

# Putting Evidence Into Practice: Evidence-Based Interventions for Hot Flashes Resulting From Cancer Therapies

Marcelle Kaplan, RN, MS, AOCN®, CBCN®, Suzanne Mahon, RN, DNSc, AOCN®, APNG,  
Diane Cope, RN, PhD, ARNP-BC, AOCNP®, Elizabeth Keating, RN, MS, NP, CBCN®,  
Stacey Hill, RN, BSN, and Marcie Jacobson, RN, BSN, OCN®

Survival rates for people treated for breast or prostate cancer have increased steadily since 2000, which has been attributed to advances in early detection and improvements in treatments. However, breast and prostate cancer therapies that target estrogen and testosterone production are associated with hormone-deprivation symptoms—most commonly hot flashes—that may have a significant negative impact on quality of life. Compared to the healthy population, hot flashes occur most often in these two groups, so the authors conducted a literature search specifically for evidence-based interventions to manage hot flashes experienced by women treated for breast cancer and men treated for prostate cancer. The interventions reviewed were divided into two broad categories—pharmacologic and nonpharmacologic interventions—and categorized according to Oncology Nursing Society weights of evidence. Most of the interventions were rated *effectiveness not established* or lower; however, two drugs, venlafaxine and gabapentin, were rated *likely to be effective*. In addition, the placebo effect was noted to produce a high percentage of positive results in mitigating hot flashes.

**P**rostate and breast cancers remain the most frequently diagnosed cancers in men and women in the United States. In 2010, prostate cancer was estimated to account for 28% of all new cases of cancer in men and breast cancer was estimated to account for 28% of all new cases of cancer in women (Jemal, Siegel, Xu, & Ward, 2010). From 1999–2006, breast and prostate cancer overall survival rates have shown a steady increase, at 89% and 99%, respectively (National Cancer Institute, 2010b, 2010c). Early detection and improvements in treatment have contributed to improved survival rates. However, breast and prostate cancer therapies that target estrogen and testosterone production are associated with hormone-deprivation symptoms, most commonly hot flashes. Because hot flashes occur most often in these two groups

## At a Glance

- ◆ Hot flashes can be a distressing side effect of treatment for women treated for breast cancer and men treated for prostate cancer.
- ◆ An evidence-based review of pharmacologic and nonpharmacologic interventions for managing hot flashes in these two groups revealed that only two pharmacologic measures, gabapentin and venlafaxine, are likely to be effective.
- ◆ This systematic review demonstrates that more randomized, controlled studies are needed to identify safe and effective measures to decrease the frequency, intensity, and duration of hot flashes in cancer survivors.

Marcelle Kaplan, RN, MS, AOCN®, CBCN®, is a breast oncology clinical nurse specialist and oncology consultant in Merrick, NY; Suzanne Mahon, RN, DNSc, AOCN®, APNG, is a professor in the Division of Hematology/Oncology in the Department of Internal Medicine and a professor of adult nursing in the School of Nursing at St. Louis University in Missouri; Diane Cope, RN, PhD, ARNP-BC, AOCNP®, is an oncology nurse practitioner in hematology/oncology at Florida Cancer Specialists and Research Institute in Fort Myers; Elizabeth Keating, RN, MS, NP, CBCN®, is a nurse practitioner at University of Massachusetts Memorial Health Care in Worcester; Stacey Hill, RN, BSN, is a staff nurse at Tennessee Valley Gynecologic Oncology in Huntsville, AL; and Marcie Jacobson, RN, BSN, OCN®, is head nurse at Florida Cancer Specialists and Research Institute in Fort Myers. The authors take full responsibility for the content of the article. The authors did not receive honoraria for this work. The content of this article has been reviewed by independent peer reviewers to ensure that it is balanced, objective, and free from commercial bias. No financial relationships relevant to the content of this article have been disclosed by the authors, planners, independent peer reviewers, or editorial staff. (Submitted October 2010. Revision submitted November 2010. Accepted for publication December 8, 2010.)

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