**INTRODUCTION**

- ADP-A2M4CD8, an autologous mixed CD4+ and CD8+ T-cell receptor (TCR) T-cell therapy, targets melanoma-associated antigen A4 (MAGE-A4) in a human leukocyte antigen (HLA)-A*02-restricted manner and expresses a CD8α co-receptor (Figure 1)

- The CD8α co-receptor confers additional functional activity to the CD4+ cells, leading to activation of T-helper as well as T-cytotoxic cells, allowing both endogenous and engineered T cells to infiltrate the tumor (Figure 2)

- MAGE-A4 is expressed (~30% tumor cells at ≥2 intensity by immunohistochemistry) in ~25% of ovarian cancers, and ~45% of the US/European population expresses the relevant HLA-A*02 alleles

- The ongoing Phase 1 SURPASS trial (NCT04648459) in HLA-A*02-restricted eligible participants demonstrated an acceptable tolerability/tumor profile, with responses across multiple MAGE-A4-positive solid tumors, including platinum-resistant ovarian cancer, with an overall response rate of 39% on 29, 2023, of 40% (95% CI: 34.6–47.7) (Figure 3)

**CONCLUSIONS**

- **SURPASS-3 TRIAL (NCT05601752)**: 66 participants were randomized 1:1 to receive ADP-A2M4CD8 or nivolumab and nivolumab

- Autologous T cells will be collected by leukapheresis and transduced with a lentiviral vector

- **Aversion therapy** was provided by Gabrielle Knafler, MSc, PhD, CMPP, of Excel Scientific

- The authors would like to acknowledge Jose Saro, Stavros Rafail, Robert Martini, David Miller, Ainhoa Rodrigue, Thomas J. Herzog, Lorna Thistlethwaite, Barbara Ann Barquin, Benoit You, and McDaniel Thistlethwaite, for their contributions to the SURPASS trial support further development in the Phase 2 SURPASS-3 trial

**ACKNOWLEDGMENTS AND DISCLOSURES**

- **Trial funding**: This trial (NCT05601752) is supported by Adaptimmune

- **Writing assistance**: Assistance was provided by Gabrielle Knoller, MSc, PhD, CMPP, of Excel Scientific Solutions, which was contracted and compensated by Adaptimmune for these services

- **Author disclosures**: Research support to the authors was provided by Adi, Anesia, Andrew Furness, Max Cai, James Cole, and Steven, for their contributions to the SURPASS-3 trial design

- **Kathleen Moore** (email – Kathleen.Moore@escultus.com)