

Cancer Association of South Africa (CANSA)

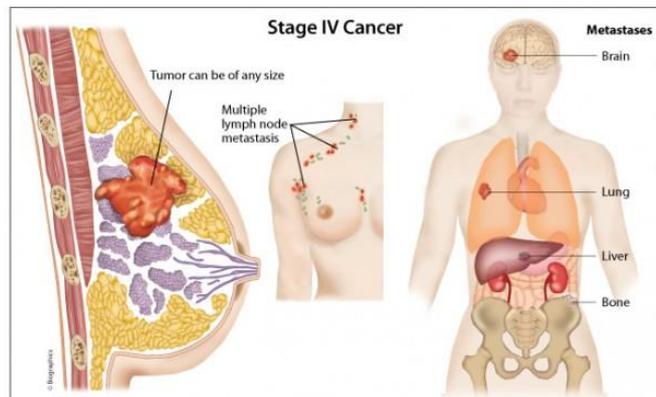


Fact Sheet on Metastatic Breast Cancer

Introduction

Metastatic breast cancer is cancer that has spread beyond the breast and lymph nodes under the arm. It occurs in both men and women. The most common sites where breast cancer spreads to are the bones, lungs, liver and brain.

[Picture Credit: Stage IV]



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 from the body.

The metastatic tumour in a different part of the body is made up of cells from the breast cancer. For instance, if breast cancer spreads to the bone, the metastatic tumour in the bone is made up of breast cancer cells, not bone cells.

Breast cancer can be "metastatic at diagnosis". This means that the cancer in the breast was not detected before it spread to another part of the body. It is also known as cancer of unknown primary (CUP).

No one dies from breast cancer that remains in the breast. The lump itself is not what kills. The spread of cancerous cells to a vital organ is what kills. This is called metastasis. Metastasis refers to the spread of the cancer to distant organs. When the cancer does so, it is known as metastatic, or stage IV, disease.

Research shows that in about 6 -10 % of all breast cancer patients, the cancer has spread to distant organs and is classified as Stage IV at the time of the first diagnosis. In the majority of patients with metastatic breast cancer, the metastasis is diagnosed after a cancer has already been treated at an earlier stage.

Metastatic breast cancer is also known as 'mbc', stage IV or Advanced Breast Cancer.

Incidence of Metastatic Breast Cancer in South Africa

According to the National Cancer Registry (2014) the following number of breast cancer cases in women was histologically diagnosed during 2014:

Group	Actual Number of Cases	Estimated Lifetime Risk	Percentage of All Cancers
2014			
All females	8 230	1 : 27	21,78%
Asian females	456	1 : 15	39,30%
Black females	3 226	1 : 53	20,05%
Coloured females	1 169	1 : 19	28,57%
White females	3 370	1 : 11	20,51%

Frequency of Histologically Diagnosed Cases of Breast Cancer

According to the National Cancer Registry (2014), the frequency of histologically diagnosed cases of breast cancer in women in South Africa is as follow:

Group	0 to 19 Years	20 to 29 Years	30 to 39 Years	40 to 49 Years	50 to 59 Years	60 to 69 Years	70 to 79 Years	80 + Years
2014								
All females	8	121	805	1 763	1 937	1 799	1 129	525
Asian females	1	5	33	89	109	118	67	19
Black females	6	84	469	789	722	526	287	174
Coloured females	0	11	90	266	300	237	166	72
White females	1	17	187	586	769	889	589	250

It must be noted that correct cancer figures will only be available as from the 2012 statistics because it only became an obligation to report all cases of cancer to the National Cancer Registry during 2011.

Diagnosis of Metastatic Breast Cancer

A metastatic tumour is always caused by cancer cells from another part of the body.

In most cases, when a metastatic tumour is found first, the primary cancer can also be found. The search for the primary cancer may involve laboratory tests, X-rays, computed tomography (CT) scans, magnetic resonance imaging (MRI) scans, positron emission tomography (PET) scans, and other procedures.

However, in some patients, a metastatic tumour is diagnosed but the primary tumour cannot be found, despite extensive tests, because it either is too small or has completely regressed. The pathologist knows that the diagnosed tumour is a metastasis because the cells do not look like those of the organ or tissue in which the tumour was found. Doctors refer to the primary cancer as unknown or occult (hidden), and the patient is said to have cancer of unknown primary (CUP).

Some women have metastatic breast cancer when they are first diagnosed, but this is not common (approximately five percent of diagnoses). More commonly, metastatic breast cancer arises months or years after a person has completed treatment for early or locally advanced (stage I, II or III) breast cancer. This is sometimes called distant recurrence.

Researched and Authored by Prof Michael C Herbst

[D Litt et Phil (Health Studies); D N Ed; M Art et Scien; B A Cur; Dip Occupational Health; Dip Genetic Counselling; Dip Audiometry and Noise Measurement; Medical Ethicist]

Approved by Ms Elize Joubert, Chief Executive Officer [BA Social Work (cum laude); MA Social Work]

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Some people with metastatic tumours do not have symptoms. Their metastases are found by X-rays or other tests.

