

## Researchers from Erasmus Cancer Center validate the clinical and prognostic utility of the HOXB13/IL17BR ratio in breast cancer patients

**Carlsbad, CA, February 26, 2007** – AviraDx, Inc., a leader in molecular cancer diagnostics, announced today the publication of an independent 1,252 patient retrospective clinical validation study in the February 20, 2007 issue of the *Journal of Clinical Oncology* entitled: “*HOXB13-to-IL17BR expression ratio is related with tumor aggressiveness and response to tamoxifen of recurrent breast cancer*” by Maurice Jansen, Anieta Sieuwerts, Jan Klijn, John Foekens, Els Berns, and colleagues at the Department of Medical Oncology, Erasmus MC/Daniel den Hoed Cancer Center, Rotterdam, The Netherlands.

Medical investigators at Erasmus Cancer Center have demonstrated that a high HOXB13-to-IL17BR (‘H over I’ or H/I) expression ratio in breast cancer is significantly associated with both tumor aggressiveness and tamoxifen therapy outcome. Using a cutpoint previously published by Ma et al.<sup>1</sup>, they show that a high H/I ratio within the breast tumor is associated with poor response to tamoxifen therapy and shorter progression-free survival. The study also confirmed the previously demonstrated prognostic utility of the H/I ratio in untreated, ER+, node-negative breast cancer patients<sup>1,2,3</sup>.

“This study by our researchers is significant because it validates the clinical utility of the H/I ratio in patients receiving tamoxifen therapy, in cases for advanced/metastatic disease, using a previously defined cutpoint.” said Professor Dr. Jan Klijn, Head of the Division of Endocrine Oncology at Erasmus Medical Center. To this, Antonius Schuh, Chief Executive Officer of AviraDx, adds “We are excited about the rapidly growing body of evidence supporting the clinical utility of the H/I ratio in the management of breast cancer patients. Our new diagnostic test (H/I ratio) can be used by clinicians to assess prognosis and risk of recurrence due to estrogen signaling dysfunction.”

<sup>1</sup> Ma et al., *The HOXB13:IL17BR Expression Index is a Prognostic Factor in Early Stage Breast Cancer*. *J. Clinical Oncology*, 24:28, 4611-4619 (2006)

<sup>2</sup> Goetz et al., *A Two-gene Expression Ratio of HOXB13 and IL-17BR for Prediction of Recurrence and Survival in Women Receiving Adjuvant Tamoxifen*. *Clinical Cancer Res.*, Apr (12): 2080-2087 (2006)

<sup>3</sup> Ma et al., *A two-gene expression ratio predicts clinical outcome in breast cancer patients treated with tamoxifen*. *Cancer Cell*, Jun;5(6):607-16 (2004).

## **About Breast Cancer**

There are over 274,000 new breast cancer cases annually of which approximately 115,000 cases are classified as estrogen receptor positive (ER+) and node negative. As a population, ER+/node negative patients have a good 5-year survival prognosis when treated with surgery and hormonal therapy. However, 15% of these ER+/node-negative patients will develop a subsequent breast cancer recurrence within 10 years. The H/I ratio is an important test suitable to identify those women with an elevated risk of breast cancer recurrence due to estrogen signaling dysfunction and aids the clinician in the selection of appropriate treatment and monitoring.

## **About AviaradX, Inc.**

AviaradX, Inc. is focused on developing and commercializing molecular diagnostic technologies and high value assays for personalized medicine in cancer treatment. The company is targeting the oncology market with three first-in-class molecular cancer profiling technologies: Molecular Cancer Classification and Identification for Cancer of the Unknown Primary, Breast Cancer Assays such as HOXB13/IL17BR, and Drug Response Profiling Assays. AviaradX has licensed its technologies for specific clinical indications to reference laboratories in the United States and Europe. Please visit the AviaradX website at <https://www.aviaradx.com> for more information.