

cover internal organs — such as breast tissue. All together, “invasive ductal carcinoma” refers to cancer that has broken through the wall of the milk duct and begun to invade the tissues of the breast. Over time, invasive ductal carcinoma can spread to the lymph nodes and possibly to other areas of the body. Although invasive ductal carcinoma can affect women at any age, it is more common as women grow older.

2) Invasive lobular carcinoma (ILC), sometimes called infiltrating lobular carcinoma, is the second most common type of breast cancer after invasive ductal carcinoma (cancer that begins in the milk-carrying ducts and spreads beyond it). Invasive means that the cancer has “invaded” or spread to the surrounding breast tissues. Lobular means that the cancer began in the milk-producing lobules, which empty out into the ducts that carry milk to the nipple. Carcinoma refers to any cancer that begins in the skin or other tissues that cover internal organs — such as breast tissue. All together, “invasive lobular carcinoma” refers to cancer that has broken through the wall of the lobule and begun to invade the tissues of the breast. Over time, invasive lobular carcinoma can spread to the lymph nodes and possibly to other areas of the body. Although invasive lobular carcinoma can affect women at any age, it is more common as women grow older. According to the American Cancer Society, about two-thirds of women are 55 or older when they are diagnosed with an invasive breast cancer. ILC tends to occur later in life than invasive ductal carcinoma — the early 60s as opposed to the mid- to late 50s. Some research has suggested that the use of hormone replacement therapy during and after menopause can increase the risk of ILC.

3) Ductal carcinoma in situ (DCIS) is non-invasive breast cancer. Ductal means that the cancer starts inside the milk ducts, carcinoma refers to any cancer that begins in the skin or other tissues (including breast tissue) that cover or line the internal organs, and in situ means “in its original place.” DCIS is called “non-invasive” because it hasn’t spread beyond the milk duct into any normal surrounding breast tissue. DCIS isn’t life-threatening, but having DCIS can increase the risk of developing an invasive breast cancer later on. When you have had DCIS, you are at higher risk for the cancer coming back or for developing a new breast cancer than a person who has never had breast cancer before. Most recurrences happen within the 5 to 10 years after initial diagnosis. The chances of a recurrence are under 30%.



4) Tubular Carcinoma of the breast is a subtype of invasive ductal carcinoma (cancer that begins inside the breast's milk duct and spreads beyond it into healthy tissue). Tubular carcinomas are usually small (about 1 cm or less) and made up of tube-shaped structures called “tubules.” These tumours tend to be low-grade, meaning that their cells look somewhat similar to normal, healthy cells and tend to grow slowly. Studies also suggest that the average age of diagnosis for tubular carcinoma is the early 50s, although women can be diagnosed with it at any age. This type of cancer is rare in men. Even though tubular carcinoma is an invasive breast cancer, it tends to be a less aggressive type that responds well to treatment. It isn’t likely to spread outside the breast and is considered to have a very good prognosis.

5) Medullary Carcinoma of the breast is a rare subtype of invasive ductal carcinoma (cancer that begins in the milk duct and spreads beyond it), accounting for about 3-5% of all cases of breast cancer. It is called “medullary” carcinoma because the tumour is a soft, fleshy mass that resembles a part of the brain called the medulla. Medullary carcinoma can occur at any age, but it usually affects women in their late 40s and early 50s. Medullary carcinoma is more common in women who have a *BRCA1* mutation. Medullary carcinoma cells are usually high-grade in their appearance and low-grade in their behaviour. In other words, they look like aggressive, highly abnormal cancer cells, but they don’t act like them. Medullary carcinoma doesn’t grow quickly and usually doesn’t spread outside the breast to the lymph nodes. For this reason, it’s typically easier to treat than other types of breast cancer.

6) Mucinous Carcinoma of the breast — sometimes called colloid carcinoma — is a rare form of invasive ductal carcinoma (cancer that begins in the milk duct and spreads beyond it into nearby healthy tissue). In this type of cancer, the tumour is made up of abnormal cells that “float” in pools of mucin, a key ingredient in the slimy, slippery substance known as mucus. Normally, mucus lines most of the inner surface of our bodies, such as our digestive tract, lungs, liver, and other vital organs. Many types of cancer cells — including most breast cancer cells — produce some mucus. In mucinous carcinoma, however, mucin becomes part of the tumour and surrounds the breast cancer cells. Under a microscope, it looks like the cancer cells are scattered throughout pools of mucus. Although mucinous carcinoma can be diagnosed at any age, it tends to affect women after they’ve gone through menopause. Some studies have found that the average age at diagnosis is in the 60s or early 70s. Even though mucinous carcinoma is an invasive breast cancer, it tends to be a less aggressive type that responds well to treatment. Mucinous carcinoma is less likely to spread to the lymph nodes than other types of breast cancer.


