

Calculating a Recurrence Score Helps Predict Survival for Patients With Breast Cancer That Has Spread to the Lymph Nodes

Using a specialized 21-gene test of a breast tumor's genes, researchers found that the result, called a Recurrence Score (RS), predicted the prognosis (chance of recovery) for patients with estrogen-receptor positive breast cancer that has spread to the axillary (underarm) lymph nodes. Previous studies have shown that these 21 genes help predict the risk of recurrence (cancer that comes back after treatment) and the risk of death from cancer for women with breast cancer that has not spread to the axillary lymph nodes.

In this study, researchers examined the tumors removed during surgery for 1,065 women with estrogen-receptor positive breast cancer that had spread to the lymph nodes who had received chemotherapy plus hormonal therapy after surgery as part of a previous study. Then, the researchers calculated a RS based on the 21 specific genes in each tumor. A low RS is associated with a better prognosis and a high RS is associated with a poorer prognosis. This RS was then compared with how long each patient lived after diagnosis.

Researchers found that 76% of the patients who lived at least 10 years with no signs of the disease had a low RS, compared with 48% of those with a high RS. They also showed that 81% of the patients who did not have the disease return in a distant location within 10 years had a low RS, compared with 56% for those with a high RS. In addition, 90% of patients who lived at least 10 years after diagnosis had a low RS, compared with 63% for those with a high RS.

What this means for patients

The number of lymph nodes with cancer helps determine the RS and that strongly predicts prognosis for patients with breast cancer. The risk of the disease recurring or worsening increases when more lymph nodes contain cancer, said Terry Mamounas, MD, Medical Director of the Cancer Center at Aultman Hospital in Canton, Ohio. The RS test may be used as part of your diagnosis to predict the risk that the disease will come back, as well as to help guide treatment options. Talk with your doctor for more information about the test.

Questions to ask your doctor

- What type of breast cancer do I have? What does this mean?
- Has the cancer spread to my underarm lymph nodes?
- What are my treatment options?
- Will a recurrence score be calculated for my cancer?
- What is the risk that the cancer will come back or worsen?

For More Information

[Guide to Breast Cancer](#) [1]

[Coping With Fear of Recurrence](#) [2]

[Making Decisions About Cancer Treatment](#) [3]

[What to Know: ASCO's Guideline on Hormonal Therapy for Hormone Receptor-Positive Breast Cancer](#) [4]

Links:

[1] <http://www.cancer.net/node/18618>

[2] <http://www.cancer.net/node/25241>

[3] <http://www.cancer.net/node/24582>

[4] <http://www.cancer.net/node/29866>