Background

- ADP-A2M4 SPEAR T-cells target MAGE-A4+ tumors (Figure 1)
- MAGE-A4 is highly expressed in synovial sarcoma and myxoid/round cell liposarcoma (MRCLS) in the context of HLA-A*02 (Figure 2)

Synovial Sarcoma

- ~800–1000 new cases/year in the United States
- Often occurs in patients aged <40 years
- High metastatic potential

MRCLS

- ~750 new cases/year in the United States
- Typically presents at 35–55 years of age
- One-third MRCLS become metastatic

SPEARHEAD-1 Trial Design: A Phase 2, Single-Arm, Open-Label Clinical Trial of ADP-A2M4 SPEAR T-Cells in Patients with Advanced Synovial Sarcoma or Myxoid/Round Cell Liposarcoma

Soft tissue sarcomas
- >50 subtypes, including liposarcoma and synovial sarcoma
- Prognosis in advanced disease remains unfavorable

SPEARHEAD-1 trial (NCT04044768)
- Recruiting 60 patients from North America and Europe
- Advanced synovial sarcoma or MRCLS, prior chemotherapy, HLA-A*02 and MAGE-A4 positive

Abbreviations

- PD, progressive disease
- RECIST, response evaluation criteria in solid tumors
- SPEAR, specific peptide enhanced affinity receptor
- TCR, T-cell receptor
- HLA, human leukocyte antigen
- IHC, immunohistochemistry
- MAGE-A4, melanoma-associated antigen-A4
- MRCLS, myxoid/round cell liposarcoma
- T-cell, T lymphocyte
- UNMET CLINICAL NEED

Trial Details

- We are currently recruiting trial participants
- Study design and engineered T-cell pathway are shown below (Figure 3 and Figure 4)