7) With Invasive Cribriform Carcinoma of the breast, the cancer cells invade the stroma (connective tissues of the breast) in nest-like formations between the ducts and lobules. Within the tumour, there are distinctive holes in between the cancer cells, making it look something like Swiss cheese. Invasive cribriform carcinoma is usually low grade, meaning that its cells look and behave somewhat like normal, healthy breast cells. In about 5-6% of invasive breast cancers, some portion of the tumour can be considered cribriform. Usually, some ductal carcinoma in situ (DCIS) of the cribriform type is present as well.



8) Inflammatory breast cancer (IBC) is a rare and aggressive form of breast cancer. Inflammatory breast cancer usually starts with the reddening and swelling of the breast instead of a distinct lump. IBC tends to grow and spread quickly, with symptoms worsening within days or even hours. It’s important to recognize symptoms and seek prompt treatment. Although inflammatory breast cancer is a serious diagnosis, keep in mind that treatments today are better at controlling the disease than they used to be.

Male Breast Cancer –

Breast cancer in men is a rare disease. Less than 1% of all breast cancers occur in men. For men, the lifetime risk of being diagnosed with breast cancer is about 1 in 1,000. You may be thinking: Men don't have breasts, so how can they get breast cancer? The truth is that boys and girls, men and women all have breast tissue. The various hormones in girls' and women's bodies stimulate the breast tissue to grow into full breasts. Boys' and men's bodies normally don't make much of the breast-stimulating hormones. As a result, their breast tissue usually stays flat and small. Still, you may have seen boys and men with medium-sized or big breasts. Usually these breasts are just mounds of fat. But sometimes men can develop real breast gland tissue because they take certain medicines or have abnormal hormone levels. Because breast cancer in men is rare, few cases are available to study. Most studies of men with breast cancer are very small. But when a number of these small studies are grouped together, we can learn more from them.



SIGNS OF MALE BREAST CANCER

- A lump or thickening in breast tissue
- The lump increasing in size and turning painful
- Skin covering the breast turning orange
- Occurrence of dimpling, puckering, redness or scaling on the breast
- Nipples turning inwards or discharge from them

DANGERS

Breast cancer in men is often diagnosed later than breast cancer in women, making it tough to treat. This may be because men are less likely to be suspicious of something strange in that area. Also, their small amount of breast tissue is harder to feel, making it harder to catch these cancers early.

DIAGNOSIS & TREATMENT

The same techniques that are used to diagnose breast cancer in women are used in men: physical exams, mammography, and biopsies (examining small samples of tissue under a microscope).

The same treatments that are used in treating breast cancer in women – surgery, radiation, chemotherapy, biological therapy, and hormone therapy – are also used to treat breast cancer in men.

Metastatic breast cancer (also called stage IV) is breast cancer that has spread to another part of the body, most commonly the liver, brain, bones, or lungs. Cancer cells can break away from the original tumour in the breast and travel to other parts of the body through the bloodstream or the lymphatic system, which is a large network of nodes and vessels that works to remove bacteria, viruses, and cellular waste products. Breast cancer can come back in another part of the body months or years after the original diagnosis and treatment. Nearly 30% of women diagnosed with early-stage breast cancer will develop metastatic disease. Some people have metastatic breast cancer when they are first diagnosed with breast cancer (called “de novo metastatic”). This means that the cancer in the breast wasn’t detected before it spread to another part of the body. A metastatic tumour in a different part of the body is made up of cells from the breast cancer. So if breast cancer spreads to the bone, the metastatic tumour

Why is metastatic breast cancer a problem?

Metastatic breast cancer is the main cause of death from breast cancer

A third of women with breast cancer will also have metastatic breast cancer later in life

Treatments are not targeted or very effective at this stage

5-year survival for women with metastatic is 26%, compared to 90% for all women with the disease

in the bone is made up of breast cancer cells, not bone cells. Being diagnosed with metastatic breast cancer can be overwhelming. You may feel angry, scared, stressed, outraged, and depressed. Some people may question the treatments they had or may be mad at their doctors or themselves for not being able to beat the disease. Others may deal with diagnosis of metastatic breast cancer in a matter-of-fact way. There is no right or wrong way to come to terms with the diagnosis. You need to do and feel what is best for you and your situation.

