



DCIS

PRECISION* News about Ductal Carcinoma In Situ (DCIS)

Ductal Carcinoma In Situ (DCIS) is a breast condition that is often found on mammograms. DCIS refers to abnormal cells found inside a milk duct. Research shows that at least 3 out of 4 women (75%) with DCIS will not get a future invasive breast cancer, but almost all still receive breast cancer treatment. There are types of DCIS that are considered low-risk or higher risk. This is why DCIS is sometimes called different names. PRECISION* is learning about DCIS risk to find women who may not need treatment. One of their published articles is explained here.

What is the science article about?

The science article checked over 3,000 past studies to see if they could find risk factors that might lead to a future DCIS or breast cancer in the same breast after DCIS is found. This was done to find ways to help women learn about and manage their risk of a future breast event.

Why was the article written?

There is not much known about how DCIS develops. Many studies suggest that if left untreated, most women with low-risk DCIS may not get invasive breast cancer.

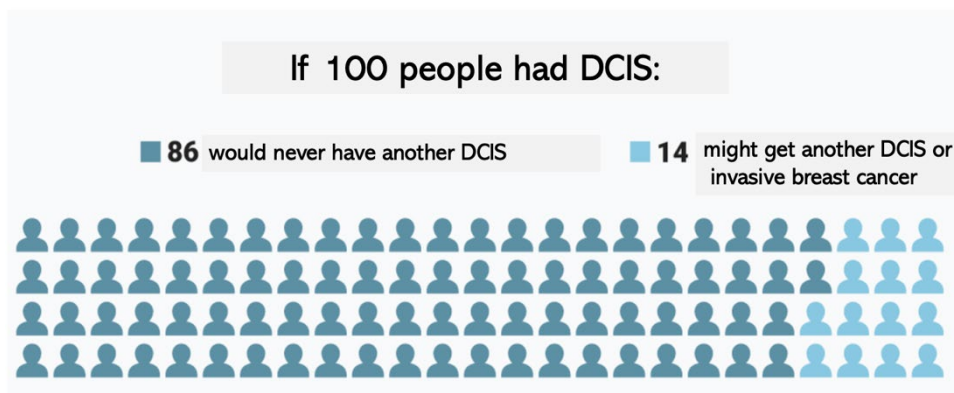
Currently, almost all DCIS patients still get surgery. Some also get radiotherapy, hormone therapy or both. A small number of women may need treatment to lower their risk of getting a future DCIS or invasive breast cancer. For women who have low-risk DCIS, though, active monitoring over time instead of instant surgery may be enough.

The problem is that no one yet knows which women with DCIS may need surgery and which may not. There are four current international clinical studies looking at which low-risk DCIS patients may be able to avoid or delay surgery.

How was the article review done?

The science article reviewed studies about women with DCIS. This was done to see which risk factors might have added to the number of women with DCIS who developed a future DCIS or breast cancer in their lifetime.

PRECISION researchers checked over 3,000 studies from medical journals from 1970 until 2018. They found 6 articles with good clear information about risk factors that women can and cannot control. These factors may change the risk of a future DCIS or breast cancer.



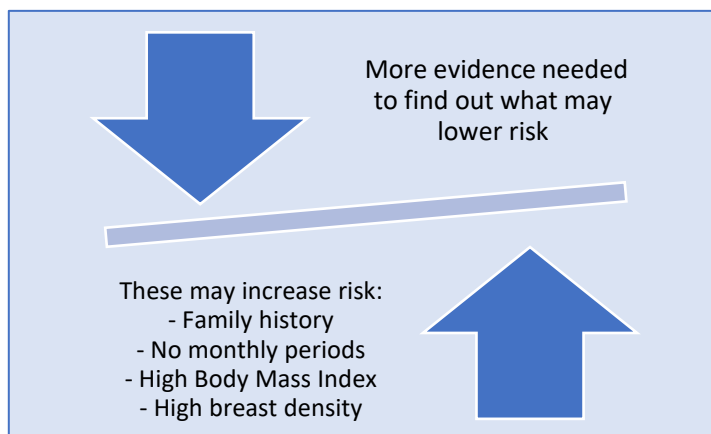
The review included almost 5,000 women who had DCIS.

- About 14 out of 100 (13.7%) women had a future DCIS or breast cancer.
- That means that over 86 out of 100 women (86.3%) with DCIS did not have a future breast event.

What are the results in the article?

The review showed that these items may slightly increase the risk of getting a future DCIS or breast cancer **for women who already have DCIS**:

- A family history of breast cancer.
- No monthly menstrual cycles or periods (postmenopausal).
- High Body Mass Index (BMI) of 30 or more. BMI means weight over height.
- High breast density on a mammogram which means more fibrous tissue than fat in the breast.



Many articles did not have enough information to show which risk factors made any difference for women with DCIS. It is still not known if these risk factors matter:

- Smoking
- Diet or amount of fat intake
- Ethnicity
- Drinking alcohol
- Physical activity
- Height

There was even less information about these risk factors:

- Birth control pills, breast feeding, or taking hormone replacement therapy once women were postmenopausal.

What does this mean for women with DCIS?

This review shows there is not enough evidence (proof) to know which risk factors might lower risk or add to risk for women with DCIS. This is because so few women get a future DCIS or breast cancer after their first one. There is also not enough long-term follow-up for answers.

There were also some limits about this study that are important:

- The review included women who were mainly of European descent. It may not apply to other ethnic groups.
- The studies that were reviewed did not include men. A very small number of men get DCIS each year.
- DCIS was described in different ways in the different studies. This means not all related articles may have been included. More consistent terms between researchers and doctors would help in the future.
- Most of the articles did not report whether future events were DCIS or invasive breast cancer. Some did not report whether the further events were in the same (ipsilateral) breast or in the opposite (contralateral) breast.

When was the study done?

The science article was published in April 2020. This public summary was completed in July 2020.

Official name of the article

The impact of patient characteristics and lifestyle factors on the risk of an ipsilateral event after a primary DCIS: A systematic review

By Alaeikhanehshir S., et al. On behalf of PRECISION*.

Published in *Breast*. 2020 Apr;50:95-103. doi: [10.1016/j.breast.2020.02.006](https://doi.org/10.1016/j.breast.2020.02.006)

The article can be found at: [https://www.thebreastonline.com/article/S0960-9776\(20\)30063-1/fulltext](https://www.thebreastonline.com/article/S0960-9776(20)30063-1/fulltext) and at <https://www.dcisprecision.org/publications/>.