## Tamoxifen Discontinuation Rates Surprisingly High In Clinical Practice

Atlanta 2007/01/22 -In the clinical practice setting almost a quarter of women treated for breast cancer stop tamoxifen within one year, a rate twice as high as indicated by previous studies. The new study, published in the March 1, 2007 issue of CANCER, a peer-reviewed journal of the American Cancer Society, says early termination of this highly effective breast cancer drug may negatively affect treatment efficacy. At 3.5 years, the study also reveals that over one third of women have ceased tamoxifen treatment.

Tamoxifen is a selective estrogen receptor modulator that inhibits the stimulatory effect that estrogen has on the development of specific types of breast cancer. Scientists estimate that over 40,000 recurrences are prevented each year worldwide because of this drug. However, the optimal duration of therapy is five years. Less than five years of continual treatment is associated with higher rates of recurrence and higher mortality rates. The most common reason for discontinuation is adverse effects, including mood swings and hot flashes; these are often successfully treated with a specific antidepressant.

Discontinuation or non-persistence rates estimated by clinical trials range from 16 to 32 percent. Studies of usage outside clinical trials report non-persistence rates of only 17 percent at two years and 31 percent at five years. However, these rates are compiled from self-reporting data collection methods and target elderly patients – an inherently biased data collection method in a population accustomed to chronic medications. Led by Thomas I. Barron, M.Sc. of the Department of Pharmacology & Therapeutics at Trinity College Dublin & St James's Hospital, Dublin, researchers reviewed pharmaceutical data from a national database of 2816 women aged 35 years and older who started tamoxifen for breast cancer.

The researchers found that at 12 months 22 percent of women had ceased using the drug. At 24 months 28 percent had stopped tamoxifen, and at 3.5 years 35 percent had stopped the treatment without commencing an alternative therapy.

Analysis for risk factors for discontinuing tamoxifen identified age and history of antidepressant use. Women between the ages of 35 and 44 or over 75 as well as women who reportedly used an antidepressant within one year of starting tamoxifen were more likely to stop tamoxifen.

"This study demonstrates that persistence with tamoxifen cannot be assumed and raises concerns about persistence with other oral hormonal therapies for breast cancer and oral anti-neoplastics in general," the authors write. "This is of particular importance," they conclude, "as longer durations of adjuvant therapy may be recommended for breast cancer in the future and as cancer survivorship becomes a priority area in clinical practice and research."

Article: "Early Discontinuation of Tamoxifen: a Lesson for Oncologists," Thomas I. Barron, Róisín M. Connolly, Kathleen Bennett, John Feely, M. John Kennedy, CANCER; Published Online: January 22, 2007 (DOI: 10.1002/cncr.22486); Print Issue Date: March 1, 2007.

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