Keep in mind that metastatic disease is NOT hopeless. Many people continue to live long, productive lives with breast cancer in this stage. There are a wide variety of treatment options for metastatic breast cancer, and new medicines are being tested every day. More and more people are living life to the fullest while being treated for metastatic breast cancer. While metastatic breast cancer may not go away completely, treatment may control it for a number of years. If one treatment stops working, there usually is another you can try. The cancer can be active sometimes and then go into remission at other times. Many different treatments — alone, in combination, or in sequence — are often used. Taking breaks in treatment when the disease is under control and you are feeling good can make a big difference in your quality of life.

Bone Metastasis –

The bones are the most common place where metastatic breast cancer cells tend to go. For more than half of women who develop stage IV breast cancer, the bones are the first site of metastasis. Although breast cancer can spread to any bone, the most common sites are the ribs, spine, pelvis, and long bones in the arms and legs. A sudden, noticeable new pain is the most common symptom of cancer that has spread to the bone. It may come and go at first, but over time it can become constant. It can be hard to tell the difference between bone metastasis pain and pain due to arthritis or an exercise strain. If the pain feels just as bad or even worse when you rest or lie down, that can be a sign of a problem. Don't wait to get it checked out; if it is bone metastasis, prompt treatment can prevent a fracture down the road.

If you develop a skeletal-related event or SRE as a complication of bone metastasis, symptoms can include:

Sudden severe pain and the inability to move, which can be a sign of fracture.

Pain in the back or neck; numbness or weakness in an area of the body; or difficulty passing urine or having bowel movements. All can indicate a spinal cord compression, in which a fractured vertebra presses on the nerves in the spinal cord that control various bodily functions.

Fatigue, weakness, nausea, loss of appetite, and/or dehydration, which all can indicate very high levels of calcium in the blood due to bone breakdown.

Lung Metastasis –

When breast cancer moves into the lung, it often doesn't cause symptoms. Instead, a tumour might be first discovered on an imaging study done as part of treatment follow-up, such as a chest CT (computed tomography) scan.

If a lung metastasis does cause symptoms, they may include:

- pain or discomfort in the lung
- shortness of breath
- wheezing/singing of the chest/lung cavity
- persistent cough
- coughing up blood and mucus

It can be difficult to tell the difference between symptoms of lung metastasis and symptoms of the common cold or upper respiratory conditions — especially if it's cold and flu season, or you have a history of respiratory problems. Many doctors recommend that any unusual symptoms persisting for more than a week or two should be checked out.

Brain Metastasis –

About 10-15% of women with stage IV breast cancer develop brain metastases. For most, the breast cancer has already travelled to another part of the body, such as the bones, liver, or lung. However, for about 17% of women in this group, the brain is the only site of metastasis. The risk of cancer spread to the brain is usually highest for women with more aggressive subtypes of breast cancer, such as HER2-positive or triple-negative breast cancer.

Symptoms of breast cancer in the brain can include:

- headache
- changes in senses controlled by the brain such as slurred speech, blurred vision, balance problems, dizziness, or anything else that seems unusual
- memory problems
- mood or personality changes
- seizures
- stroke or “brain attack,” in which blood supply to the brain is cut off; symptoms can include sudden weakness or numbness on one side of the body, headache, trouble speaking, vision changes, dizziness and/or loss of balance

Liver Metastasis –

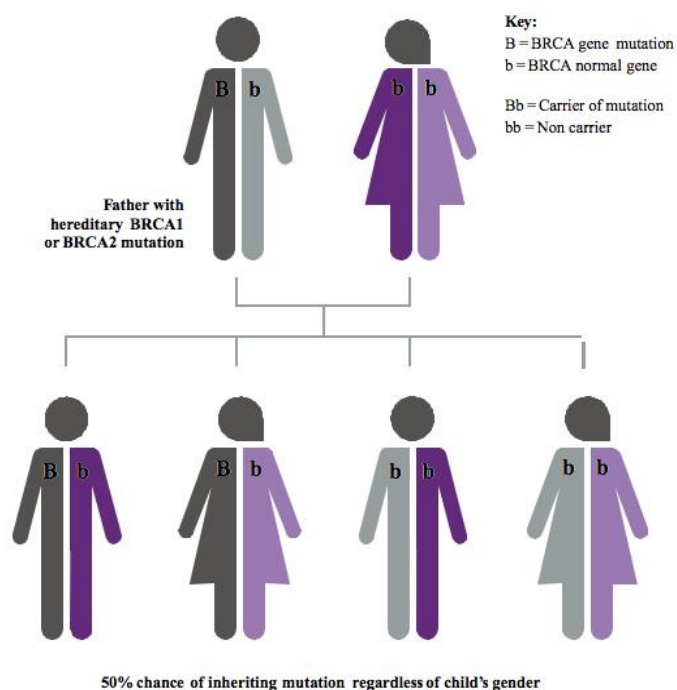
When breast cancer moves into the liver, it often doesn't cause symptoms. It may first be picked up by liver function tests, which are blood tests that measure certain levels of enzymes and proteins in the blood. Abnormal levels can indicate liver disease or damage.

