Adding ovarian suppression to tamoxifen reduced recurrence for some women with premenopausal breast cancer

December 12 2014

Among premenopausal women with early-stage, hormone receptor-positive breast cancer, adding ovarian suppression to tamoxifen reduced breast cancer recurrence for those who had previously received chemotherapy and remained premenopausal, according to data from the randomized, phase III suppression of ovarian function trial (SOFT) presented at the 2014 San Antonio Breast Cancer Symposium, held Dec. 9–13.

"We found that that adding ovarian suppression to tamoxifen was somewhat beneficial for those women with early-stage, hormone receptor-positive breast cancer who remained premenopausal after chemotherapy," said Prudence Francis, MD, head of breast medical oncology at the Peter MacCallum Cancer Centre in Melbourne, Australia. "However, we found a greater reduction in recurrence in this same patient group with the use of ovarian suppression plus the aromatase inhibitor exemestane.

"I believe that these results will result in changes in clinical practice," continued Francis. "For women who have not reached menopause and have hormone receptor-positive breast cancer that carries sufficient risk of recurrence that they receive chemotherapy, physicians are likely to discuss the option of treatment with ovarian suppression plus an aromatase inhibitor."

Analysis of data from all patients assigned tamoxifen or tamoxifen with ovarian suppression showed that there was not a statistically significant improvement in disease-free survival with the addition of ovarian suppression overall. Just over half of the patients had received chemotherapy prior to enrollment in SOFT, and there was a 22 percent decrease in risk of breast cancer recurrence for those patients assigned tamoxifen with ovarian suppression who had received prior chemotherapy compared with their counterparts assigned tamoxifen; the decrease was a trend and not statistically significant.

A 35 percent decrease in risk of breast cancer recurrence was observed for premenopausal women who received chemotherapy for early-stage, hormone receptor-positive breast cancer and were assigned exemestane with ovarian suppression compared with those assigned tamoxifen. This comparison was a secondary question of the trial, but the results of the statistical analysis were conclusive.

"We found that with the addition of ovarian suppression to tamoxifen, four or five fewer patients out of 100 experienced a breast cancer recurrence within five years in the group of patients who remained premenopausal after chemotherapy," said Francis. "However, we found an even greater reduction in recurrence in this same patient group with the use of ovarian suppression plus the aromatase inhibitor exemestane, which resulted in seven or eight fewer patients out of 100 experiencing a breast cancer recurrence within five years."

Francis and colleagues enrolled 3066 women with early-stage, hormone receptor-positive breast cancer in SOFT, led by the International Breast Cancer Study Group (IBCSG). Patients were randomized to five years of tamoxifen (1021 patients), tamoxifen and ovarian suppression (1024 patients), or exemestane and ovarian suppression (1021 patients). In most patients, ovarian suppression was achieved by monthly triptorelin injections. The data reported were obtained after a median follow-up of

67 months.

"We are continuing to follow the patients enrolled in SOFT and plan to provide future updates on cancer recurrence rates, later side effects, as well as the overall survival for the different patient groups in the trial," said Francis.

Provided by American Association for Cancer Research