MedicalXpress

Risk assessment plays key role in long-term treatment of breast cancer

August 12 2008

Breast cancer patients and their physicians may make more informed, long-term treatment decisions using risk assessment strategies to help determine probability of recurrence, a research team led by scientists at The University of Texas M. D. Anderson Cancer Center reported in the Aug. 12 online issue of the *Journal of the National Cancer Institute*.

The 2,838 women studied were diagnosed with Stage I through III breast cancers and had been treated with adjuvant systemic therapy (AST), such as chemotherapy and or tamoxifen between 1985 and 2001, and were in the M. D. Anderson Tumor Registry. The patients in the study were five years from the start of their AST and were cancer-free. The researchers calculated the residual or remaining risk of recurrence from the benchmark of five years from the start of AST and determined the factors that contributed to a higher residual risk of recurrence.

"Understandably, one of the most common questions posed by breast cancer survivors is 'What are the chances of it coming back?'," said the study's lead author, Abenaa Brewster, M.D., assistant professor in M. D. Anderson's Department of Clinical Cancer Prevention. "Now we can tell some women within a certain percentage their future risk of recurrence and clinicians may be able to make more informed decisions regarding prescription of extended adjuvant endocrine therapy."

Data analysis revealed that 89 percent of the study populations did not experience a recurrence at five years (approximately 10 years after a woman's initial diagnosis), and 80 percent did not experience a

recurrence at 10 years (approximately 15 years after diagnosis).

Brewster commented that, while reassuring for most of the five-year survivors, the percentage of the population who had a recurrence is significant to oncologists.

"The magnitude of risk of recurrence should indicate a need for us to consider extended endocrine treatment for eligible women to further lower their risks," said Brewster. Additionally, the study did not include women who received adjuvant systemic therapy with trastuzamab or five years of aromatase inhibitor treatment and therefore the residual risk of recurrence among those groups of patients could not be determined.

Median follow-up time for women in the study was 28 months. During that time, 216 of the women experienced a recurrence. The five-year residual risks of recurrence for patients with Stage I, II and III cancers were 7 percent, 11 percent and 13 percent respectively. Patients with Stage II or III versus Stage I disease and patients with grade I versus grade III tumors had a higher risk of late recurrence. Patients who had estrogen receptor-positive tumors who received adjuvant endocrine therapy also had a higher risk of recurrence than those with hormone receptor-negative tumors but the difference was not found to meet statistical significance.

The study also indicated a need for the continued development of risk-reduction strategies for pre-menopausal breast cancer survivors because of lack of available therapies in this younger age group. Currently, extended adjuvant endocrine therapy with letrozole (Femara) is available only for post-menopausal patients with hormone receptor positive tumors who have completed five years of tamoxifen therapy.

Source: University of Texas M. D. Anderson Cancer Center