TPS8660 **Poster Session**

NAPISTAR 1-01: An international phase I/II trial of the novel ADC TUB-040 in platinum-resistant ovarian cancer (PROC) and relapsed/refractory adenocarcinoma non-small cell lung cancer (NSCLC).

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Background: NaPi2b, encoded by SLC34A2, is a sodium-dependent phosphate transporter overexpressed in various cancers, particularly high levels in high-grade ovarian cancer (HGSOC) and non-small cell lung cancer (NSCLC) adenocarcinomas. This tumor-selective expression pattern makes NaPi2b a compelling target for therapeutic development. TUB-040 is an innovative antibody-drug conjugate (ADC) combining a NaPi2b-specific Fc-silenced monoclonal antibody with the cytotoxic payload exatecan, a potent topoisomerase-I inhibitor exhibiting a robust bystander effect. This ADC utilizes a cleavable dipeptide linker (P5) to achieve a uniform drug-to-antibody ratio of 8, optimizing its potency against heterogeneous tumors. **Methods:** NAPISTAR 1-01 (NCT06303505) is an open-label, multicenter, Phase I/IIa study investigating TUB-040 in platinum-resistant ovarian cancer (PROC) and advanced NSCLC adenocarcinoma . Phase I employs a stepwise dose escalation strategy using adaptive titration design (ATD), followed by a Bayesian Optimal Interval (BOIN) model. The dose escalation framework includes initial double-dosing steps, transitioning to modified Fibonacci increments with intra-patient escalation permissible at low exposure levels. An independent Dose Escalation Board manages safety oversight. Phase IIa involves randomized dose optimization at multiple dosing levels to identify the optimal therapeutic window. Enrollment of approximately 100 patients across the US, EU and UK is planned, with dose escalation currently underway. Clinical trial information: NCT06303505. Research Sponsor: None.