Less Is More for Early Breast Cancer

Genetic test can help guide decisions about treatment after surgery.

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A tumor gene test could allow about 70 percent of women with a more easily treatable type of early breast cancer to safely skip chemotherapy, the large TAILORx study showed.

The trial included more than 10,000 women with early-stage estrogen-receptor-positive, HER2-negative breast cancer that was confined to the breast.

About half of women diagnosed with breast cancer fall into this category; they usually undergo surgery and receive estrogen-blocking hormone therapy. Adding adjuvant, or preventive, chemotherapy can reduce the risk of recurrence by a small amount, but most never would have experienced disease progression without it and therefore suffer needless side effects.

After surgery, the women had their tumors tested with Oncotype DX, which analyzes 21 tumor genes to predict the risk of cancer recurrence. Low-risk women received hormone therapy alone, high-risk women received estrogen blockers plus chemotherapy and those in the middle group were randomly assigned to hormone therapy either with or without chemotherapy.

After nine years of follow-up, 83 percent of intermediate-risk women who received estrogen blockers alone and 84 percent of those who received hormone therapy plus chemotherapy were still alive without having experienced local recurrence, cancer in the opposite breast or metastasis to distant parts of the body. Overall survival was also similar in both treatment groups, about 94 percent.

These findings “will transform care immediately, and for the better,” says ASCO expert Harold Burstein, MD, PhD, of the Dana-Farber Cancer Institute in Boston. “Practically speaking, this means that thousands of women will be able to avoid chemotherapy, with all of its side effects, while still achieving excellent long-term outcomes.”