

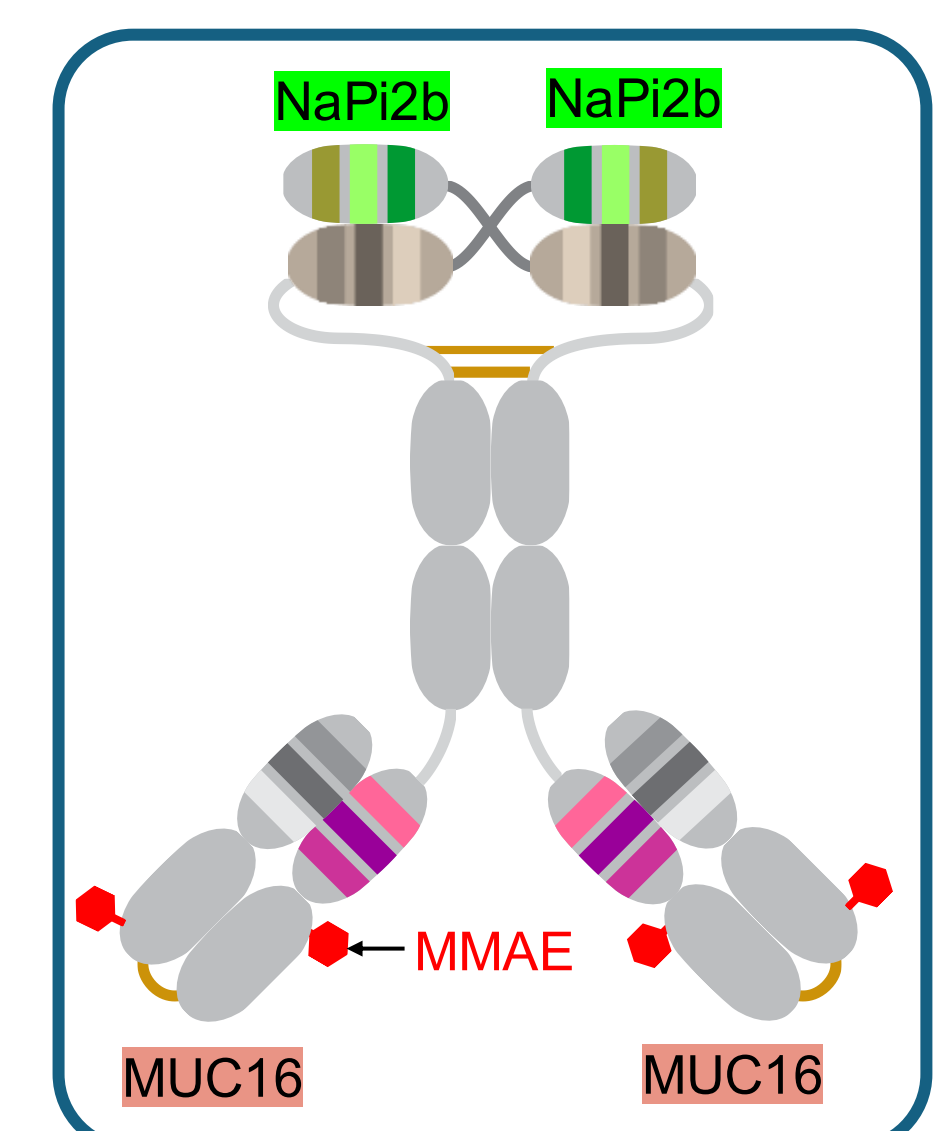
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Introduction

