

Caris presents patient tumor profiling study, 2/14

February—Caris Life Sciences presented a study at the December 2013 CTCR-AACR San Antonio Breast Cancer Symposium on identifying potentially actionable therapeutic targets and clinical strategies for triple-negative breast cancer (TNBC). The biomarker data used for the study were obtained using the company's tumor profiling service, Caris Molecular Intelligence.

Titled "Comparison of mutations and protein expression in potentially actionable targets in 5,500 triple negative vs. non-triple negative breast cancers," the study profiled a large database of breast cancer tumors (with TNBC tumors accounting for 35.8 percent) to identify potential molecular differences between subtypes and to find potential druggable targets for TNBC. Among the findings:

- Androgen receptor (AR) was expressed in 50 percent of ER-/HER2+ breast cancer patients and 18 percent of TNBC patients studied, indicating its potential as a therapeutic target.
- Nearly all AR+ breast cancers displayed a PIK3CA mutation or PTEN loss/mutation, suggesting that combined AR and PIK3CA targeted therapies should be evaluated as a potential therapeutic strategy.
- EGFR gene amplification differed between breast cancer types and may need to be considered a predictive marker in clinical trials of EGFR inhibitor therapies.
- Multi-platform molecular profiling is needed to identify targetable genomic and proteomic alterations in poor prognosis breast cancer.

The study's lead author is Joyce O'Shaughnessy, MD, of Baylor Sammons Cancer Center.

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