

Early Discontinuation and Nonadherence to Adjuvant Hormonal Therapy in a Cohort of 8,769 Early-Stage Breast Cancer Patients

Dawn L. Hershman, Lawrence H. Kushi, Theresa Shao, Donna Buono, Aaron Kershenbaum, Wei-Yann Tsai, Louis Fehrenbacher, Scarlett Lin Gomez, Sunita Miles and Alfred I. Neugut

Author Affiliations

1. From the Mailman School of Public Health, Columbia University; New York Presbyterian Hospital, New York, NY; Kaiser Permanente of Northern California, Oakland, CA; and Greater Bay Area Cancer Registry, Northern California Cancer Center, Fremont, CA.
1. Corresponding author: Dawn L. Hershman, MD, MS, Columbia University Medical Center, 161 Fort Washington Ave, 10-1068, New York, NY 10032; e-mail: dlh23@columbia.edu.

Abstract

Purpose While studies have found that adjuvant hormonal therapy for hormone-sensitive breast cancer (BC) dramatically reduces recurrence and mortality, adherence to medications is suboptimal. We investigated the rates and predictors of early discontinuation and nonadherence to hormonal therapy in patients enrolled in Kaiser Permanente of Northern California health system.

Patients and Methods We identified women diagnosed with hormone-sensitive stage I-III BC from 1996 to 2007 and used automated pharmacy records to identify hormonal therapy prescriptions and dates of refill. We used Cox proportional hazards regression models to analyze factors associated with early discontinuation and nonadherence (medication possession ratio < 80%) of hormonal therapy.

Results We identified 8,769 patients with BC who met our eligibility criteria and who filled at least one prescription for tamoxifen (43%), aromatase inhibitors (26%), or both (30%) within 1 year of diagnosis. Younger or older age, lumpectomy (v mastectomy), and comorbidities were associated with earlier discontinuation, while Asian race, being married, earlier year at diagnosis, receipt of chemotherapy or radiotherapy, and longer prescription refill interval were associated with completion of 4.5 years of therapy. Of those who continued therapy, similar factors were associated with full adherence. Women age younger than 40 years had the highest risk of discontinuation (hazard ratio, 1.51; 95% CI, 1.23 to 1.85). By 4.5 years, 32% discontinued therapy, and of those who continued, 72% were fully adherent.

Conclusion Only 49% of patients with BC took adjuvant hormonal therapy for the full duration at the optimal schedule. Younger women are at high risk of nonadherence. Interventions to improve adherence and continuation of hormonal therapy are needed, especially for younger women.

Footnotes

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