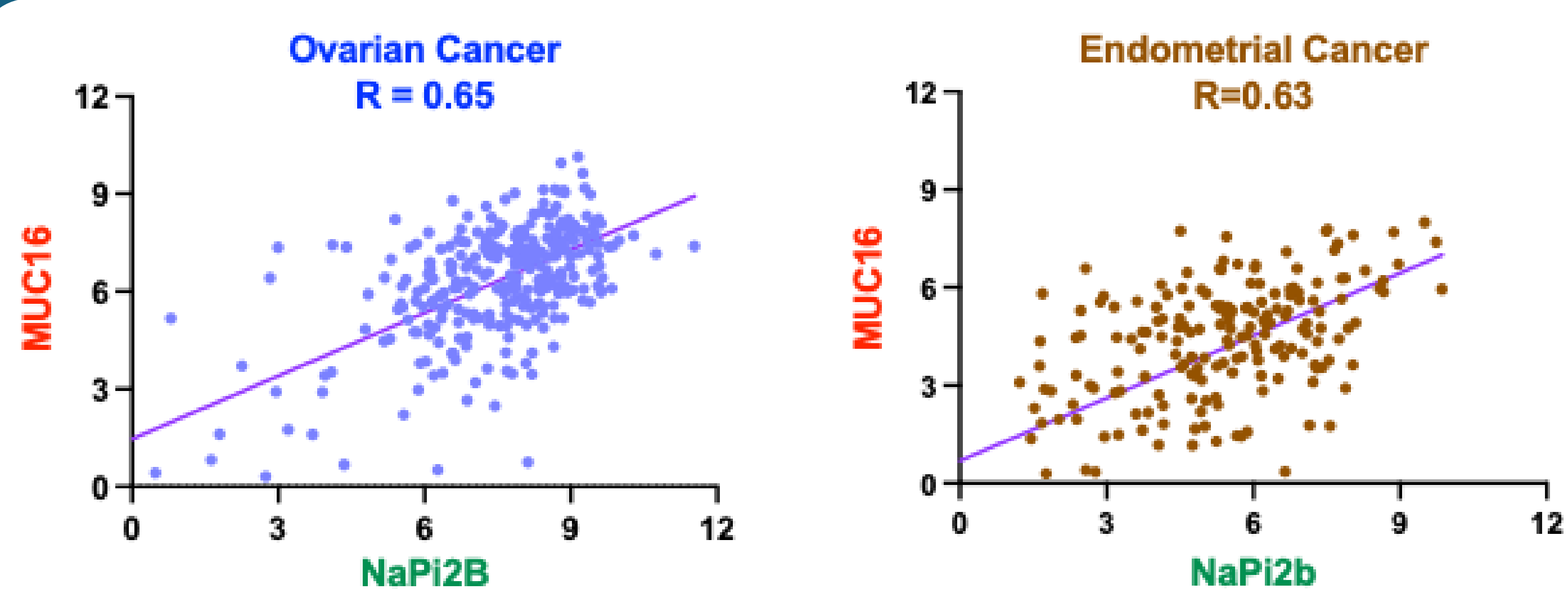
- AV-P138-ADC (ARR-002) is a novel MUC16 and NaPi2b dual-target tetraivalent (2+2) ADC with site-specific MMAE conjugation (DAR 4) engineered using Aarvik Therapeutics' proprietary Multi-epitope Targeting Tetraivalent Antibody (MUTTATTM) platform.
- MUC16 and NaPi2b are attractive targets in ovarian and endometrial tumors, owing to their high expression as well as promising clinical activity previously demonstrated by single-target ADCs directed against each antigen.
- Dual targeting may address limitations of single-target ADCs, such as inefficient internalization, heterogeneous antigen expression, and antigen loss, and thereby improve efficacy.
- AV-P138-ADC showed improved binding and internalization *in vitro*, and superior efficacy *in vivo* compared to corresponding single-target ADCs.
- Site specific conjugation of MMAE in AV-P138-ADC enhanced stability and tolerability compared to random conjugation.
- Aarvik Therapeutics and ArriVent BioPharma, Inc. collaborated on the pre-clinical development of AV-P138-ADC. Later, ArriVent exercised an option for an exclusive global license to develop the molecule, now known as ARR-002.

