

A new gene test for patients with breast cancer—called MammaPrint—could dramatically reduce the number of women who need to undergo chemotherapy.

The test is available at the University of Nebraska Medical Center. It analyzes 70 key genes and accurately determines which patients are at low risk of breast cancer recurrence and could safely choose not to undergo chemotherapy.

The test has been validated in a peer-reviewed study called MicroarRAy PrognoSTics in Breast CancER (or RASTER), conducted in 16 community-based clinics in the Netherlands. The five-year study involved 427 breast cancer patients.

A MammaPrint test determined 219 women to be low risk and 208 to be high risk.

Of the 219 low-risk patients, 85 percent chose not to have chemotherapy. Of those patients, 97 percent were disease-free after five years.

Of the 208 high-risk patients, 81 percent chose chemotherapy and 91 percent were disease-free after five years.

Long-term side effects of chemotherapy could include damage to the heart, kidneys, lungs, nerves or reproductive organs.

The test can be administered to virtually all early-stage breast cancer patients and has been cleared by the U.S. Food and Drug Administration.