

# Ovary-suppressing drugs beneficial for some patients

In combination with the drug tamoxifen, drugs that suppress the production of estrogen by the ovaries can benefit certain groups of young women with breast cancer fueled by estrogen, Dana-Farber and other researchers reported recently in the *New England Journal of Medicine*.

In a clinical trial involving more than 3,000 premenopausal women with estrogen-driven (ER-positive) breast cancer, the investigators found that a regimen of tamoxifen and ovary-suppressing agents was better than tamoxifen alone in preventing a recurrence of the disease in specific sets of patients. Among women age 35 and younger, 79 percent of those who received the combined therapy were breast-cancer-free after five years, compared to 68 percent of those who received the standard therapy of tamoxifen alone. Among women who had been treated with chemotherapy and remained premenopausal afterward (who comprised about half the trial population), the five-year breast-cancer-free rate was 82.5 percent, compared to 78 percent for the tamoxifen-only group.



Meredith Regan

In both sets of patients, a combination of the drug exemestane (an aromatase inhibitor, which blocks the formation of estrogen) and an ovarian inhibitor improved five-year breast-cancer-free rates even further – to 83.4 percent in the 35-and-under group, and 85.7 percent in the chemotherapy group.

The combination of tamoxifen and ovarian inhibitors produced more adverse side effects than tamoxifen alone – mainly menopausal symptoms, depression, and several conditions that could pose long-term health problems, including hypertension, diabetes, and osteoporosis.

The findings are based on data from the Suppression of Ovarian Function (SOFT) trial launched in 2003 by the International Breast Cancer Study Group (IBCSG).

The authors of the paper include several members of the IBCSG Statistical Center in the Department of Biostatistics

and Computational Biology at Dana-Farber, including Meredith Regan, ScD, the trial's lead statistician and co-lead author of the paper; Richard Gelber, PhD, senior author of the paper; and Anita Giobbie-

Hurder, MS. Dana-Farber co-authors include Harold Burstein, MD, PhD, of the Susan F. Smith Center for Women's Cancers; and Eric Winer, MD, director of the Breast Oncology Program at the Susan F. Smith Center. 

