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# Making Sense of the Evidence Regarding Nonhormonal Treatments for Hot Flashes

Debra Barton, RN, PhD, AOCN®, and Charles L. Loprinzi, MD

Since 2002, many studies have been published about the effectiveness of various nonhormonal medications for use in treating hot flashes. This has been particularly relevant as data continue to be published from the Women's Health Initiative (WHI) illustrating that hormones do not appear to have some of the benefits they once were thought to have (McDonough, 2002; Rapp et al., 2003; WHI, 2002). Although the evidence remains clear that estrogens and progestones are effective in reducing hot flashes, women are hesitant to use them. In addition, women with a history of hormone-sensitive cancers (e.g., breast cancer) are not prescribed hormone therapy. Therefore, nonhormonal options to manage hot flashes, as well as other menopausal symptoms, are needed now more than ever. Subsequently, a great deal of research has been conducted and articles published regarding the effectiveness of newer antidepressants for hot flashes (Barton, Loprinzi, Novotny, Shanafelt, et al., 2003; Loprinzi et al., 2000; Loprinzi, Sloan, et al., 2002; Stearns, Beebe, Iyengar, & Dube, 2003) and the anticonvulsant drug gabapentin (Guttuso, Kurlan, McDermott, & Kiebertz, 2003; Loprinzi, Barton, et al., 2002).

With all of the new evidence, how do healthcare providers determine the best treatment to offer patients struggling with hot flashes? The purpose of this article is to discuss the evidence available for nonhormonal options for hot flashes and to provide a treatment algorithm that can be used in clinical practice.

The demand for nonhormonal interventions for hot flashes is increasing because of the number of patients diagnosed with hormone-sensitive cancers and the results of the Women's Health Initiative indicating that hormone replacement therapy is not as beneficial as originally believed. Since 2002, numerous studies testing nonhormonal treatments for hot flashes have been conducted. Clinicians need to be able to use these research findings to help patients make treatment decisions. Because hot flashes can interfere with activities of daily living such as sleep and work, clinicians first should assess the extent to which hot flashes are disruptive to a woman's life. The evidence for nonhormonal interventions is summarized, and a decision treatment algorithm is offered for use in clinical practice. This algorithm includes nonhormonal options of the antidepressants available in addition to gabapentin, an antiseizure medication. A short review of the evidence for possible complementary therapies also is included.

**Key Words:** menopause, hot flashes

## Initial Assessment

Descriptive studies discuss how hot flashes interfere with women's quality of life. Hot flashes manifest as a feeling of warmth or heat that begins in the face and neck and can travel down through the chest and all the way to the feet. This sense of heat is accompanied by a red face and excessive perspiration. What is not as well acknowledged regarding the experience of hot flashes is that they almost always are accompanied by emotional perceptions and behavioral consequences (Finck, Barton, Loprinzi, Quella, & Sloan, 1998). Emotions accompanying hot flashes can include irritation, agitation, annoyance, embarrassment, distress, and panic. Behaviorally, hot flashes may demand a change of clothing, cause sleep disturbances, result in feeling a need to move outdoors, and interfere with or temporarily stop work activities.

In a study by Carpenter, Johnson, Wagner, and Andrykowski (2002), hot flashes in breast cancer survivors were more frequent, severe, and distressing than in women experiencing hot flashes who had not been diagnosed with breast cancer. In a recent analysis of several pilot studies of hot flashes, distress from hot flashes was correlated most highly with concomitant symptoms experienced by women. The most frequently experienced symptoms included difficulty sleeping, fatigue, interruption in sexual relations, sleepiness, nervousness, and mood changes (Barton, Loprinzi, Parkinson, Novotny, & Sloan, 2003).

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