If liver metastasis causes symptoms, they can include:

- pain or discomfort in the mid-section
- fatigue and weakness
- weight loss/poor appetite
- fever
- bloating
- swelling in the legs
- a yellow tint to the skin or the whites of the eyes

What are BRCA genes?

BRCA1 and BRCA2 are human genes that produce tumour suppressor proteins. These proteins help repair damaged DNA and, therefore, play a role in ensuring the stability of each cell's genetic material. When either of these genes is mutated, or altered, such that its protein product is not made or does not function correctly, DNA damage may not be repaired properly.



As a result, cells are more likely to develop additional genetic alterations that can lead to cancer.

Specific inherited mutations in BRCA1 and BRCA2 most notably increase the risk of female breast and ovarian cancers, but they have also been associated with increased risks of several additional types of cancer.

People who have inherited mutations in BRCA1 and BRCA2 tend to develop breast and ovarian cancers at younger ages than people who do not have these mutations. A harmful BRCA1 or BRCA2 mutation can

be inherited from a person's mother or father. Each child of a parent who carries a mutation in one of these genes has a 50% chance (or 1 chance in 2) of inheriting the mutation. The effects of mutations in BRCA1 and BRCA2 are seen even when a person's second copy of the gene is normal.

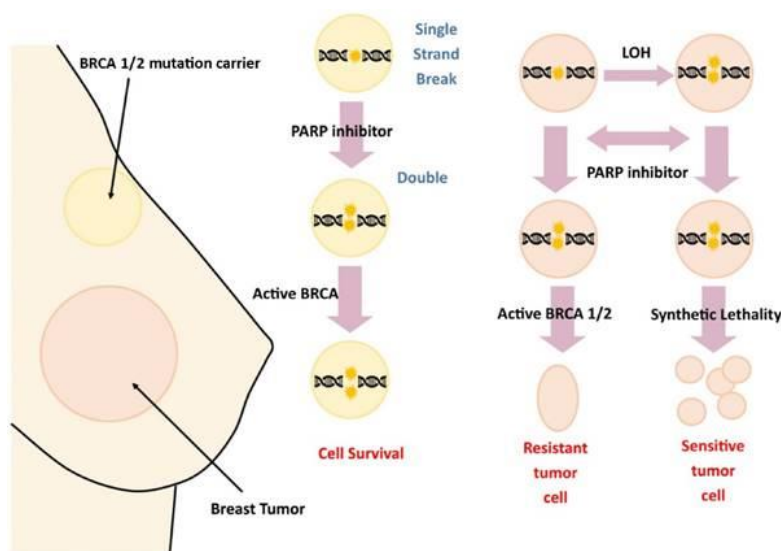
What is the BRCA mutation?

A BRCA mutation is a mutation in either of the BRCA1 and BRCA2 genes, which are tumour suppressor genes. Hundreds of different types of mutations in these genes have been identified, some of which have been determined to be harmful, while others have no proven impact. Harmful mutations in these genes may produce a hereditary breast-ovarian cancer syndrome in affected persons. Only 5-10% of breast cancer cases in women are attributed to BRCA1 and BRCA2 mutations (with BRCA1 mutations being slightly more common than BRCA2 mutations), but the impact on women with the gene mutation is more profound. Women with harmful mutations in either BRCA1 or BRCA2 have a risk of breast cancer that is about five times the normal risk, and a risk of ovarian cancer that is about ten to thirty times normal. The risk of breast and ovarian cancer is higher for women with a high-risk BRCA1 mutation than with a BRCA2 mutation. Having a high-risk mutation does not guarantee that the woman will develop any type of cancer, or imply that any cancer that appears was actually caused by the mutation, rather than some other factor. Mutations can be inherited from either parent and may be passed on to both sons and daughters.

