Adjuvant bevacizumab did not improve survival rate - triple-negative breast cancer study

SAN ANTONIO, USA: Patients who received one year of bevacizumab in addition to chemotherapy for the postsurgical treatment of triple-negative breast cancer had no statistically significant improvement in invasive disease-free survival compared with patients treated with chemotherapy alone, according to the primary results of the phase III BEATRICE study.

"This study did not confirm the hypothesis that adding bevacizumab to chemotherapy would improve patients' outcomes," said David Cameron, M.D., professor of oncology at Edinburgh University in Scotland, who presented the results at the 2012 CTRC-AACR San Antonio Breast Cancer Symposium, held here Dec. 4-8. "Therefore, sadly for patients, we have nothing extra to add to chemotherapy for early, triple-negative breast cancer."

Prior research has shown that bevacizumab combined with chemotherapy significantly improves progression-free survival in metastatic breast cancer and improves pathologic complete response in the neoadjuvant setting. The dependence of micrometastases on angiogenesis suggested to Cameron and his colleagues that patients might benefit from anti-angiogenic strategies, such as bevacizumab, applied in the adjuvant setting.

In BEATRICE, an open-label, multinational, phase III study, researchers randomly assigned 2,591 patients with triple-negative operable primary invasive breast cancer to four or more cycles of anthracycline-based or taxane-based chemotherapy with or without one year of bevacizumab.

At a median follow-up of 32 months, the hazard ratio for invasive disease-free survival was 0.87 (95% CI 0.72-1.07) in favor of patients assigned to chemotherapy and bevacizumab. Researchers reported 107 deaths among patients who received chemotherapy alone compared with 93 deaths among those who received chemotherapy and bevacizumab.

"The findings are reminiscent of what was reported in operable colorectal cancer," Cameron said. "Bevacizumab clearly does something in this setting, but the effect is not sustained, and therefore, adding bevacizumab to chemotherapy for all these patients is not the way to improve their chances."

Researchers found no difference in the amount of chemotherapy delivered and found no increase in the risk for fatal adverse events in patients assigned to bevacizumab. However, the addition of bevacizumab to chemotherapy was associated with an increase in grade 3 or worse hypertension, left ventricular dysfunction and congestive heart failure.

"We still need to understand what is special about the biology of breast cancers that do not express hormone receptors, nor overexpress HER2," Cameron said. "We need to explore which cancers might benefit from other additional therapies,

including the possibility that some of them might benefit from drugs like bevacizumab."

Source: AACR