1. AV-P138-ADC (ARR-002): MUC16/NaPi2b dual-target tetraivalent ADC designed to overcome tumor heterogeneity and widen the therapeutic window



- Dual Targeting with Tetraivalent Antibody (2 + 2 Format)**
 - Both targets highly expressed in ovarian and endometrial cancers
 - Improved internalization and anti-tumor efficacy vs. single-target ADCs
 - Novel tetraivalent format with IgG-like properties
 - Site-Specific Conjugation**
 - Improved conjugation stability
 - Better pharmacokinetics (PK) profile
 - Superior tolerability
 - MMAE Payload (DAR = 4)**
 - Validated clinical activity in ovarian tumors
 - Widely reported bystander activity
 - Potential to induce immunogenic cell death (ICD)
- Compared to random conjugated ADCs

2. MUC16 and NaPi2b are both highly expressed in ovarian and endometrial cancers

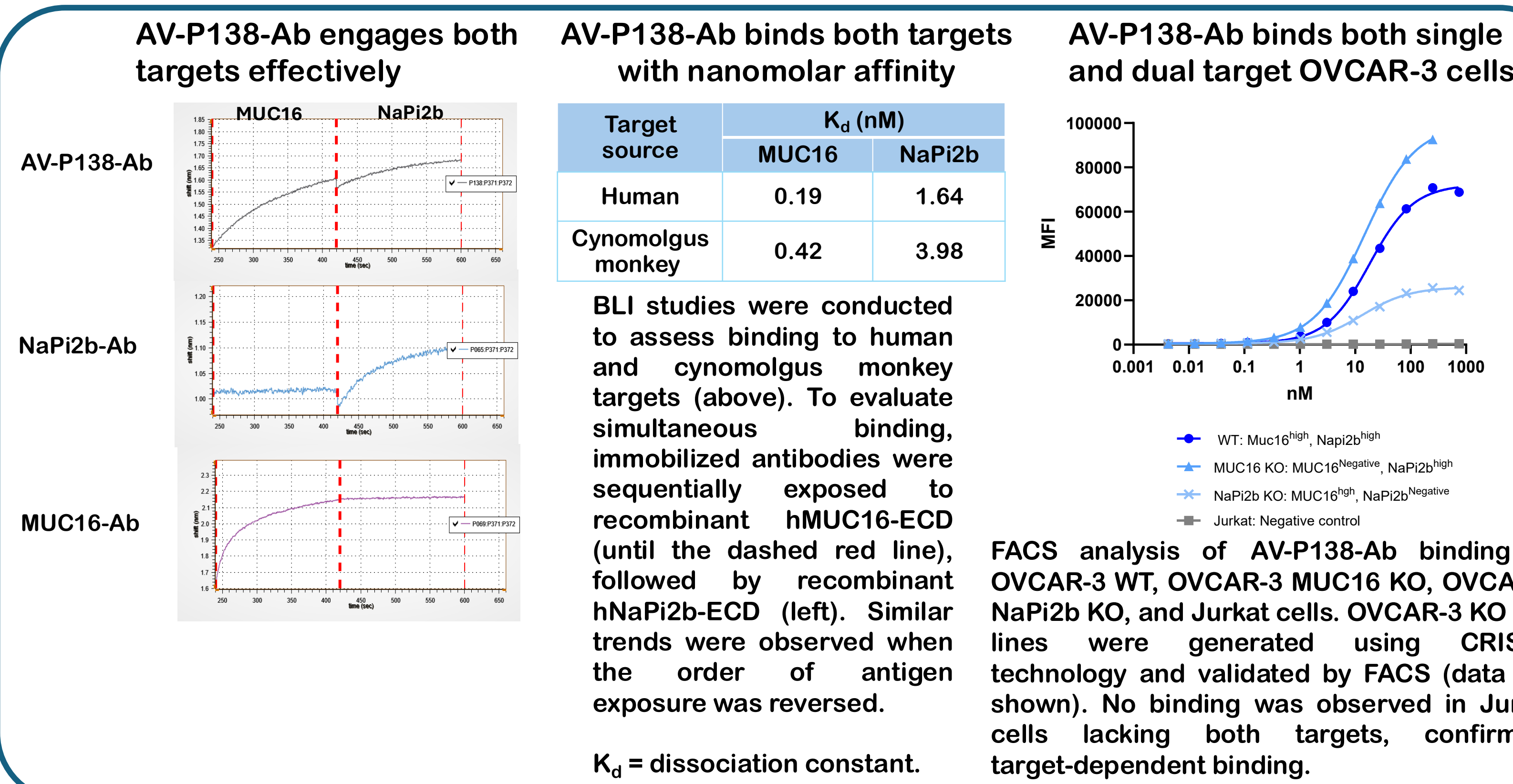


- Analysis of RNA-seq data (log₂ values) from The Cancer Genome Atlas (TCGA) database (<https://www.cancer.gov/tcga>) reveals co-expression of MUC16 and NaPi2b in ovarian and endometrial cancer samples.
- N= 306 (Ovarian cancer); N=200 (Endometrial cancer); R= Correlation coefficient

