

# A Patient Guide to Breast Localization

## Your FAQs Answered



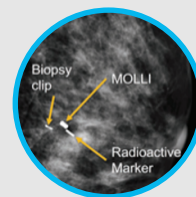
If you've been diagnosed with a breast abnormality, whether cancerous, pre-cancerous or benign, you will likely need a **localization procedure**. This resource provides answers to some of the questions you may be asking as you make decisions about your breast treatment. This document answers the most frequently asked questions patients have about the localization procedure, so you can feel better equipped to discuss surgical options with your doctor.

## What is localization?

Localization is a procedure used to mark the breast before surgery to guide the surgeon in locating the abnormality. It is typically used for breast-conserving surgery, also known as a lumpectomy, where the surgeon's goal is to successfully remove the abnormal tissue.

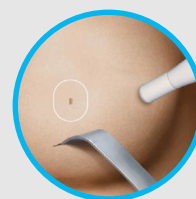
Localization always happens before surgery, either the morning of the surgery or up to 30 days before surgery, depending on the type of localization used. During localization, a radiologist implants a marker or wire into the abnormal tissue that will help the surgeon find its location. Then, during the surgery, the surgeon removes the localization marker or wire, along with the abnormal tissue.

## Steps of a lumpectomy procedure



### 1 Localization

A procedure in Radiology to mark the location of abnormal breast tissue before your surgery.



### 2 Lumpectomy

A procedure to remove abnormal tissue marked during the localization procedure.



### 3 Follow up

A repeat visit with your surgeon to monitor your care.

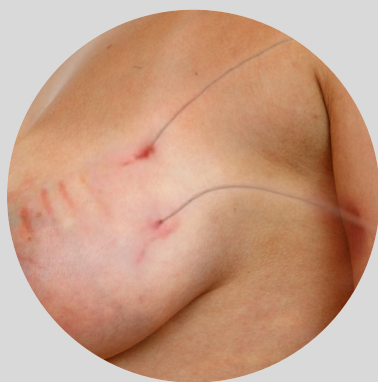
## What are the different types of localization?

There are a number of different options for localization, but they mostly fall into two categories: **wire-guided** and **wire-free**. This chart explains the major differences of each type:

### Wire-Guided Localization



Image Source: www.bd.com



A **wire**, approximately 8 inches, is inserted into the abnormal tissue which **protrudes through the breast**.

This type of localization device is a **wire with a hooked tip** at one end, which is inserted to mark the location of your breast abnormality. The other end of the wire will extend outside the breast. For this reason, the wire localization procedure typically needs to be done the same day as your surgery.

During surgery, your surgeon will use the length of the wire to help locate the breast abnormality.

VS

### Wire-Free Localization



A **small marker** is inserted directly into the abnormal tissue which is detected using a handheld device.

You will have a **simple bandage** covering the site of the incision.

**Wire-free localization** devices are fully implantable, **tiny pellets**, much like a biopsy clip. Depending on your preference, the localization and surgery procedures may be scheduled for the same day or different days.

Throughout the surgery, your surgeon will use a handheld device designed to detect the fully implanted device and locate the breast abnormality.

A few wire-free localization technologies currently available include **magnetic, radioactive, radar** and **infrared**.

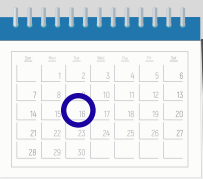
# What to expect from the different types of localization procedures?

The localization procedure will *seem* very similar to your biopsy procedure except no tissue will be removed. **The objective is simply to place the marker.**

When you arrive at the radiology office for localization, you will change into a gown and be given a local anesthetic in the breast that contains the abnormal tissue. The radiologist will implant the wire or marker using mammography or ultrasound as guidance.

**What happens next** depends on the type of localization used.

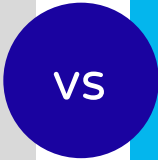
## Wire-Guided Localization



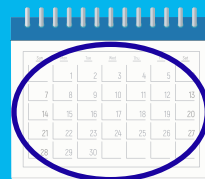
**SAME DAY AS SURGERY**

Plan a full day and an early morning start, around 6 or 7 a.m., in Radiology for the localization procedure. After localization is done, you will need to remain in your hospital gown with the wire in place and wait for your surgery slot while maintaining fasting.