Each child of a genetic carrier, regardless of sex, has a 50% chance of inheriting the mutated gene from the parent who carries the mutation. As a result, half of the people with BRCA gene mutations are male, who would then pass the mutation on to 50% of their offspring, male or female. The risk of BRCA-related breast cancers for men with the mutation is higher than for other men, but still low. However, BRCA mutations can increase the risk of other cancers, such as colon cancer, pancreatic cancer, and prostate cancer.

What other cancers have been linked to mutations in BRCA1 and BRCA2?

Harmful mutations in BRCA1 and BRCA2 increase the risk of several cancers in addition to breast and ovarian cancer. These include fallopian tube cancer and peritoneal cancer. Men with BRCA2 mutations, and to a lesser extent BRCA1 mutations, are also at increased risk of breast cancer and prostate cancer. Both men and women with harmful BRCA1 or BRCA2 mutations are at increased risk of pancreatic cancer. Certain mutations in BRCA2 (also known as FANCD1), if they are inherited from both parents, can cause a rare form of Fanconi anemia (subtype FA-D1), a syndrome that is associated with childhood solid tumours and development of acute myeloid leukaemia. Likewise, certain mutations in BRCA1 (also known as FANCS), if they are inherited from both parents, can cause another Fanconi anemia subtype.



Are mutations in BRCA1 and BRCA2 more common in certain racial/ethnic populations than others?

Yes.

For example, people of Ashkenazi Jewish descent have a higher prevalence of harmful BRCA1 and BRCA2 mutations than people in the general population. Other ethnic and geographic populations around the world, such as the Norwegian, Dutch, and Icelandic decedents, also

have a higher prevalence of specific harmful BRCA1 and BRCA2 mutations. In addition, the prevalence of specific harmful BRCA1 and BRCA2 mutations may vary among individual racial and ethnic groups including central African (first nation central African Great Lakes) communities and descendants, Hispanics, Asian Americans, and non-Hispanic Caucasians.

Are genetic tests available to detect BRCA1 and BRCA2 mutations?

Yes.

Several different tests are available. Some tests look for a specific harmful BRCA1 or BRCA2 gene mutation that has already been identified in another family member. Other tests check for all of the known harmful mutations in both genes. Multigene (panel) testing uses next-generation sequencing to look for harmful mutations in many genes that are associated with an increased risk of breast and ovarian cancer, including BRCA1 and BRCA2, at the same time. DNA (usually from a blood or saliva sample) is needed for all of these tests. The sample is sent to a laboratory for analysis. It usually takes about a month to get the test results.

Who should consider genetic testing for BRCA1 and BRCA2 mutations?

Because harmful BRCA1 and BRCA2 gene mutations are relatively rare in the general population, most experts agree that mutation testing of individuals who do not have cancer should be performed only when the person's individual or family history suggests the possible presence of a harmful mutation in BRCA1 or BRCA2.

It is recommended that women who have family members with breast, ovarian, fallopian tube, or peritoneal cancer be evaluated to see if they have a family history that is associated with an increased risk of a harmful mutation in one of these genes. Several screening tools are available to help health care providers with this evaluation.

These tools assess personal or family history factors that are associated with an increased likelihood of having a harmful mutation in BRCA1 or BRCA2, such as:

- Breast cancer diagnosed before age 50 years
- Cancer in both breasts in the same woman
- Both breast and ovarian cancers in either the same woman or the same family
- Multiple breast cancers in the family
- Two or more primary types of BRCA1- or BRCA2-related cancers in a single family member
- Cases of male breast cancer
- Ashkenazi Jewish ethnicity

When an individual has a family history that is suggestive of the presence of a BRCA1 or BRCA2 mutation, it may be most informative to first test a family member who has cancer, if that person is still alive and willing to be tested.

If that person has a harmful BRCA1 or BRCA2 mutation, then other family members may want to consider genetic counselling to learn more about their potential risks and whether genetic testing for mutations in BRCA1 and BRCA2 might be appropriate for them.

BRCA MUTATION BREAST SCREENING*

PROCEDURE	STARTING AGE	FREQUENCY
Self Exam	18	Monthly
Physician Exam	25	Every 6-12 Months
MRI	25	Annually
Mammogram	30	Annually

* From pennmedicine.org's Abramson Cancer Center

livelytable.com



Understanding Hormone Receptors and What They Do?

Cell receptors, including hormone receptors, are special proteins found within and on the surface of certain cells throughout the body, including breast cells.

