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

John M. McLaughlin, Amy K. Ferketich, Eric E. Seiber, and Electra D. Paskett, The Ohio State University, Columbus, OH; Roger T. Anderson, Penn State Hershey Cancer Institute, Hershey, PA; and Rajesh Balkrishnan, University of Michigan, Ann Arbor, MI.

Corresponding author: John M. McLaughlin, PhD, MSPH, Specialty Medicines Development Group, Pfizer, PO Box 113, Powell, OH 43065-0113; e-mail: mclaugj1@gmail.com.

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 ≥ 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 ≥ 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 ≥ 60 days to initiate treatment after a diagnosis of breast cancer. Waiting ≥ 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

See accompanying article doi: http://jco.ascopubs.org/content/early/2012/11/16/JCO.2012.41.7972
Received October 4, 2011. Accepted September 14, 2012.
©American Society of Clinical Oncology