

From diagnosis to treatment: Understanding breast cancer

DIAGNOSIS
Every year
~1.67 million
people are told
they have breast
cancer worldwide¹

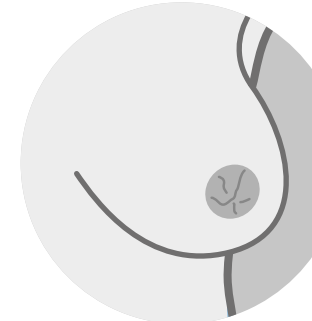
SIGNS INCLUDE²



A lump or swelling in the breast or armpit



Changes to size, shape or skin texture of the breast



Changes to the nipple, e.g. retraction, rash or discharge

Early Breast Cancer (eBC)

Advanced Breast Cancer (aBC)

DIAGNOSIS

It is important to identify the type and stage of breast cancer. This will determine treatment decisions and prognosis:

- **Stage**
Prognosis becomes worse as breast cancer advances (spreads). It is important to diagnose and treat early³
- **Type**
Various tumor types have different biological behaviours and prognoses; e.g. HER2-positive breast cancer is aggressive. If left untreated, it is associated with poorer chances of survival and faster disease worsening than other types of breast cancer.⁴

TYPES OF BREAST CANCER

Breast cancer can be categorised into three types based on the presence of abnormal amounts of specific receptors (proteins) on the surface of cancer cells.⁵

80% **Hormone receptor (HR)-positive**
Too many oestrogen receptors (ER) and/or progesterone receptors (PR)

20% **Human epidermal growth factor receptor 2 (HER2)-positive**
Too many HER2 receptors

10–20% **Triple negative breast cancer (TNBC)**
No abnormal amounts of ER, PR or HER2 receptors

aBC

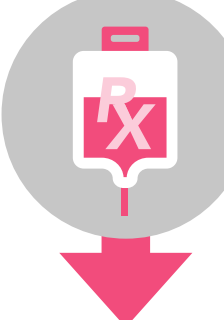
~40%
diagnosed with
advanced breast cancer (aBC); cancer has spread to other parts of the body³

eBC

~60%
diagnosed with
early breast cancer (eBC); cancer has not spread beyond the breast and/or lymph nodes³

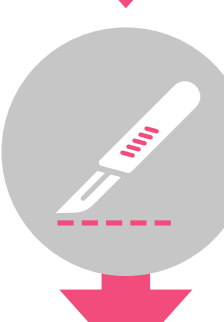
Potentially curable⁶

eBC TREATMENT Goal: to cure



Treatment before surgery (neoadjuvant)⁷

- Shrinks tumours
- Makes it easier or possible to operate
- May allow for breast conserving surgery



Surgery⁸

- Main eBC treatment
- Possible procedures:
 - Lumpectomy – only lump removed
 - Quadrantectomy – ~1/4 of breast removed
 - Mastectomy – whole breast removed



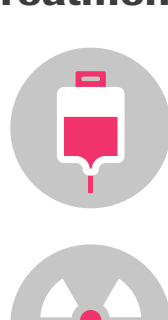
Treatment after surgery (adjuvant)⁷

- Potentially kills remaining cancer cells
- Reduces chances of cancer returning

Neoadjuvant and adjuvant treatment options can include:



TARGETED THERAPIES



CHEMOTHERAPY



HORMONAL THERAPY



RADIOTHERAPY



After treatment, most patients will receive regular mammograms (**breast x-rays**) to check for any signs of the cancer returning

eBC TREATMENT Goal: to cure

Even after treatment

~1/3
of patients first diagnosed with eBC go on to develop aBC⁹

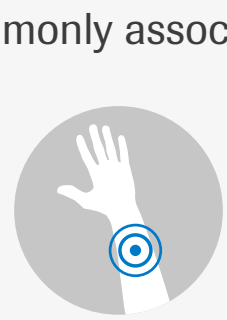
Multiple medicines may be needed to:

- Fight disease
- Manage symptoms
- Balance side-effects

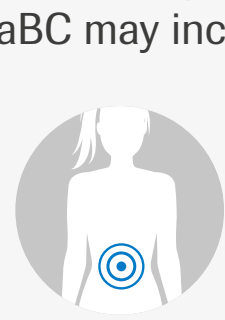
aBC TREATMENT
Goal: to help patients live longer, while preserving quality of life as much as possible

SYMPTOMS¹⁰

aBC symptoms may vary depending on where the cancer has spread to. Some symptoms commonly associated with aBC may include:



SEVERE, PROGRESSIVE BONE PAINS



ABDOMINAL PAIN AND LOSS OF APPETITE



PROGRESSIVE HEADACHE, NAUSEA AND VOMITING



CHEST PAIN, COUGH AND BREATHLESSNESS

TREATMENT DECISIONS ARE BASED ON:

- ☒ **DISEASE AND PATIENT CHARACTERISTICS**
- ☒ **PRIOR TREATMENT HISTORY**
- ☒ **PATIENT AND PHYSICIAN'S PREFERENCE**

- First treatment in aBC is known as 'first-line treatment'
- When initial treatment stops working and the cancer gets worse, patients are given a new treatment regimen ('second-line treatment')
- Patients may receive further lines of treatment as their cancer worsens

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2. Breast Cancer Now: <http://breastcancer.org/about-breast-cancer/what-are-the-signs-and-symptoms-of-breast-cancer> [Accessed October 2015]
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4. Dawood S, et al. J Clin Oncol 2010;28:192-98
5. WebMD: <http://www.webmd.com/breast-cancer/breast-cancer-types-er-positive-her2-positive> [Accessed October 2015]
6. Wolff AC and Davidson NE. Curr Treat Options Oncol 2000; Aug:1(3):210-20
7. Jon Hopkins: http://www.hopkinsmedicine.org/breast_center/treatments_services/medical_oncology/neoadjuvant_adjuvant_chemotherapy.html [Accessed October 2015]
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10. Metastatic Breast Cancer: <http://www.nationalbreastcancer.org/metastatic-breast-cancer> [Accessed October 2015]