



# **Glossary**

## Adjuvant chemotherapy

Adjuvant chemotherapy (postoperative treatment) is used to eradicate any microscopic non-detectable cancer cells when there is little evidence of cancer presence, but there is risk of circulating microscopic cancer cells leading to recurrence.

## Age-standardised rate

This term is a weighted average of age-specific rates according to the World Standard Population of the same age group and is expressed per 100,000 people. It is a method of eliminating the effects of age distribution in order to facilitate valid comparisons between groups in different countries with differing age structures, or for the same population over time.

# **Axillary dissection**

A surgical procedure to remove the lymph nodes in the armpit (axillary nodes) hidden under the pectoral major and minor muscles. It is performed when there is evidence of cancerous cells in lymph nodes by palpation or imaging, or in sentinel lymph nodes.

#### **Bilateral breast cancer**

Bilateral breast cancer is cancer occurring in both breasts at the same time (synchronous) or at different times at least six months apart (metachronous).

## **Breast surgery**

Surgery for breast cancer is a local therapy to remove the breast tumour.

## **Breast conserving surgery**

This could be lumpectomy, wide local excision, partial mastectomy or segmentectomy. It is the surgical removal of a cancerous breast lump with a rim of non-cancerous tissue around the lump, without removing the entire breast.

#### **Breast reconstruction**

A surgery that rebuilds the breast contour after mastectomy. A breast implant of the woman's own tissue provides the contour. If desired, the nipple and areola may also be preserved or recreated. Reconstruction can usually be done at the time of mastectomy or any time later.

## **Cancer specific death**

A death where the underlying cause is indicated as cancer. People who die of causes other than breast cancer are not counted in the death statistics of this publication.

# Chemotherapy

Treatment with drugs to destroy cancer cells. Chemotherapy is often used in addition to surgery or radiation to treat cancer when metastasis (spread) is proven or suspected, when the cancer has come back (recurred), or when there is a strong likelihood that the cancer could recur.

#### **Crude rate**

A crude rate is the number of new cases (or deaths) occurring in a specific population per year, usually expressed as the number of cases per 100,000 people at risk.

#### **Distant recurrence**

Cancer that occurs in organs or tissues distant from the original site or regional lymph nodes (such as the lungs, liver, bone marrow, or brain). The term metastasis is used to describe a disease that has recurred at another location in the body.



## **Endocrine therapy**

Treatment with hormonal drugs that interfere with hormone production or hormone action, or treament with surgical removal of hormone-producing glands to kill cancer cells or to cause programmed cell death (apoptosis).

## **Estrogen receptor positive**

This refers to the status of cancer cells with receptor proteins that bind the hormone estrogen. Cancer cells that are estrogen receptor positive need estrogen to grow, and may stop growing or die when treated with substances that block the binding with oestrogen.

# Human epidermal growth factor receptor 2 (HER2) positive

In HER2+ breast cancer, the cancer cells have an abnormally large number of HER2 genes per cell. When this happens, excessive HER2 protein appears on the surface of these cancer cells. This is called HER2 protein over-expression. Excessive HER2 protein is thought to cause cancer cells to grow and divide more quickly. This is why HER2+ breast cancer is considered aggressive.

#### In situ breast cancer

This term refers to early stage breast cancer, when it is confined to the layer of cells where it began. In breast cancer, in situ means that the cancer cells remain confined to ducts (ductal carcinoma in situ). They have not grown into deeper tissues in the breast or spread to other organs in the body, and are sometimes referred to as non-invasive or pre-invasive breast cancers.

Lobular carcinoma in situ (LCIS) is considered a precancerous lesion, a risk factor for developing invasive cancer in future, but is not classified as breast cancer.

#### **Invasive breast cancer**

An invasive cancer is one that has already grown beyond the outer lining of the layer of cells where it started, for example breast ducts or lobules (as opposed to carcinoma in situ). Most breast cancers are invasive carcinomas.

## **Latissimus dorsi flap (LD flap)**

A method of breast reconstruction that rotates the fanshaped flat muscle of the back to the chest area.

## **Locoregional recurrence**

Cancer that returns after treatment, and occurs at the same site as the original cancer or in the lymph nodes near the site of origin.

## **Mastectomy**

A mastectomy is the surgical removal of the entire breast. It is usually used to treat serious breast disease, such as breast cancer.

## **Mortality**

Mortality is the incidence of death in a population.

## **Multicentricity**

Breast cancer occurring in multiple quadrants of a breast.

# Multifocality

Multifocality in breast cancer is defined as the presence of two or more tumour foci 5 mm apart within a single quadrant of the breast.



#### **Necrosis**

A term used to describe the death of cellular tissue. Necrosis within a cancerous tumour may indicate that the tumour is growing so rapidly that blood vessels are not able to multiply fast enough to nourish some of the cancer cells. Necrosis usually indicates that the tumour is very aggressive and can spread quickly. Fat necrosis is a benign (non-cancerous) breast condition that may occur when fatty breast tissues swell or become tender spontaneously or as a result of an injury to the breast.

## **Neoadjuvant chemotherapy**

In neoadjuvant chemotherapy (preoperative treatment), initial chemotherapy is designed to shrink the primary tumour, thereby rendering local therapy (surgery or radiotherapy) less destructive or more effective.

# Progesterone receptor positive

The hormone progesterone will bind to protein in cells. Cancer cells that are progesterone receptor positive need progesterone to grow and will usually stop growing when hormonal therapy drugs block progesterone from binding.

# **Radiation therapy**

Treatment with radiation to destroy cancer cells. External sources of radiation used include linear accelerators, cobalt and betatrons. This type of treatment may be used to reduce the size of a cancer before surgery, or to destroy any remaining cancer cells after surgery.

# Risk exposures

Risk exposures are associated with an increased probability of a specified outcome, for example, the occurrence of a disease. Risk exposures are not necessarily the causes of disease.

## **Sentinel node biopsy**

A surgical procedure to remove the first few nodes receiving lymphatic drainage from the breast in clinically node-negative cancers. This is to determine if breast cancer has spread to the armpit (axillary) lymph node basin.

## Sensitivity of the test

The ratio of true positive results to the total number of affected (positive) patients tested. It is expressed as a percentage.

#### **Survival time**

The time from initial diagnosis until the occurrence of death.

## **Targeted therapy**

A type of medication that blocks the growth of cancer cells by interfering with specific targeted molecules needed for carcinogenesis and tumour growth.

#### Time to recurrence

The time from initial diagnosis until the occurrence of recurrence.

# Transverse rectus abdominus muscle flap (TRAM flap)

A method of breast reconstruction in which tissue from the lower abdominal wall receiving its blood supply from the rectus abdominus muscle is used. The tissues from this area are moved up to the chest to create a breast mound; usually an implant is not required. Moving muscles and tissues from the lower abdomen to the chest results in flattening of the lower abdomen.

## **Triple negative breast cancer**

This term is used to describe breast cancer (usually invasive ductal carcinomas) in which the cells lack estrogen receptors and progesterone receptors, and do not have an excess of the HER2 protein on their surfaces.