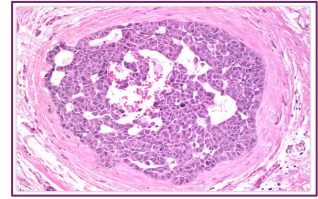


# IMPROVE DCIS

A research study to learn  
who needs treatment & who doesn't



**IMPROVE DCIS** stands for

“Identify **M**olecular **P**redictors of Risk to **O**bjectively **V**alidate the **E**volution of **DCIS**.”

Here is more information about what that means.

## What is this study about?

We want to find a way to predict which Ductal Carcinoma In Situ (DCIS) may develop into Invasive Breast Cancer (IBC) and which DCIS won't change.



- **DCIS** means that abnormal breast cells in a milk duct stay where they are and do not invade other cells. This is sometimes called non-invasive, or stage 0 breast cancer.
- **IBC** means breast cancer cells have invaded nearby cells at different levels. IBC is often called stage 1, 2, 3, or 4 breast cancer.

IMPROVE DCIS explores what is in DCIS samples (biology). These samples were collected from women who joined three (3) past studies called:

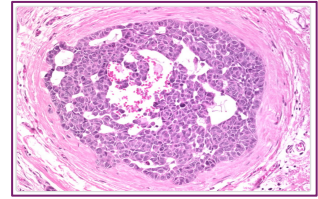
- Comparing Operation vs. Monitoring, with or without Endocrine Therapy (**COMET**)
- A Study Looking at the Genetics of DCIS (**ICICLE**)
- Breast Screening: The SLOANE Project (**SLOANE**)

Our research includes these goals:

1. Confirm (verify) the previous findings from each of the 3 studies.
2. Look at changes that can affect DCIS biology. This includes chemical changes in the molecules, genes, and proteins of the cells. We will create detailed information to learn:
  - How IBC sometimes develops from the original DCIS
  - How some women with DCIS will not develop a future DCIS or IBC
  - How different ethnic backgrounds may shape future risk
  - What kind of hereditary changes (from family) may be involved
3. Create a risk score from the combined data and new research findings to help inform future risk of IBC after someone gets DCIS. This could tell the difference between:
  - Patients with DCIS who are at higher risk of getting IBC and need surgery
  - Patients who have low-risk DCIS that can be checked with Active Monitoring images. They will get surgery only if their DCIS develops into IBC.

# IMPROVE DCIS

A research study to learn who needs treatment & who doesn't



## How IMPROVE DCIS works

Researchers and doctors from the US and UK are working together to share their skills on this multi-year research project. Patient advocates are also involved in discussions and decisions during monthly calls and throughout the whole program.



<https://blogs.bournemouth.ac.uk/research/files/2013/11/USA-UK.jpg>

## How IMPROVE DCIS will make progress

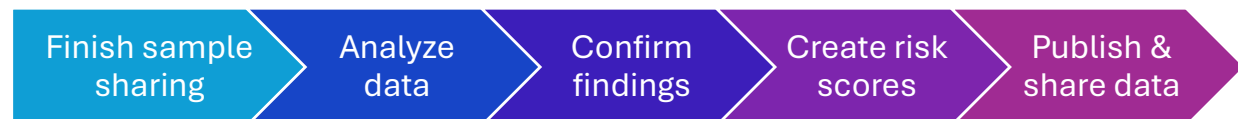
The study team is working hard to get approvals to collect DCIS samples from these past studies so they can be used to teach us more about the biology of DCIS.

## What does it mean for Women with DCIS?

IMPROVE DCIS is important because it looks for differences that can lead to a higher risk of developing IBC after getting DCIS. These differences include:

- Changes in the DCIS itself. These are called molecular or tumor biomarkers.
- Inherited changes (variants) that lead to a higher risk. These are called genetic biomarkers.

## What is next for IMPROVE DCIS?



IMPROVE DCIS started in 2023. We have shared DCIS samples and are starting tests. New data will be developed; results are expected around 2027. Once we have confirmed research findings, a plain-language summary will be developed to help everyone better understand risk levels for DCIS. Science articles and presentations may also be created. No information about individuals who joined the past studies will be shared.

DCIS is not a single disease. These abnormal cells can vary greatly from person to person and lead to different outcomes. We hope to develop an accurate risk score that doctors can use to advise women with DCIS about their risk levels for IBC. This will mean that women at lower risk can safely manage their DCIS with Active Monitoring instead of surgery if they so choose.