Effect on Survival of Longer Intervals Between Confirmed Diagnosis and Treatment Initiation Among Low-Income Women With Breast Cancer

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Abstract

Purpose: To determine the impact of longer periods between biopsy-confirmed breast cancer diagnosis and the initiation of treatment (Dx2Tx) on survival.

Patients and Methods: This study was a non interventional, retrospective analysis of adult female North Carolina Medicaid enrollees diagnosed with breast cancer from January 1, 2000, through December, 31, 2002, in the linked North Carolina Central Cancer Registry–Medicaid Claims database. Follow-up data were available through July 31, 2006. Cox proportional hazards regression models were constructed to evaluate the impact on survival of delaying treatment \geq 60 days after a confirmed diagnosis of breast cancer.

Results: The study cohort consisted of 1,786 low-income, adult women with a mean age of 61.6 years. A large proportion of the patients (44.3%) were racial minorities. Median time from biopsy-confirmed diagnosis to treatment initiation was 22 days. Adjusted Cox proportional hazards regression showed that although Dx2Tx length did not affect survival among those diagnosed at early stage, among late-stage patients, intervals between diagnosis and first treatment \geq 60 days were associated with significantly worse overall survival (hazard ratio [HR], 1.66; 95% CI, 1.00 to 2.77; P = .05) and breast cancer–specific survival (HR, 1.85; 95% CI, 1.04 to 3.27; P = .04).

Conclusion: One in 10 women waited \geq 60 days to initiate treatment after a diagnosis of breast cancer. Waiting \geq 60 days to initiate treatment was associated with a significant 66% and 85% increased risk of overall and breast cancer–related death, respectively, among late-stage patients. Interventions designed to increase the timeliness of receiving breast cancer treatments should target late-stage patients, and clinicians should strive to promptly triage and initiate treatment for patients diagnosed at late stage.

Footnotes

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