

Breast Biopsy

There are three options for performing a breast biopsy; using ultrasound, mammography or MRI-guidance, and the choice of modality will depend on how best the area of interest is seen.

Ultrasound-guided Breast Biopsy:

A biopsy is a sterile procedure that involves an injection of local anaesthetic to numb skin and deeper tissue. Ultrasound is used to guide a needle to the desired location to take a biopsy, and the progress of the needle can be viewed in real time. The samples of tissue taken are then sent off to the laboratory for analysis.

An ultrasound-guided breast biopsy takes approximately 30 minutes.

BEFORE AN ULTRASOUND-GUIDED BREAST BIOPSY:

- There is no preparation for an ultrasound-guided breast biopsy.
- Your previous imaging will have been reviewed.

AFTER AN ULTRASOUND-GUIDED BREAST BIOPSY:

- A small dressing and an icepack is applied to the skin.
- It may help to take some pain relief, such as Panadol.
- The radiologist will send a written report to your referring doctor once they have received the histology results.

Stereotactic (Mammography-guided) Breast Biopsy:

In a stereotactic breast biopsy, the mammography machine is used to help guide the radiologist's instruments to the site of interest. Stereotactic guidance is used in two biopsy procedures:

- **vacuum-assisted device (VAD)** which uses a vacuum powered instrument to collect multiple tissue samples during one needle insertion, and
- **core needle (CN)** which uses a large hollow needle to remove one sample of breast tissue per insertion.

HOW IS A STEREOTACTIC BREAST BIOPSY PERFORMED?

In most cases you will be positioned lying on your side on a bed. You will then be moved into position against the mammography machine and three mammograms will be taken at different angles. From these images, the coordinates for the biopsy are calculated. Your breast will remain compressed and held in position throughout the procedure.

A biopsy is a sterile procedure that involves an injection of local anaesthetic to numb skin and deeper tissue. The radiologist then inserts the needle and advances it to the correct position using the x-ray and computer generated coordinates. More mammograms are taken to confirm that the needle tip is actually within the area of interest. Tissue samples are then removed using one of the two methods and are sent off to the laboratory for analysis.

A stereotactic breast biopsy takes approximately 30 minutes.

BEFORE A STEREOTACTIC BREAST BIOPSY:

- There is no preparation for a stereotactic breast biopsy.
- Your previous imaging will have been reviewed.

AFTER A STEREOTACTIC BREAST BIOPSY:

- A small dressing is applied to the skin.
- The radiologist will send a written report to your referring doctor once they have received the histology results.

Breast Biopsy CONTINUED

MRI-guided Breast Biopsy

In an MRI-guided breast biopsy, the scanner is used to help guide the radiologist's instruments to the site of interest. Generally, there are two procedures that are used to take biopsies:

- **vacuum-assisted device (VAD)** which uses a vacuum powered instrument to collect multiple tissue samples during one needle insertion, and
- **core needle (CN)** which uses a large hollow needle to remove one sample of breast tissue per insertion.

HOW IS AN MRI-GUIDED BREAST BIOPSY PERFORMED?

You will have a small needle inserted into a vein, usually in your arm. This is to enable the technologist to inject contrast (Gadolinium) during the study to further enhance the images. Sedation is required for this procedure.

You will then be positioned on your tummy on the MRI table in a specially designed breast coil with your head supported. It is important that you are as comfortable as possible during the scan so we can obtain optimal images. Once preliminary scans are done, the images are reviewed and coordinates of the area of interest are calculated.

The radiologist will then clean the skin with antiseptic and inject local anaesthetic to numb skin and deeper tissue. The biopsy needle is inserted into the numbed area and is advanced to the correct position using the coordinates. More images are taken to confirm that the needle tip is actually within the lesion. Tissue samples are then removed using one of the two methods and are sent off to the laboratory for analysis.

An MRI-guided breast biopsy can take up to 2 hours.

BEFORE AN MRI-GUIDED BREAST BIOPSY:

- Because sedation is required, it is important to arrange to have someone drive you home.
- Please have nothing to eat or drink for food for 4 hours before the biopsy.
- Stop taking Aspirin/Cartia five days before the biopsy.
- Contact our nurse if you are on any anticoagulants such as Warfarin, or if you are a diabetic.
- On the morning of your biopsy, take all your other usual medications.

AFTER AN MRI-GUIDED BREAST BIOPSY:

- A small dressing is applied to the skin.
- Rest for the remainder of the day.
- If you have had sedation, please don't drive (or operate any other heavy machinery) for the rest of the day.
- The radiologist will send a written report to your referring doctor once they have received the histology results.