Femara Downstaged Tumors to Operable Size

BY DAMIAN McNAMARA

PALM BEACH, FLA. — Neoadjuvant aromatase inhibitor therapy allows some breast cancer patients to be downstaged to breast-conserving surgery rather than being considered inoperable or as candidates for mastectomy, according to results of a multicenter phase II trial.

The treatment shrank tumors from a median 4.9 cm to 3.0 cm for a "highly significant difference preoperatively versus after therapy," said Dr. George S. Leight Jr., a general surgeon at Duke University Medical Center, Durham, N.C.

Because experience with neoadjuvant aromatase inhibitor therapy is limited in the United States, Dr. Leight said, he and his associates studied 106 postmenopausal women who either had inoperable breast cancer or had been recommended for mastectomy. The women had estrogen receptor–positive, stage II/III breast cancer and palpable tumors of 2 cm or larger.

Seven women chose neoadjuvant chemotherapy and three declined surgery, so researchers assessed surgical outcomes for the remaining 96 women. Participants were treated with the aromatase inhibitor letrozole (Femara) for 16-24 weeks.

In all, 48 of the women had successful breast-conserving operations. Women in this arm included 30 of 46 patients who were initially identified as likely to require a mastectomy, as well as 15 of 39 patients who were initially judged to definitely require a mastectomy. Results were presented at the annual meeting of the Southern Surgical Association.

"This is an excellent study," said Dr. Kelly K. Hunt, chief of the surgical breast section in the department of surgical oncology at the University of Texas M.D. Anderson Cancer Center, Houston. "The fact that they could downstage patients to more surgical options, especially breast-conserving surgery, is important."

The 11 women who had been deemed inoperable at baseline were converted to operable status, including 3 who had successful breast-conserving surgery.

Dr. Leight, lead author John A. Olson Jr., and their associates gauged clinical response with ultrasound and/or mammography. In all, 13% of women had a complete response to aromatase inhibitor therapy, 49% had a partial response, 26% had stable disease, and the remaining 12% had progressive breast cancer.

"Do you think other imaging studies, such as MRI or PET scan, would be more appropriate than ultrasound?" Dr. Hunt asked.

"Regarding imaging, the inadequacy of mammograms and ultrasound is clear," said Dr. Olson, chief of endocrine, breast, and oncologic surgery at Duke. "MRI and PET are options, but [are] full of limitations that are not addressed in this trial."

The remaining 48 women still had mastectomy. "The decision between mastectomy and breast-conserving surgery is complex, and we were sobered by the number of patients who had very small tumors yet still had mastectomy," Dr. Olson said.

Pretreatment T stages were T2 in 53% of patients, T3 in 37%, and T4 in 10%. Following treatment with letrozole, T stages changed to T0 in 1%, T1 in 41%, T2 in 41%, T3 in 13%, and T4 in 4%.

"This suggests that a significant number of patients who had mastectomy could have had breast-conserving surgery," Dr. Leight said.

"I assume most of these patients with median tumor size of 5 cm are going to get chemotherapy anyway. What is the rationale for giving endocrine therapy up front instead of chemotherapy?" asked Dr. Kelly M. McMasters, chair of the surgery department at the University of Louisville (Ky.).

"Regarding a 5-cm tumor being treated with endocrine therapy versus chemotherapy—that is the point—it is appropriate to treat large, estrogen receptor–rich tumors with endocrine therapy," Dr. Olson said.

Neither Dr. Leight nor Dr. Olson had any relevant financial disclosures.

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