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Olivia Munn says a breast cancer risk assessment 'saved my life.' Who should get one? Shiv Sudhakar, MD | March 14, 2024



Actor Olivia Munn, 43, is raising awareness about the breast cancer risk assessment tool that led to her early diagnosis, despite an unrevealing mammogram just two months before.

Munn was diagnosed with breast cancer in April 2023 at age 42 and subsequently underwent four surgeries, including a double mastectomy, but wrote in an Instagram post that she is "lucky" her OB-GYN, Dr. Thaïs Aliabadi, caught it in time.

"Ask your doctor to calculate your Breast Cancer Risk Assessment Score," the former star of "The Newsroom" added.

Olivia Munn diagnosed with breast cancer

Munn's breast cancer journey started in February 2023, when she took a genetic test that looks for 90 different cancer genes "to be proactive about my health," she wrote. She tested negative for the most commonly inherited breast cancer gene, known as BRCA.

Despite a "normal" mammogram in early 2023, she said her doctor decided to go a step further and calculate her breast cancer risk assessment score because she had some concerning risk factors, such as having her first child after the age of 30.

Munn's score revealed a 37% lifetime risk of breast cancer.

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Munn and her OB-GYN, Dr. Thaïs Aliabadi.@oliviamunn via Instagram

"The way I explained it to my patients (is) if you had a 37.5% chance of boarding a plane that would crash, would you ever board that plane? And the answer is almost always no," Aliabadi, <u>host of the SheMD podcast</u>, said in an exclusive interview on TODAY.

Munn underwent additional imaging, including an MRI and ultrasound, which ultimately led to a biopsy, revealing an aggressive cancer known as luminal B on both breasts. Her medical team acted quickly, performing a double mastectomy 30 days after the biopsy.

"Olivia chose to go with the double mastectomy to basically prevent her risk of recurrence because she was diagnosed so early," Aliabdi explained.

"I went from feeling completely fine one day, to waking up in a hospital bed after a 10-hour surgery the next," Munn recalled.

Had Munn not undergone the assessment, "potentially, (the) cancer would have grown," Aliabadi added. "She had an aggressive cancer. She probably wouldn't have been early stage."

Munn hopes sharing her medical ordeal "will help others find comfort, inspiration and support on their own journey."

TODAY.com spoke with oncologists about the breast cancer risk assessment tool and who should use it.

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What is a breast cancer risk assessment score?

"A breast cancer risk assessment score is calculated using a mathematical model that incorporates various risk factors that have been shown to be associated with breast cancer," Dr. Jennifer Plichta, director of the Breast Risk Assessment Clinic at Duke Cancer Institute, tells TODAY.com.

The most commonly used one is called the Gail Model, NBC News medical contributor Dr. Tara Narula explained on TODAY.

It uses a woman's medical history, concentrating on certain risk factors, including:

- Age
- Race and ethnicity
- Age of starting periods
- Age of having your first child
- Whether you've had a breast biopsy with atypical cells
- Family history of breast cancer

The calculator estimates a woman's risk of developing invasive breast cancer (when it spreads outside the milk ducts) over the next five years, as well as her lifetime risk (up to age 90), adds Dr. Julie R. Gralow, chief medical officer and executive vice president of American Society of Clinical Oncology.

But the risk assessment tool has certain limitations. For example, it relies on population-based estimates, meaning it can only provide an average risk of breast cancer for a group of women with similar risk factors, Plichta cautions. It can't predict whether any individual patient will get breast cancer or not.

"Although a woman's risk may be estimated by tools, such as the breast cancer risk assessment tool, the predictions don't say who will develop breast cancer — some women who do not develop breast cancer have higher risk estimates than some women who do develop breast cancer," Gralow adds.

Other providers use different breast cancer risk assessment scores to evaluate the risk of developing breast cancer in their patients.

One of the most common is the Tyrer-Cuzick Risk Calculator, which evaluates the 10-year and lifetime risks of developing breast cancer, Dr. Melanie Sheen, breast medical oncologist at Ochsner MD Anderson Cancer Center in New Orleans, tells TODAY.com.

This assessment tool evaluates a woman's risk factors, similar to the Gail Model, but also includes breast density and the use of hormone therapy in menopause.

