## Information about the Use and Accuracy of Breast Cancer Tests is Lacking, Study Finds

Atlanta 2009/09/14 -A new study finds that there is little information available about the use of new testing technologies and targeted therapies in breast cancer, specifically the anti-cancer drug trastuzumab (Herceptin). Published in the November 15, 2009 issue of CANCER, a peer-reviewed journal of the American Cancer Society, the review suggests that many breast cancer patients who may benefit from trastuzumab are not receiving it, and that some women receiving the drug have never been tested for the receptor it targets.

Standard care now dictates that women with early-stage breast cancer should be tested to see if they have tumors that express the HER2 protein. Those who test positive are candidates for treatment with trastuzumab, which is only effective in HER2-positive cancers.

Researchers at the UCSF Center for Translational and Policy Research on Personalized Medicine (TRANSPERS) and led by Kathryn A. Phillips, PhD, of the University of California-San Francisco, reviewed the medical literature to determine how HER2 testing is being used in routine clinical practice. The studies they found reported that up to two-thirds of patients eligible for HER2 testing had no documentation of a test in their health insurance records. About one in five women who received trastuzumab had no documentation of a positive HER2 test in their health insurance records. The studies also revealed that about one in five HER2 test results may be incorrect.

The authors also found that studies looking at the economic issues associated with prescribing trastuzumab often did not explicitly consider the role of HER2 testing, which can have a substantial impact on the cost-effectiveness of the therapy.

Given the increasing use of targeted therapies like trastuzumab, proper testing will become more important to ensure that medications are directed only to the patients who will benefit from them.

"Our review of the literature suggests that there are important knowledge gaps regarding the real-world use of HER2 testing and trastuzumab," said Dr. Elena Elkin, a researcher at Memorial Sloan-Kettering Cancer Center in New York and one of the study's authors. "Filling these gaps may help optimize limited health care resources and improve care for women with breast cancer," she added.

Article: "Clinical practice patterns and cost-effectiveness of HER2 testing strategies in breast cancer patients." Kathryn A. Phillips, Deborah A. Marshall, Jennifer S. Haas, Elena B. Elkin, Su-Ying Liang, Michael J. Hassett, Ilia Ferrusi, Jane E. Brock, and Stephanie L Van Bebber. CANCER; Published Online: September 14, 2009 (DOI: 10.1002/cncr.24574); Print Issue Date: November 15, 2009.

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