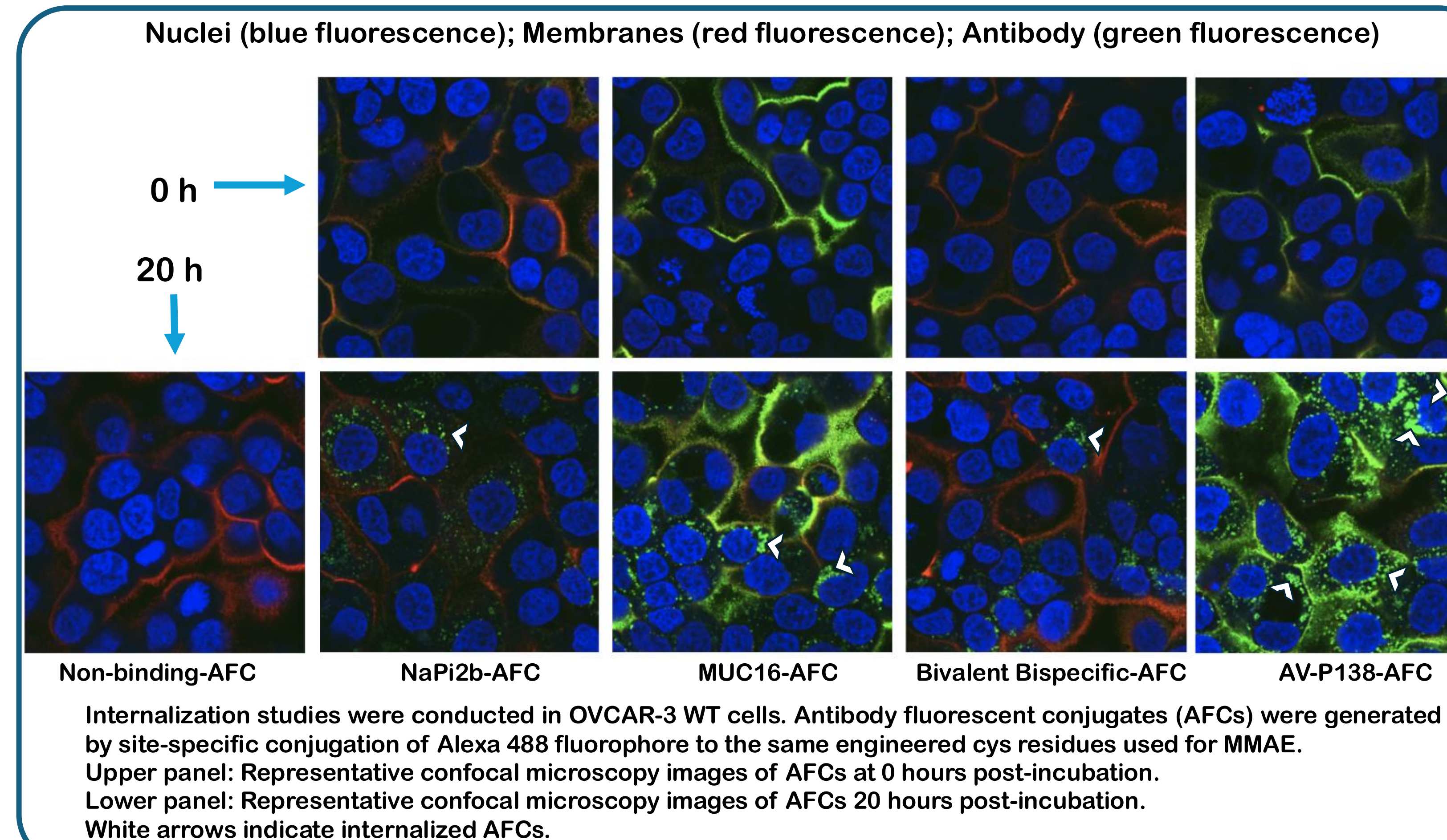
Acknowledgements

Antibodies were produced in CHO cells by Celltheon. Preparation of site-specific ADC and their analytical characterization was done at NJBio. All animal studies (efficacy, PK and safety) were done at Charles