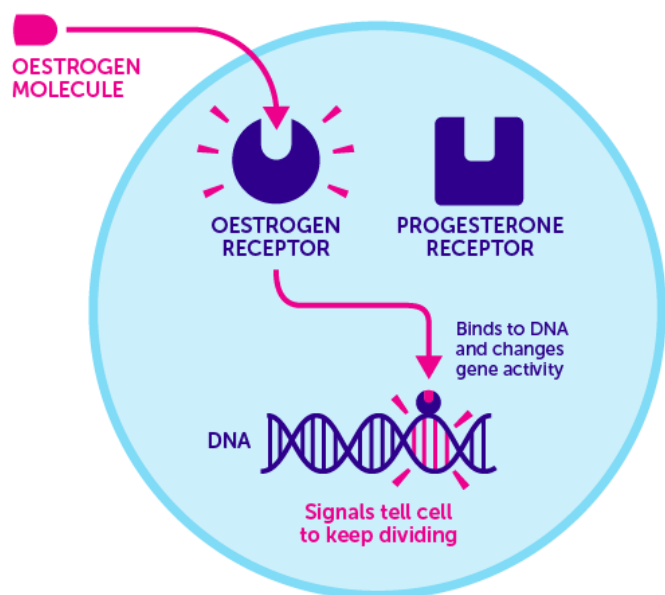
These receptor proteins are the “eyes” and “ears” of the cells, receiving messages from substances in the bloodstream and then telling the cells what to do. In other words, the receptors act like an on-off switch for a particular activity in the cell. If the right substance comes along that fits into the receptor — like a key fitting into a lock — the switch is turned on and a particular activity in the cell begins.

One type of receptor found in normal breast cells is the hormone receptor. By attaching to hormone receptors, oestrogen and/or progesterone contribute to the growth and function of breast cells. Oestrogen and progesterone are often called “female hormones” because they play an important role in women’s menstrual cycle, sexual development, pregnancy, and childbirth.

Even after menopause, however, women continue to have these hormones in their bodies. Men have them, too, although in much smaller amounts than women. Like healthy breast cells, most breast cancer cells — but not all — have hormone receptors and respond to the signals coming from these hormones. Knowing whether or not breast cancer cells have hormone receptors is an important piece of information for making treatment decisions.

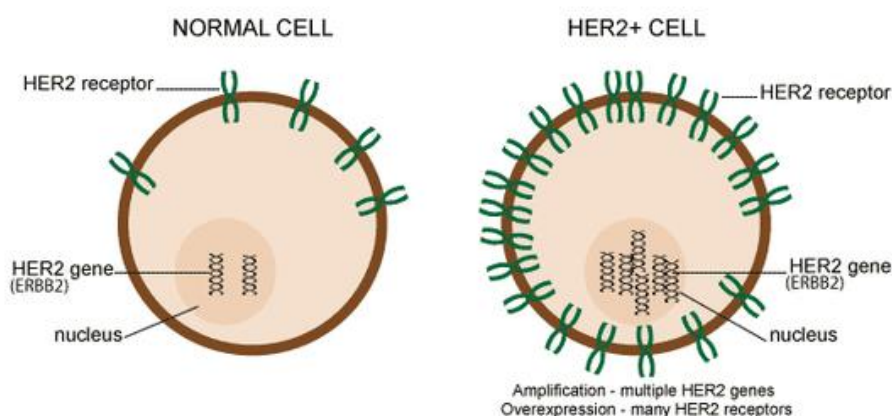
For hormone-receptor-positive breast cancer cells, hormonal therapy can be used to interrupt the influence of hormones on the cells’ growth and overall functioning. If you take the hormone away or block it, as these medications do, the cancer cells are less likely to survive. It’s also worth noting that some breast cancers that are hormone-receptor-positive can lose their receptors over time. The opposite is also true: hormone-receptor-negative cancers can gain receptors. If the breast cancer recurs in the future as advanced disease, doctors should order a repeat biopsy and retest the cancer for hormone receptors. If the cancer cells no longer have receptors, hormonal therapy is unlikely to help treat the cancer. If the cells have gained hormone receptors, however, then hormonal therapy may be helpful.

OESTROGEN FUELS THE GROWTH AND DIVISION OF BREAST CANCER CELLS



What are HER2 genes?

HER2 (human epidermal growth factor receptor 2) is a gene that can play a role in the development of breast cancer. Your pathology report should include information about HER2 status, which tells you whether or not HER2 is playing a role in the cancer. Genes contain the recipes for the various proteins a cell needs to stay healthy and function normally. Some genes and the proteins they make can influence how a breast cancer behaves and how it might respond to a specific treatment.



