

Ixabepilone: Providing New Hope for Women With Breast Cancer After Anthracycline and Taxane Failure

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Patterns of breast cancer care continue to be amended because of the more frequent use of anthracyclines and taxanes in earlier lines of therapy (particularly in the adjuvant setting) and the emergence of multidrug resistance. When treating women with recurrent or metastatic breast cancer that is resistant to anthracyclines and taxanes, nurses have a unique opportunity to foster a sense of hope by helping patients understand available treatment options and what to expect during therapy. This article presents information on the use of an epothilone agent, ixabepilone (Ixempra®, Bristol-Myers Squibb), a new treatment option for metastatic breast cancer after anthracycline and taxane failure. The information will allow nurses and their patients to collaborate as a team to help prevent or effectively manage side effects. In addition, nurses can take a proactive approach in educating patients about treatment options to enhance their quality of life.

Breast cancer is the most frequently diagnosed cancer among women in the United States, with almost 200,000 women diagnosed in 2009 (Surveillance Epidemiology and End Results, 2009). Early detection and treatment advances have contributed to a steady decline in mortality rates. Breast cancer management has evolved significantly during the past several decades with the use of less-invasive surgical techniques, the incorporation of new agents (e.g., anthracyclines, taxanes, aromatase inhibitors, trastuzumab) in the adjuvant setting, and the use of novel therapies (e.g., ixabepilone, lapatinib) in the advanced disease setting. Despite treatment advances in early-stage breast cancer, about 20%–30% of patients with node-negative disease and 50%–60% with node-positive disease will have recurrent disease (American Cancer Society, 2008). The five-year survival rate for patients with stage IV breast cancer remains at about 20%. An increased number of patients are expected to have pretreated metastatic breast cancer that has developed resistance to multiple agents, including anthracyclines and taxanes (Longley & Johnston, 2005).

Cytotoxic strategies approved by the U.S. Food and Drug Administration (FDA) for the management of metastatic breast cancer include anthracyclines, taxanes, capecitabine, gemcitabine, and ixabepilone. Trastuzumab and bevacizumab in combination with paclitaxel may be used for first-line treatment of HER2-positive and -negative invasive disease, respectively (National Comprehensive Cancer Network [NCCN], 2010). Ixabepilone, alone or in combination with capecitabine, is approved as a treatment for taxane- and anthracycline-resistant disease. Despite indications, the agents typically are used after most other options have failed.

At a Glance

- ◆ More breast cancers are becoming resistant to taxanes and anthracyclines.
- ◆ Ixabepilone is a novel agent that has been approved to treat taxane- and anthracycline-resistant breast cancer.
- ◆ Awareness of indications for ixabepilone and associated treatment side effects can improve nursing interventions and significantly enhance patients' quality of life.

Nurses are the critical link between new data, clinical practice, and patient education. With the emergence of promising new therapies in addition to available treatments, nurses can help educate patients to make informed decisions. In addition, nurses and their patients can function as a team to prevent or effectively manage treatment-related side effects. The measures are likely to increase patient adherence to therapeutic regimens, improve treatment outcomes, and enhance patients' quality of life.

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