River Laboratories. We sincerely thank all colleagues from the CROs, Aarvik and ArriVent for their support and valuable contributions to this program.

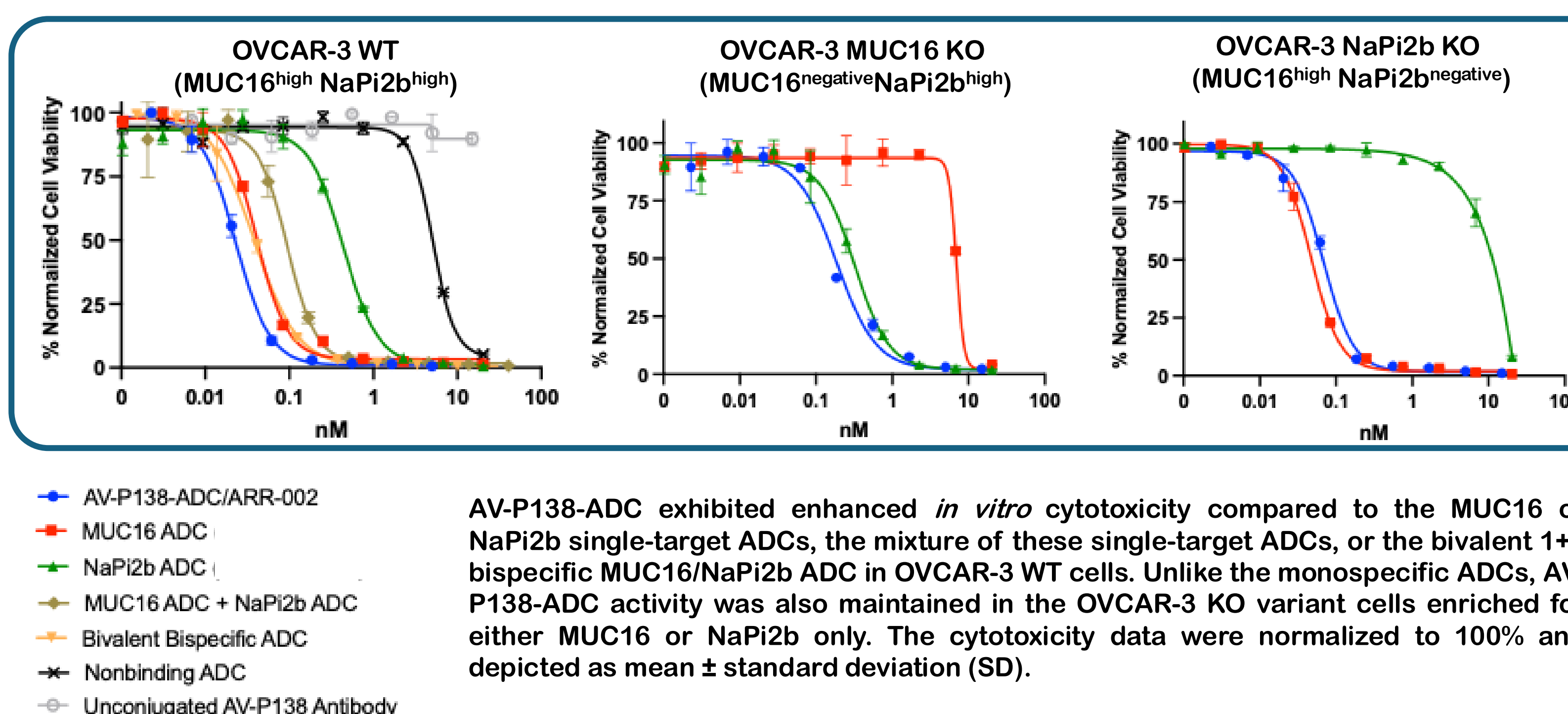
3. AV-P138-Ab binds MUC16 and NaPi2b simultaneously and effectively



