NaPi2b Expression in High-Grade Serous Ovarian Cancer: Results From Combined Data Sets

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BACKGROUND
- NaPi2b is a sodium-dependent phosphate transporter basally expressed in high-grade serous ovarian cancer (HGSC), with limited expression in normal tissue.
- NaPi2b is one of the few clinically-drug resistant (CDDR) antigens identified (upRi), which is under clinical investigation for the treatment of HGSC, in the preliminary monoclonal antibody-drug conjugate (ADC) phase I trial of upRi in patients with advanced HGSC, have been previously reported.
- Prevalence of NaPi2b-positive tumors has been well characterized in preclinical data; however, the expression of NaPi2b over time in HGSC has not been well characterized.

METHODS

Three Sets of HGSC Tissue Samples Were Collected
- Three sets of archival and fresh tissue samples were collected as part of ongoing clinical studies.
- Fresh samples were obtained from Ovarian Cancer Research Network (OCR) centers.
- Archival samples were obtained from archival tissue blocks.
- The concordance between archival and fresh tissues was 75% (42/56)
- The concordance between fresh and archival tissues was 76% (22/29)

RESULTS (cont’d)

FRESH VS ARCHIVAL TISSUE SAMPLES
- Overall, 64% of samples (36/56) were deemed NaPi2b positive based on either fresh or archival tissue analysis.
- The concordance between fresh and archival tissue was 75% (42/56)
- 76% (22/29) maintained NaPi2b positive status between archival and fresh tissues.
- The concordance between archival and fresh tissues was not affected by the interval between archival and fresh tissue sample collection.
- 11 patients were NaPi2b positive based on archival samples that were aged ≥2 years; at fresh biopsy, 14 maintained NaPi2b positive (94%).
- NaPi2b expression in matched samples over disease course (N=11).
- Percentages shown are based on a denominator of 27.

CONCLUSIONS
• NaPi2b is a biomarker that appears to be highly expressed in the majority of HGSC tumors (64-86%).
• These assessments suggest that NaPi2b expression remains stable over time, between sites, and throughout treatment, with a concordance from 72-75%.
• Findings show high concordance between fresh and archival tissue samples, with no difference based on interval between sample collection, which support the use of archival tissue for NaPi2b biomarker analysis.

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REFERENCES

ADDITIONAL INFORMATION
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