	Advanced tumors	Overall response rate	Median duration of response
Cohort 1 of the phase 2 SPEARHEAD-1 trial of afami-cel <sup>1</sup>	Synovial sarcoma (n=44)	38.6%	11.6 months
	Myxoid/round cell liposarcoma (n=8)	25.0%	4.2 months

• Most common adverse events: Low-grade cytokine release syndrome (71% of patients, one grade 3 event)

Grade ≥3 cytopenias (lymphopenia in 96%, neutropenia in 85%, leukopenia in 81%)

In this analysis, we investigate afami-cel's impacts on quality of life and overall health in Cohort 1 patients

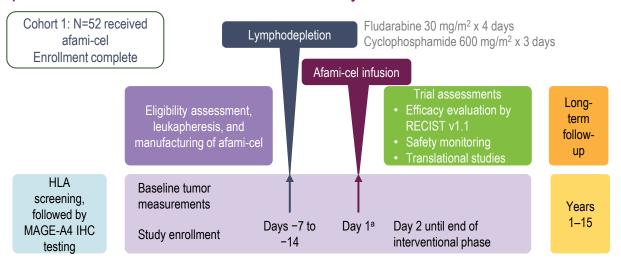
 Van Tine B, et al. Oral presented at CTOS 2022; Vancouver, BC, Canada. afami-cel, afamitresgene autoleucel; HLA, human leukocyte antigen; MAGE-A4, melanoma-associated antigen A4; TCR, T-cell receptor.



# SPEARHEAD-1 (NCT04044768) TRIAL DESIGN

Single-arm trial of afami-cel in patients with unresectable/metastatic synovial sarcoma or MRCLS

- Quality of life measures were pre-specified exploratory endpoints
- ECOG PS recorded at baseline; Days 8, 15, 22, 29; Weeks 6, 8, 12, 16, 24; and at Month 8 and then every 2 months thereafter
- EQ-5D-3L at baseline and Weeks 8, 16, and 24 post infusion were recorded by VAS and domain changes



**Key eligibility criteria:** ECOG PS 0 or 1; HLA-A\*02 positive; tumor MAGE-A4 expression (≥30% cancer cells had 2+ or 3+ staining by IHC); must have previously received either an anthracycline- or ifosfamide-containing regimen; aged ≥16 and ≤75 years

afami-cel, afamitresgene autoleucel; ECOG PS, Eastern Cooperative Oncology Group performance status; EQ-5D-3L, EuroQol 5-dimension 3-level; HLA, human leukocyte antigen; IHC, immunohistochemistry; MAGE-A4, melanoma-associated antigen A4; MRCLS, myxoid/round cell liposarcoma; RECIST, Response Criteria in Solid Tumors; VAS, visual analogue scale.



### **QUALITY OF LIFE METRICS USED**

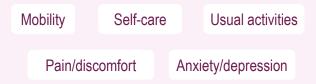
Health care professionals use ECOG PS to measure a patient's ability to participate in activities of daily life, ranging from 0–5

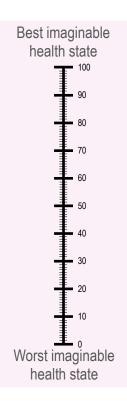
#### Paretian Classification of Health Change (PCHC)

- A domain analysis comparing post-baseline time points against baseline
- "Better" = at least one domain is better, no worse in any other domain
- "Worse" = at least one dimension is worse, no better in any other domain
- "Mixed" = both better and worse changes
- "No change"
- Patients need to have an adequate baseline visit and at least one subsequent visit to assess PCHC

The EQ-5D-3L is a standardized tool measuring health-related quality of life, consisting of two parts:

- Visual analogue scale (VAS)
  - The patient rates their health on a vertical VAS
- Domains
  - The patient indicates if they have no, some, or extreme problems in five different domains:





ECOG PS, Eastern Cooperative Oncology Group performance status; EQ-5D-3L, EuroQol 5-dimension 3-level; PCHC, Paretian Classification of Health Change; VAS, visual analogue scale.