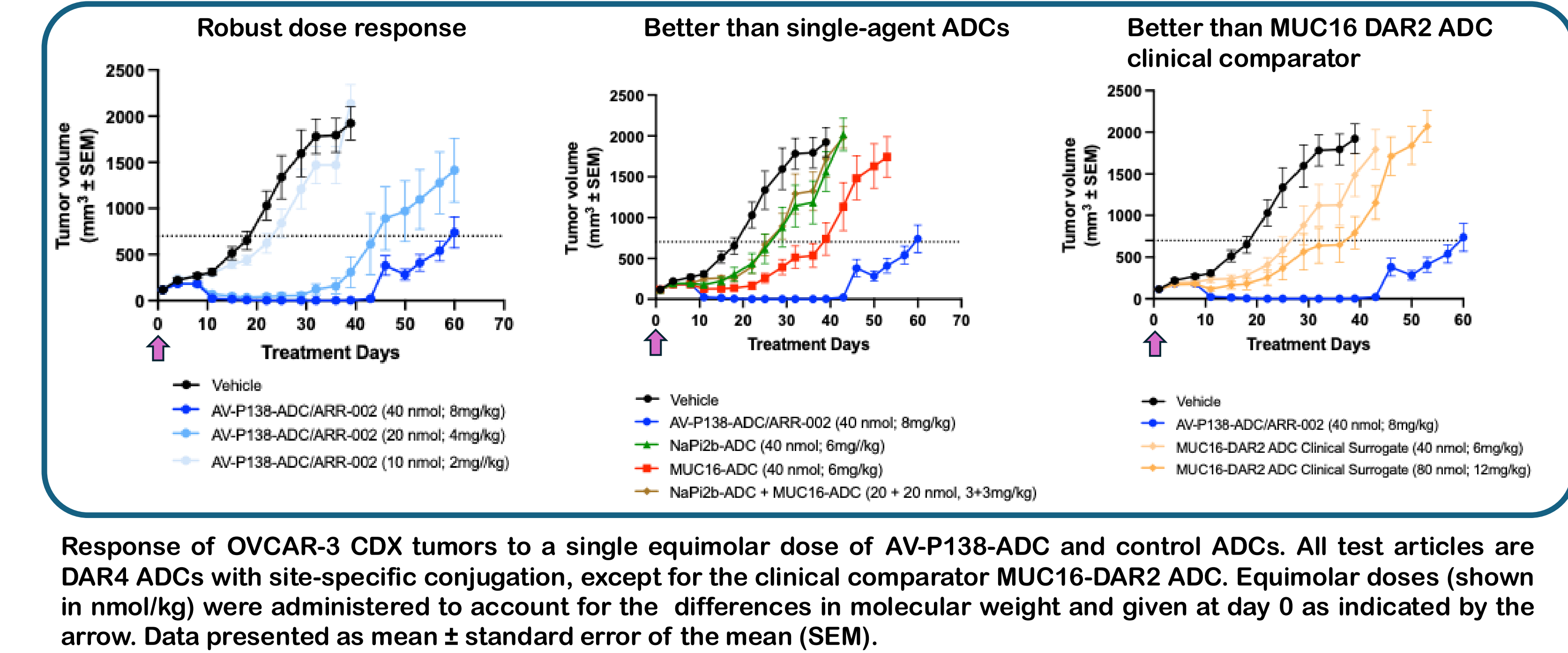
4. AV-P138-Ab is internalized more effectively versus single-agent or bivalent bispecific antibodies