Cancer cells from a tissue sample can be tested to see which genes are normal and abnormal. The proteins they make can also be tested. The HER2 gene makes HER2 proteins (also sometimes referred to as HER2/neu proteins). HER2 proteins are

receptors on breast cells. Normally, HER2 receptors help control how a healthy breast cell grows, divides, and repairs itself. But in about 25% of breast cancers, the HER2 gene doesn't work correctly and makes too many copies of itself (known as HER2 gene amplification). All these extra HER2 genes tell breast cells to make too many HER2 receptors (HER2 protein overexpression). This makes breast cells grow and divide in an uncontrolled way. Breast cancers with HER2 gene amplification or HER2 protein overexpression are called HER2-positive in the pathology report. HER2-positive breast cancers tend to grow faster and are more likely to spread and come back compared to HER2-negative breast cancers. But there are medicines specifically for HER2-positive breast cancers

What is Triple Negative Breast Cancer?

Your pathology report may say that the breast cancer cells tested negative for oestrogen receptors (ER-), progesterone receptors (PR-), and HER2 (HER2-). Testing negative for all three means the cancer is triple-negative. These negative results mean that the growth of the cancer is not supported by the hormones oestrogen and progesterone, nor by the presence of too many HER2 receptors. Therefore, triple-negative breast cancer does not respond to hormonal therapy (such as tamoxifen or aromatase inhibitors) or therapies that target HER2 receptors, such as Herceptin (chemical name: trastuzumab). However, other medicines can be used to treat triple-negative breast cancer. About 10-20% of breast cancers — more than one out of every 10 — are found to be triple-negative. In addition, triple-negative breast cancer tends to be more aggressive than other types of breast cancer.

A study found that African women, women with African or Hispanic decent, with BRCA1 mutation were 3 times more likely to develop triple-negative breast cancer than Caucasian women. When people with an inherited BRCA1 mutation develop breast cancer, it is especially before age 50, it is usually found to be triple-negative.



Breast cancer prevention –

Breast cancer prevention starts with healthy habits such as limiting alcohol and staying physically active. Understand what you can do to reduce your breast cancer risk plays a pivotal role in fighting breast cancer.

Limit alcohol. The more alcohol you drink, the greater your risk of developing breast cancer. The general recommendation — based on research on the effect of alcohol on breast cancer risk — is to limit yourself to less than 1 drink per day as even small amounts increase risk.

Don't smoke. Accumulating evidence suggests a link between smoking and breast cancer risk, particularly in premenopausal women. In addition, not smoking is one of the best things you can do for your overall health.

Control your weight. Being overweight or obese increases the risk of breast cancer. This is especially true if obesity occurs later in life, particularly after menopause.

Be physically active. Physical activity can help you maintain a healthy weight, which, in turn, helps prevent breast cancer. For most healthy adults at least 150 minutes a week of moderate aerobic activity or 75 minutes of vigorous aerobic activity weekly, plus strength training at least twice a week, is recommended.

Breast-feed. Breast-feeding might play a role in breast cancer prevention. The longer you breast-feed, the greater the protective effect.

Limit dose and duration of hormone therapy. Combination hormone therapy for more than three to five years increases the risk of breast cancer. If you're taking hormone therapy for menopausal symptoms, ask your doctor about other options. You might be able to manage your symptoms with non-hormonal therapies and medications. If you decide that the benefits of short-term hormone therapy outweigh the risks, use the lowest dose that works for you and continue to have your doctor monitor the length of time you are taking hormones.

Avoid exposure to radiation and environmental pollution. Medical-imaging methods, such as computerized tomography, use high doses of radiation. While more studies are needed, some research suggests a link between breast cancer and radiation exposure. Reduce your exposure by having such tests only when absolutely necessary.

Can a healthy diet prevent breast cancer?

Eating a healthy diet might decrease your risk of some types of cancer, as well as diabetes, heart disease and stroke. For example, women who eat a Mediterranean diet supplemented with extra-virgin olive oil and mixed nuts might have a reduced risk of breast cancer. The Mediterranean diet focuses on mostly on plant-based foods, such as fruits and vegetables, whole grains, legumes and nuts. People who follow the Mediterranean diet choose healthy fats, like olive oil, over butter and fish instead of red meat.

Is there a link between birth control pills and breast cancer?

