

# Blood test confirmed to be 'powerful predictor' for metastatic breast cancer following largest analysis to date

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Researchers at Georgetown Lombardi Comprehensive Cancer Center say the number of circulating tumor cells (CTCs) in the blood is a "powerful predictor" to help physicians more reliably assess treatment benefit for patients with metastatic breast cancer. The findings from a large analysis using pooled data from international cancer centers will be presented during a poster session on Monday, June 6th, at the 2011 annual meeting of the American Society of Clinical Oncology in Chicago.

"The current standard of care for monitoring patients with metastatic [breast cancer](#) involves the use of radiology studies such as CT scans, ultrasounds, and the like to determine whether or not patients are deriving benefit from their current therapies," says Minetta Liu, M.D., lead investigator of the new analysis and director of translational [breast cancer research](#) at Georgetown Lombardi. "These tests can be expensive and invasive, and can negatively impact a patient's quality of life."

Liu says the new analysis substantiates the utility of the CTC test, which counts the number of CTCs in the blood. CTC results at or above the threshold of five are reliably associated with clinical and/or radiographic evidence of worsening disease, strengthening considerations for a change in therapy with the goal of improving long-term [patient outcomes](#).

Enumerating CTCs can be done with various technologies. For this

analysis, researchers culled data from peer-reviewed published studies, all of which, by chance, utilized the FDA-approved CellSearch™ technology. Teams from institutions around the world contributed blinded data to create a pooled dataset of 841 patients. This large sample size enabled Liu to confirm findings from other studies that indicate a CTC count of five or more is associated with disease progression. Importantly, the predictive value of CTCs was not affected by treatment type (chemotherapy, endocrine therapy, biologic therapy), tumor type (hormone receptor positive/negative, HER2 positive/negative), or sites of disease involvement.

"Using a [blood test](#) to count CTCs in addition to our existing tools for disease monitoring might improve our ability to appropriately treat patients and maximize their quality of life," explains Liu. "When a patient with metastatic breast cancer feels well and looks well, has had normal recent scans and CTC results that are consistently less than five, we feel more confident in her current treatment plan and may delay repeat imaging studies in favor of the less-invasive CTC blood test."

Provided by Georgetown University Medical Center

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