### **ECOG PS BASELINE CHARACTERISTICS**

Patients who received afami-cel in Cohort 1 of SPEARHEAD-1

Characteristic	Overall (N=52)	
ECOG PS at baseline, n (%)		
0	27 (51.9)	
1a	25 (48.1)	

<sup>a</sup>Baseline ECOG PS for one patient was recorded as 2 due to a transcription error but was subsequently confirmed as 1.

 The ECOG PS scores of the population were balanced at baseline

ECOG PS 0 = Fully active, able to carry out work of a light or sedentary nature, e.g., light housework, office work. afami-cel, afamitresgene autoleucel; ECOG PS, Eastern Cooperative Oncology Group performance status.



#### POST-AFAMI-CEL ECOG PS CHANGES COMPARED WITH BASELINE

Visit	ECOG PS deterioration	ECOG PS improvement	ECOG PS no change	Grand total	Data collection completeness,	Maintaining/ improving ECOG PS, %
Day 8	18	8	22	48	92	63
Day 15	13	3	36	52	100	75
Day 22	11	11	29	51	98	78
Day 29	11	11	27	49	94	78
Week 6	6	12	27	45	87	87
Week 8	5	12	24	41	79	88
Week 12	4	9	21	34	65	88
Week 16	2	8	19	29	56	93
Week 24	2	8	9	19	37	89
Month 8	0	5	10	15	29	100
Month 10	0	4	8	12	23	100
Month 12	0	3	7	10	19	100

- Data completeness was >90% to Day 29
- A transient deterioration was reported at Day 8 for 38% of patients, which then gradually improved
- This is consistent with the transient and reversible adverse effects reported in previous analyses<sup>1</sup>
- At all time points assessed, most patients had either an improvement or maintenance of their ECOG PS

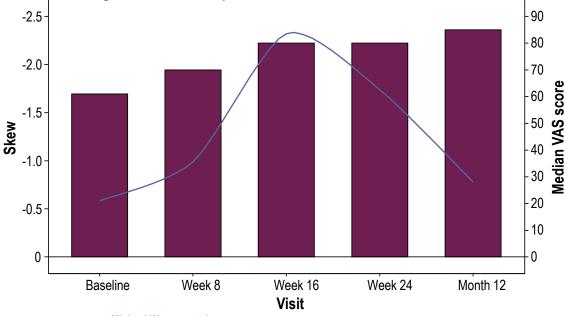
Data cut-off: August 30, 2023.

Van Tine B, et al. Oral presented at CTOS 2022; Vancouver, BC, Canada.
 afami-cel, afamitresgene autoleucel; ECOG PS, Eastern Cooperative Oncology Group performance status.

### **EQ-5D-3L VAS HEALTH SCORES IMPROVED**

- Where data were recorded, median health scores showed improvements up to Month 12
- Median health score analysis showed a maximum improvement achieved at Week 16 and maintained at Week 24 (median health score skewed towards higher VAS score)

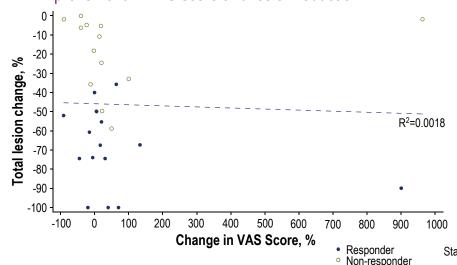
Visit	Median health score
Baseline (n=45)	61
Week 8 (n=37)	70
Week 16 (n=19)	80
Week 24 (n=19)	80
Month 12 (n=5)	85



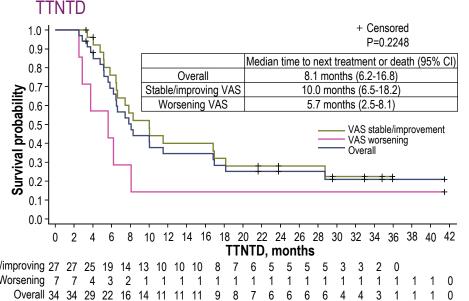
Data cut-off: August 30, 2023. EQ-5D-3L, EuroQol 5-dimension 3-level; VAS, visual analogue scale

#### **EQ-5D-3L VAS IMPROVEMENTS CORRELATED WITH CLINICAL RESPONSE**

Changes in VAS scores were analyzed alongside target lesion reduction, and there was a correlation between improvement in VAS score and lesion reduction



VAS per patient changes were categorized as stable/improvement or deterioration and analyzed alongside



Data cut-off: August 30, 2023

TTNTD is defined as the time from afami-cel infusion to the next systemic treatment or death due to any cause, whichever came first. When neither death nor new systemic therapy was observed, TTNTD was censored at the date of last patient's contact. Patients with no baseline or post-baseline visits were not considered.