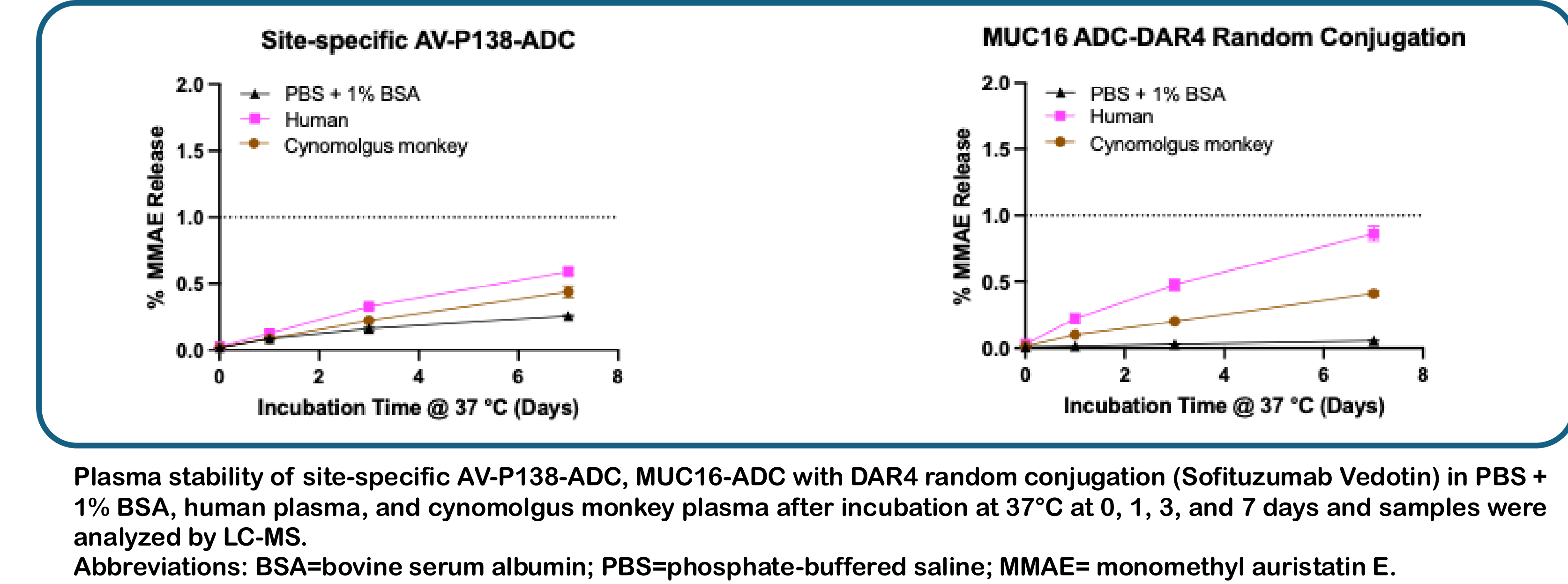
5. AV-P138-ADC enhances *in vitro* potency versus single-agent or bivalent bispecific ADCs