If radiology isn't co-located with your surgery facility, you will need transportation to your surgery while remaining in your gown at all times. A surgery slot may not be available until later in the afternoon. While you wait, you will be required to maintain your fasting from the night before, which sometimes causes fainting.



## Wire-Free Localization



**FLEXIBLE SCHEDULING**

With wire-free localization, surgery to remove the abnormal tissue may be scheduled the **same day or up to 30 days following localization**. You can schedule the localization and surgery procedures independently and around your schedule. The localization procedure takes about as long as a biopsy.

After the procedure, you are free to get dressed while you wait for surgery on the same day, or return home if your surgery is on a separate day. Most patients can resume normal activity while they wait, but talk to your doctor for specific recommendations. No fasting is required for this procedure unless you've chosen to have your surgery on the same day as localization.



Wire

Wire-Free

## Will I be able to choose between wire-guided and wire-free localization?

Surgeons typically use one of these methods based on **several factors**:

- **Their preferences**
- **Their experience and comfort with a technology**
- **Which localization technology is available at their practice or hospital**

If you meet with more than one surgeon as part of your decision-making, you will want to discuss localization during those consultations.

### Ask your prospective surgeon **questions** such as:

- Do you offer wire-free localization options?
- What type of localization method do you use and why?
- How do you see that localization method affecting my surgical experience?
- How long will localization take? How much time should I allow?
- Will I be able to shower, get dressed and go about my normal routine after the localization marker is placed?
- What are surgical outcomes for each type of localization?
- Can I see the implant before localization begins?

# Why do I need a localization device when I already have a biopsy clip?

Though the two markers may seem similar, **they have different functions.**

## Biopsy Clip

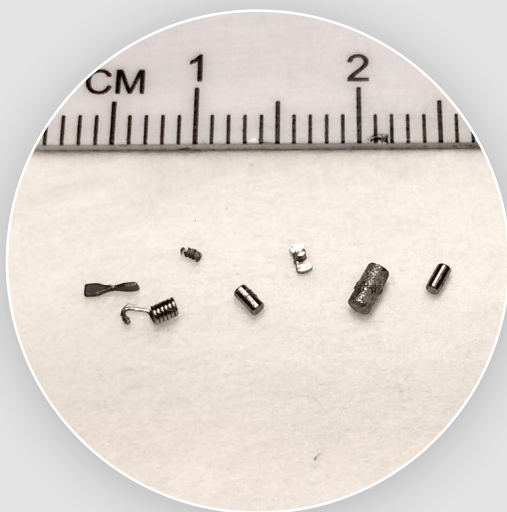


Image Source: twitter.com/AAPAstudents

A **biopsy clip** is a very small titanium marker used to mark the site where the biopsy was performed.

If the biopsy result comes back normal, this small marker will remain in your breast indefinitely and is safe and painless.



## Localization Device



Wire



Wire-Free

If the biopsy result indicates that removal of the abnormal tissue is required, the radiologist needs to insert a wire or small marker as a **localization device** specifically designed to enhance surgical navigation in soft breast tissue.

**The biopsy clip is too small to adequately perform that function.** The localization device allows the surgeon to check location of the breast abnormality continually throughout the procedure, enhancing precision and reliability.

## Other Resources:

Want to learn more about localization or explore other topics involved in breast surgery and recovery? Check out [\*\*Breast Practices\*\*](#), a Facebook Live podcast designed to offer wisdom from leading medical experts in the field as well as patients, survivors, thrivers and caregivers. You'll especially appreciate the [\*\*interview with Christine Dauphine, M.D.\*\*](#), a surgeon at Harbor-UCLA Medical Center, as she discusses the various options patients have during breast localization and surgery.

For more information about **Breast Localization** and the different types of procedures, please consult your physician.