How to calculate your breast cancer risk assessment score

The calculator can be found online on the National Cancer Institute's website and takes about five minutes to complete.

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During a visit, a doctor will go through the calculator with the patient, which includes multiple questions relating to various possible risk factors, such as reproductive and family history of breast cancer, that are associated with breast cancer, Plichta says.

After the questions are completed, the calculator provides two scores: an estimated risk of developing invasive breast cancer over the next five years and an estimated lifetime risk up to age 90.

Some medical facilities now calculate patients' breast cancer risk assessment scores automatically during routine visits with the information in the patient's electronic medical records.

"Duke provides this service (automatic risk calculations) for patients that get their mammograms at Duke," Plichta notes.

If you have a high breast cancer risk assessment score...

Women are considered high risk for developing breast cancer if they have a five-year risk score of 1.67% or higher, or a lifetime risk of 20% or higher.

High scores on these risk assessments calculators often prompt doctors to order additional screening beyond a mammogram, such as an MRI.

A mammogram uses special X-ray imaging to look at the density of breast tissue and breast calcifications, but an MRI uses strong magnets to look for abnormal blood vessels that develop in breast tissue due to cancer, according to the American Cancer Society.

In high-risk patients, doctors emphasize an MRI doesn't replace a mammogram, but instead allows a more complete picture to rule out breast cancer.

In Munn's case, she had a normal mammogram, but it was the abnormal MRI that prompted further testing.

"There are patients who don't have cancer and they walk around with this high lifetime risk, and they need to know that just doing mammogram is not going to be enough," Aliabadi said.

Breast cancer risk score and when to get a mammogram

Mammograms are an essential screening tests recommended for early detection of breast cancer, which affects one in eight women in their lifetime, according to the American Cancer Society.

An estimated 9% of breast cancers diagnosed in the U.S. occur in women younger than age 45, according to the Centers for Disease Control and Prevention (CDC).

After a recent increase in breast cancer cases among younger women, the U.S. Preventive Services Task Force issued preliminary 2023 recommendations to lower the age of routine screening mammograms in women to start every other year at age 40.

They estimate approximately 20% more lives will be saved with earlier screening, according to their draft statement.

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Other screening guidelines, such as the American Cancer Society, still recommend screening starting at age 45 for women who are considered "average risk."

The American Cancer Society defines average risk as:

- No personal history of breast cancer
- No strong family history of breast cancer
- No genetic mutation known to increase risk of breast cancer (such as in a BRCA gene)
- No chest radiation therapy before the age of 30

"For women with an average risk for breast cancer, the American Cancer Society recommends that women between 40 and 44 have the option to start screening with a mammogram every year, and that women should get mammograms annually beginning at age 45," Gralow explains.

But for women at high risk, screening should start at age 30 and include an MRI and mammogram, Gralow adds.

Munn offered similar guidance from Aliabadi in her Instagram post. "Dr. Aliabadi says that if (your breast cancer risk assessment score) is greater than 20%, you need annual mammograms and breast MRIs starting at age 30," she wrote.

The experts encourage women in their 40s to engage in shared decision-making with their providers to decide when's the best time to start mammograms based on their individual health.

Who needs their breast cancer risk assessment score calculated?

"Several organizations, including the breast specialists at Duke, recommend that all women have their breast cancer risk assessed at age 25, and then discuss again with a provider every one to two years," Plichta says.

Aliabadi says she calculates patients' lifetime risk when they turn 30, unless they have a family history or a gene mutation, in which case she'll also do it at age 25.

Women with risk factors that place them at high risk of developing breast cancer should also talk to their providers.

"If you have a family history of breast cancer, especially in a first-degree relative — such as a mom or sister — or multiple second degree relatives — such as grandparents, aunts and first cousins — then you should reach out to either your primary care physician or your OB-GYN to discuss your risk factors and whether you might need earlier or more frequent breast cancer screenings," Sheen adds.

Other high-risk factors include a known BRCA mutation or anyone who received radiation to the chest for treatment of another cancer, like lymphoma, according to the American Cancer Society.

https://www.today.com/health/breast-cancer/breast-cancer-risk-assessment-score-rcna143362