Statins Could Improve Outcomes for People With Triple-Negative Breast Cancer

Overall survival increased by 30% among women with aggressive breast cancer who began statin use post-diagnosis.

August 13, 2021 By Sukanya Charuchandra

Statins, drugs used to lower cholesterol and prevent cardiovascular events, may improve survival among people with triple-negative breast cancer (TNBC), according to observational study results published in Cancer.

Breast cancer is classified by the type of receptors expressed by tumor cells. Most breast tumors have estrogen or progesterone receptors that make them suitable for hormone therapy, while others carry HER2, a growth-promoting protein. Yet others are characterized as triple-negative—tumors that do not carry any of these protein markers and thus are harder to treat. Some 15% to 20% of breast cancer patients have TNBC.

“Previous research has looked at breast cancer as only one disease, but we know there are many subtypes of breast cancer, and we wanted to focus our research on this particularly aggressive form of breast cancer that has limited effective treatment options,” Kevin Nead, MD, of the University of Texas MD Anderson Cancer Center in Houston, said in a press release.

Nead’s team studied the clinical outcomes of statin use in people with TNBC. Statins have been shown to protect the heart in women with breast cancer who were being treated with chemotherapy.

The researchers accessed data from the National Cancer Institute’s Surveillance, Epidemiology, and End Results–Medicare registry and the Texas Cancer Registry–Medicare databases and selected more than 23,000 women who were at least 66 years old and had Stage I, II or III (nonmetastatic) breast cancer. The team analyzed the impact of 12 months of statin use following a breast cancer diagnosis on overall survival and breast cancer–specific survival. The median follow-up period was 4.4 years for overall survival and 3.3 years for breast cancer–specific survival.

Across the study population, 2,281 women started using statins within 12 months after cancer diagnosis, and 1,534 had TNBC. Among those with TNBC, survival outcomes were significantly

better for those who were using statins. Women with TNBC who began statin use post-diagnosis had a 58% higher breast cancer–specific survival rate and a 30% higher overall survival rate. Moreover, the associations between statin use and survival outcomes was stronger for those at an earlier stage of TNBC. Higher doses of statin were linked to stronger impact on survival in women with TNBC. No association between statin use and survival was seen for women with other types of breast cancer.

“We know that statins decrease breast cancer cell division and increase cell death,” said Nead. “Our study shows that there is an association between statins and improved outcomes in TNBC, and it is time to pursue this idea further in a prospective trial.”

Click here to read the study abstract in Cancer.

Click here for more news about breast cancer.

© 2026 Smart + Strong All Rights Reserved.
http://beta.docker.cancerhealth.com/article/statins-improve-outcomes-people-triplenegative-breast-cancer