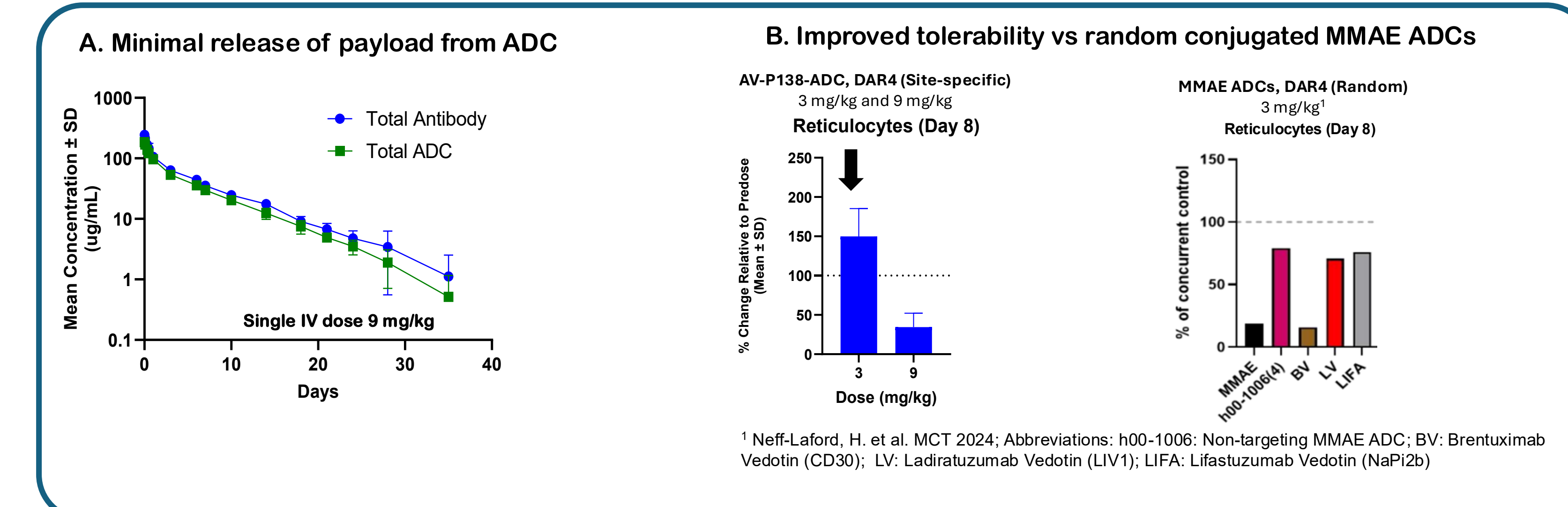
6. A single dose of AV-P138-ADC demonstrates superior *in vivo* efficacy and durable response compared to single-agent ADCs



7. AV-P138-ADC shows improved plasma stability compared to ADC with random conjugation



8. AV-P138-ADC displays favorable safety profile in NHP versus traditional MMAE ADCs



Conclusions

- AV-P138-ADC (ARR-002) is a novel MUC16 and NaPi2b dual-target tetraivalent site-specific ADC designed with best-in-disease potential for ovarian and endometrial cancers.
- Strong development rationale based on high target expression and encouraging clinical activity observed with prior MUC16 and NaPi2b single-target ADCs.
- Preclinical data supports that dual targeting drives superior (a) internalization, (b) *in vitro* potency, and (c) *in vivo* efficacy; and while, site-specific conjugation enhances safety to further expand therapeutic window.
- ArriVent Biopharma, Inc. is developing ARR-002 and plans to file a US IND in 2026.