1. What is papillary breast cancer?
The term papillary breast cancer can refer to a number of different types of breast cancer. These include:

- Invasive papillary breast cancer
- Invasive micropapillary breast cancer
- Intracystic/encapsulated/encysted papillary cancer
- Papillary ductal carcinoma in situ

These are often seen alongside other types of breast cancer.

The treatment and outlook for papillary breast cancer will depend on the type of papillary breast cancer as well as its features.

Papillary breast cancer is not the same as the benign (not cancer) condition intraductal papilloma.

2. Symptoms of papillary breast cancer
As with most types of breast cancer, the symptoms of papillary breast cancer include:

- A lump or thickening of the breast tissue
• Changes to the nipple such as nipple discharge or the nipple being pulled in (inverted)
• A change in the size of the breast

Routine breast screening can often pick up cancer before a woman notices any symptoms. Therefore, some women will be diagnosed with papillary breast cancer after attending breast screening without having any of the symptoms above.

3. Diagnosing papillary breast cancer

Papillary breast cancer is diagnosed using a range of tests. These may include:

• A mammogram (breast x-ray)
• An ultrasound scan (using sound waves to produce an image)
• A core biopsy of the breast and sometimes lymph nodes (using a hollow needle to take a sample of breast tissue to be looked at under a microscope – several tissue samples may be taken at the same time)
• A fine needle aspiration (FNA) of the breast and sometimes lymph nodes (using a fine needle and syringe to take a sample of cells to be looked at under a microscope)

4. Treatment for papillary breast cancer

Treatment will depend on the type of papillary breast cancer you have.

Features of the cancer (such as the size, grade, hormone receptor status and HER2 status) will also affect the treatment you’re offered.

**Surgery**

Surgery is usually the first treatment for all types of papillary breast cancer.

There are two main types of surgery:

Breast-conserving surgery, also known as wide local excision or lumpectomy – removal of the cancer with a margin (border) of normal breast tissue around it

Mastectomy – removal of all the breast tissue, usually including the nipple area

The type of surgery recommended depends on:

• Where the cancer is in the breast
• The size of the cancer relative to the size of the breast
• Whether more than one area in the breast is affected
Sometimes more surgery is needed if the margin of normal tissue surrounding the cancer that was removed during the first operation is not clear. This is to ensure all the cancer has been removed. In some cases, this second operation will be a mastectomy.

Most women who have a mastectomy will have the option to have breast reconstruction.

Some women decide not to have, or are unable to have, breast reconstruction. If you have a mastectomy and don't have reconstruction you can wear an artificial breast form (prosthesis) inside your bra to restore your shape. Find out more about breast prostheses, bras and clothes after surgery.

Some women choose not to have reconstruction or wear a prosthesis.

**Surgery to the lymph nodes**

If you have invasive breast cancer, your treatment team will want to check if any of the lymph nodes (glands) under the arm contain cancer cells. This, along with other information about your breast cancer, helps them decide whether you will benefit from any additional treatment after surgery.

Find out more about surgery to the lymph nodes.

If you have intracystic/encapsulated/encysted papillary breast cancer or papillary carcinoma in situ, you’re less likely to have surgery to the lymph nodes. This is because these types rarely spread to the lymph nodes.

**Adjuvant (additional) treatments**

After surgery, depending on the type of papillary breast cancer you have, you may need other treatments. These can include:

- Radiotherapy
- Hormone (endocrine) therapy
- Chemotherapy
- Targeted (biological) therapy
- Bisphosphonates

The aim of these treatments is to reduce the risk of breast cancer returning in the same breast or spreading somewhere else in the body.

Which treatments are recommended will depend on your individual situation.

Some of these treatments may be given before surgery. This is known as neo-adjuvant or primary treatment.
Radiotherapy

If you have breast-conserving surgery you will usually be offered radiotherapy to the breast to reduce the risk of the cancer coming back in the same breast.

Radiotherapy is sometimes given to the chest wall after a mastectomy.

Radiotherapy is likely to be recommended if you have an invasive type of papillary breast cancer.

Hormone (endocrine) therapy

Some breast cancers use the hormone oestrogen in the body to help them grow. These are known as oestrogen receptor (ER) positive breast cancers.

Hormone therapies block or stop the effect of oestrogen on breast cancer cells.

If your cancer is oestrogen receptor positive, your treatment team will discuss with you which hormone therapy they think is most appropriate.

If your breast cancer is not stimulated by oestrogen it is known as oestrogen receptor negative (ER-), and hormone therapy won’t be of benefit.

Chemotherapy

Chemotherapy destroys cancer cells using anti-cancer drugs.

Chemotherapy may be recommended for some people who have an invasive type of papillary breast cancer.

This will depend on various features of the cancer, such as its size, its grade, the hormone receptor and HER2 status and whether the lymph nodes contain cancer cells.

Targeted (biological) therapies

This is a group of drugs that block the growth and spread of cancer.

The type of targeted therapy given will depend on the features of the breast cancer.

The most widely used targeted therapies are for HER2 positive breast cancer. HER2 is a protein that helps cancer cells grow.

Papillary cancers are much less likely to be HER2 positive than some other types of breast cancer.
**Bisphosphonates**

Bisphosphonates are a group of drugs that can reduce the risk of breast cancer spreading in postmenopausal women. They can be used regardless of whether the menopause happened naturally or because of breast cancer treatment.

Your treatment team can tell you if bisphosphonates would be suitable for you.

**5. Coping with a diagnosis of papillary breast cancer**

Being diagnosed with breast cancer can be a difficult and frightening time.

If you’d like any further information and support or just want to talk things through, speak to one of our experts by calling our free Helpline on 0808 800 6000.

Many people find it helps to talk to someone who has been through the same experience as them.

Breast Cancer Now’s Someone Like Me service can put you in touch with someone who has had a diagnosis of breast cancer, so you can talk through your worries and share experiences over the phone or by email.

You can also visit our online Forum and join one of the ongoing discussions.

Find out more about coping emotionally with breast cancer.

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**Last reviewed:** October 2021  
**Next planned review begins 2023**