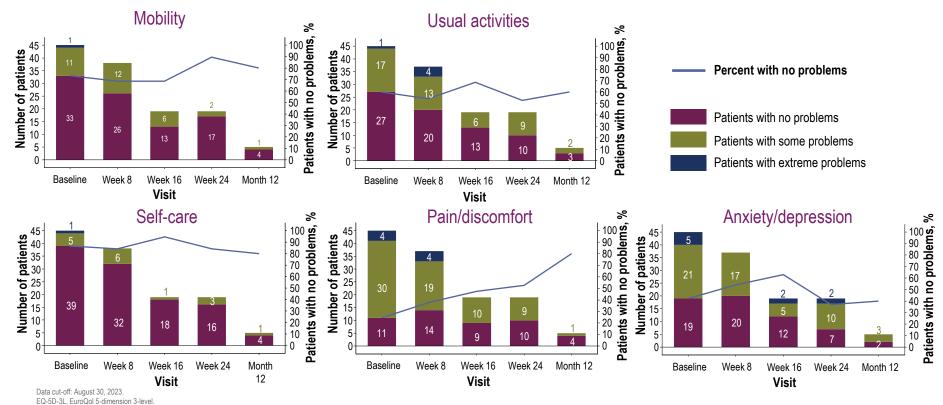
afami-cel, afamitresgene autoleucel; TTNTD, time to next treatment or death; VAS, visual analogue scale

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#### MAINTENANCE/IMPROVEMENT OF HEALTH STATUS ACROSS EQ-5D-3L DOMAINS



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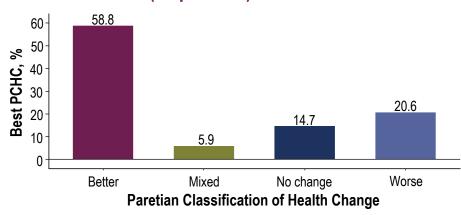
### **EQ-5D-3L DOMAIN ANALYSIS**

- The majority of the 45 patients analyzed had some or extreme problems with pain/discomfort and anxiety/depression at baseline
- There were 32 patients with baseline and at least one subsequent matched time point for PCHC
- 59% of patients had a "better" health change at one or more time points following infusion

#### **Baseline domain characteristics (45 patients)**

	No problems, n (%)	Some problems, n (%)	Extreme problems, n (%)
Mobility	33 (73)	11 (24)	1 (2)
Self-care	39 (87)	5 (11)	1 (2)
Usual activities	27 (60)	17 (38)	1 (2)
Pain/discomfort	11 (24)	30 (67)	4 (9)
Anxiety/depression	19 (42)	21 (47)	5 (11)

#### **Best PCHC (32 patients)**



EQ-5D-3L, EuroQol 5-dimension 3-level; PCHC, Paretian Classification of Health Change.



#### **EQ-5D-3L DOMAIN CHANGES BY RESPONSE TO AFAMI-CEL**

PCHC response classification showed a correlation with disease control per RECIST v1.1

- Week 8: 52% (16/31) of patients had a PCHC of "better"
  - 50% of these 16 patients had a response per RECIST v1.1
- Weeks 16 and 24, and at 1 year: 44% (7/16), 36% (5/14), and 75% (3/4) of patients had a PCHC of "better"
  - All the patients who had a "better" response at these times had a response per RECIST v1.1

### **CONCLUSIONS**

- ECOG PS was maintained or improved after afami-cel treatment in most patients
- EQ-5D-3L median VAS scores improved following afami-cel treatment
- Health status was generally maintained across the EQ-5D-3L domains following afami-cel, with improvements in the pain/discomfort domain
- Patients who had RECIST v1.1 responses also had improvements in their EQ-5D-3L domain profiles, measured by PCHC analysis
- In this small dataset, we report that afami-cel treatment can positively impact patient health status, as reported by ECOG PS and EQ-5D-3L measures

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