There's some evidence that hormonal contraception, which includes birth control pills and intrauterine devices (IUDs) that release hormones, increases the risk of breast cancer. An elevated breast cancer risk was found among not only users of hormonal birth control pills, contraceptive patches, and vaginal rings, but also women who used progestin-only implants and injections and hormonal IUDs. But the risk is considered very small, and it decreases after you stop using hormonal contraceptives. Discuss your contraceptive options with your health care provider based on your particular needs. Also consider the benefits of hormonal contraception, such as controlling menstrual bleeding and reducing the risk of other cancers, including endometrial cancer and ovarian cancer.



Breast Cancer Signs and Symptoms:

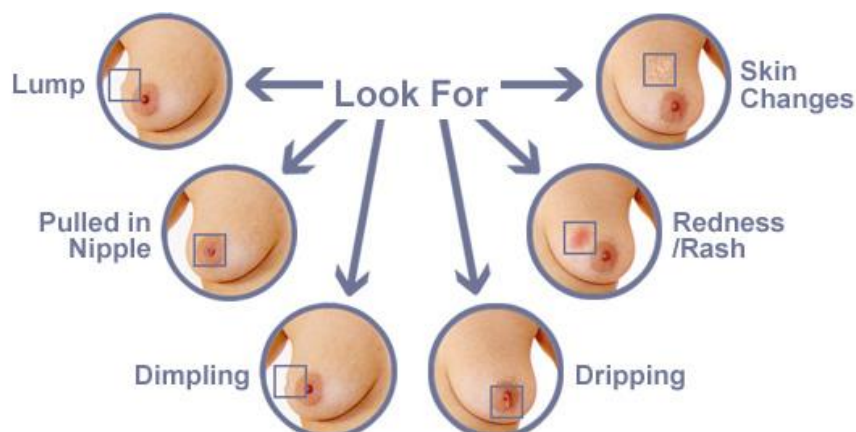
Knowing how your breasts normally look and feel is an important part of breast health. Finding breast cancer as early as possible gives you a better chance of successful treatment.

- The most common symptom of breast cancer is a new lump or mass.
- A painless, hard mass that has irregular edges is more likely to be cancer, but breast cancers can be tender, soft, or rounded. They can even be painful. For this reason, it is important to have any new breast mass, lump, or breast change checked by a health care professional experienced in diagnosing breast diseases.

Other possible symptoms of breast cancer include:

- 1) Swelling of all or part of a breast (even if no distinct lump is felt)
- 2) Skin irritation or dimpling (sometimes looking like an orange peel)
- 3) Breast or nipple pain
- 4) Nipple retraction (turning inward)
- 5) Redness or thickening of the nipple or breast skin (like scales)
- 6) Nipple discharge (other than breast milk)
- 7) Sometimes a breast cancer can spread to lymph nodes under the arm or around the collar bone and cause a lump or swelling there, even before the original tumour in the breast is large enough to be felt. Swollen lymph nodes should also be checked by a health care provider.

Although any of these symptoms can be caused by things other than breast cancer, if you have them, they should be reported to a health care professional so that the cause can be found.



What else can I do?

Be vigilant about breast cancer detection. If you notice any changes in your breasts, such as a new lump or skin changes, consult your doctor.

Adult women of all ages are encouraged to perform breast self-exams at least once a month.

Visit your healthcare provider and have a clinical breast examination conducted.

Also, ask your doctor when to begin breast screenings (ultrasound etc.) based on your personal history.

How Should A Breast Self-Exam Be Performed?

1) In the Shower - Using the pads of your fingers, move around your entire breast in a circular pattern moving from the outside to the centre, checking the entire breast and armpit area. Check both breasts each month feeling for any lump, thickening, or hardened knot. Notice any changes and get lumps evaluated by your healthcare provider.



In the shower

2) In Front of a Mirror - Visually inspect your breasts with your arms at your sides. Next, raise your arms high overhead. Look for any changes in the contour, any swelling, or dimpling of the skin, or changes in the nipples. Next, rest your palms on your hips and press firmly to flex your chest muscles. Left and right breasts will not exactly match—few women's breasts do, so look for any dimpling, puckering, or changes, particularly on one side.



In front of a mirror

3) Lying Down - When lying down, the breast tissue spreads out evenly along the chest wall. Place a pillow under your right shoulder and your right arm behind your head. Using your left hand, move the pads of your fingers around your right breast gently in small circular motions covering the entire breast area and armpit. Use light, medium, and firm pressure. Squeeze the nipple; check for discharge and lumps. Repeat these steps for your left breast.



Lying down



Breast Cancer CAN be successfully treated & cured if diagnosed early!

Breast Cancer Treatments

- Surgery
- Chemotherapy
- Radiation Therapy
- Hormone Therapy
- Immunotherapy