When symptoms of metastatic cancer occur, the type and frequency of the symptoms will depend on the size and location of the metastasis. For example, cancer that spreads to the bone is likely to cause pain and can lead to bone fractures. Cancer that spreads to the brain can cause a variety of symptoms, including headaches, seizures, and unsteadiness. Shortness of breath may be a sign of lung metastasis. Abdominal swelling or jaundice (yellowing of the skin) can indicate that cancer has spread to the liver.

Sometimes a person's original cancer is discovered only after a metastatic tumour causes symptoms.

Treatment of Metastatic Breast Cancer

Treatments for metastatic and earlier-stage breast cancer are very different. For earlier-stage breast cancer - particularly for women who are relatively young and healthy - doctors will often advise a very aggressive, rigorous course of treatment aimed at getting rid of the cancer completely. The side effects can be difficult, but there is a finish line in sight: initial breast cancer treatment usually lasts no more than six to nine months.

With metastatic cancer, some form of treatment will be a fact of life, more or less, as from the date of commencement of treatment. This means the treatment philosophy changes. The aim of treatment changes to gain maximal control of the tumour at the lowest possible cost in terms of toxicity.

Research shows that Metastatic Breast Cancer is best treated by a team of specialists. The medical team may include:

- surgeon: performs biopsies and other procedures and removes single metastatic cancers
- medical oncologist: specialises in chemotherapy, hormonal therapy, targeted therapies, pain medications, and nutritional support
- radiation oncologist: specialises in radiation therapy
- radiologist: takes and interprets mammograms, ultrasounds, bone scans, CT scans, MRIs, PET scans, and other tests to determine the location and size of the cancer and to help determine how the cancer is responding to treatment
- pathologist: examines the biopsy sample and conducts special tests on cancer tissue to determine the "personality" of the cancer (characteristics such as hormone-receptor status and HER2 status)

It may seem logical to assume that metastatic breast cancer has the same hormone-receptor status and HER2 status as the original cancer. Research has shown that the "personality" of the recurrent or metastatic cancer may be different than the original cancer. For example, the hormone-receptor status may change from hormone-receptor-positive to hormone-receptor-negative or *vice versa*. The HER2 status also may be different than the original breast cancer. If either of these factors have changed, they can affect the treatment plan.

A mutation in the oestrogen receptor 1 (*ESR1*) gene portends a worse prognosis among patients with oestrogen receptor (ER)-positive, metastatic breast cancer. A mutation in this gene may confer resistance to aromatase inhibitor (AI) therapy.

Pain Control and Palliation for Metastatic Breast Cancer

With metastatic breast cancer, pain can be related to treatment or the cancer itself. Pain is not the same for everyone. Even among people at a similar stage of disease, pain can vary. Some people have more intense and more frequent pain than others.

One should never feel pain is simply a part of one's treatment or that one should be strong and endure it. Even when pain is mild, it can interfere with daily life and make other side effects, such as fatigue, seem worse. Let the health care provider(s) know about any pain or discomfort that may be experienced.

Pain is usually easier to treat when one first has it. Waiting until the pain is severe before getting relief can make it harder to control and may require more medication. That is why it is so important to talk with one's health care provider about pain. Sometimes, treatment plans can be changed to reduce painful side effects.

Every visit with one's health care provider should include a discussion of pain. The health care provider can change the type and dose of pain medication throughout one's care in response to specific needs.

A health care provider may also suggest other types of pain control as needs change. This ensures one is getting the most benefit from available therapies and is as comfortable as possible.

Palliative care and pain specialists (physicians, nurse practitioners and nurses) treat pain from cancer or other causes. They can treat people with early breast cancer as well as those with metastatic cancer.

Palliative medicine is a medical specialty, just like oncology. Palliative care specialists give extra care to help people maintain the best quality of life possible. They have special training in pain management and symptom management.

Be sure to ask the oncologist for a referral if pain is not controlled or in the event of having side effects from the pain medications. The provider should be able to follow the specialist's recommendations and carry out the pain management. If the treatment is effective, one should not need to see the specialist again.

About Clinical Trials

Clinical trials are research studies that involve people. They are conducted under controlled conditions. Only about 10% of all drugs started in human clinical trials become an approved drug.

Clinical trials include:

- Trials to test effectiveness of new treatments

- Trials to test new ways of using current treatments
- Tests new interventions that may lower the risk of developing certain types of cancers
- Tests to find new ways of screening for cancer

The **South African National Clinical Trials Register** provides the public with updated information on clinical trials on human participants being conducted in South Africa. The Register provides information on the purpose of the clinical trial; who can participate, where the trial is located, and contact details.

For additional information, please visit: www.sanctr.gov.za/

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Metastatic Breast Cancer Network

<http://mbcn.org/education>

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Stage IV

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