

Appendix 1

Questions and answers on the treatment of locally advanced breast cancer

A guide for women and their physicians

What is locally advanced breast cancer?

Patients with *locally advanced breast cancer* or *LABC* have large breast tumours (more than 5 cm wide) and one or more of the following:

- Tumours that are attached to the chest wall or skin, or skin that is ulcerated or red.
- Lymph nodes (sometimes called *glands*) in the armpit that have become attached to structures in the armpit.
- Lymph nodes above the collarbone (called *supraclavicular nodes*) that contain cancer cells.

These features indicate that the cancer is more extensive than earlier stage breast cancer (see guideline 3) but has not yet spread or *metastasized* to other parts of the body. Inflammatory breast cancer, which makes the breast red and swollen, is a type of LABC.

How is LABC treated?

The treatment of LABC is complex and must be tailored to the individual. Patients will often need a combination of therapies (called *combined modality treatment*), which includes:

- Chemotherapy (treatment with anticancer drugs)
- Radiotherapy (treatment with high-energy x-rays)
- A mastectomy (surgery that removes all breast tissue)
- Hormonal therapy (treatment with the drug tamoxifen)

Usually 3 cancer specialists — a surgeon, a medical oncologist and a radiation oncologist — will work together to choose and schedule the best combined modality treatment for you.

What more can I learn about LABC from this guide?

This guide summarizes a list of recommendations for treating patients with LABC. The recommendations have been written with the use of a treatment framework based on whether or not surgery is possible for the patient with newly diagnosed LABC. In other words, is the tumour *operable* (it can be removed completely in an operation) or is it *inoperable* (it cannot be removed completely)?

Inoperable tumours are either:

- attached to the chest wall or skin, or
- inflammatory, or
- have lymph nodes attached to structures in the armpit, or have spread to a lymph node above the collarbone.

I have an operable tumour...

Will I be offered chemotherapy?

Yes, you will probably be offered chemotherapy unless your general health indicates that you would not tolerate it well. In general, the chemotherapy should include anthracyclines (anticancer agents such as doxorubicin and epirubicin). You will most likely have 6 months of chemotherapy (see guideline 8) — scheduled in 1 of 2 ways:

- Anticancer drugs will be given before surgery to shrink the tumour and make surgery easier, or
- Surgery will be done first and then anticancer drugs will be given to try to destroy any remaining cancer cells.

You will need to discuss with your doctor which approach will be

used. You will also need to see if your health and level of fitness allow you to have chemotherapy.

Will I be offered radiotherapy?

Yes, you will probably be offered radiotherapy. This is usually scheduled after surgery and chemotherapy. The radiation will be directed at your chest wall and at the lymph nodes in your armpit and above your collarbone.

Will I be offered hormonal therapy?

Yes, if you have a tumour that is identified as one that is likely to respond to hormones. In that case, your doctor will probably recommend that you take tamoxifen (a drug that blocks the effect of estrogens) for 5 years after you finish the chemotherapy and radiotherapy, to decrease the chance of the cancer returning. Women who may not tolerate chemotherapy may be offered tamoxifen instead.

I have an inoperable tumour...

Will I be offered chemotherapy?

Yes, you will probably be offered chemotherapy that includes anthracyclines (anticancer agents such as doxorubicin and epirubicin). If anthracycline-based chemotherapy does not help, you may then be offered taxane-based chemotherapy (anticancer agents such as paclitaxel and docetaxel). If your cancer responds well to a particular kind of chemotherapy, you will have 4 to 6 months of treatment (see guideline 8). The way your cancer responds to the anticancer drugs will determine what treatment you receive next. For example, if the anticancer drugs make the tumour disappear, you may be offered surgery before radiotherapy. If the anticancer drugs have less effect, your physician will probably suggest radiotherapy before considering surgery. Your medical specialists will also need to consider other treatment options if your health and level of fitness do not allow you to have chemotherapy.

Will I be offered radiotherapy?

Yes, you will probably be offered radiotherapy. If your cancer responds to chemotherapy, you may be offered surgery with radiotherapy to follow. If your cancer responds less well to chemotherapy or you are not able to have chemotherapy, you will probably be offered radiotherapy first. At whatever point you receive radiotherapy, the radiation will be directed at your chest wall and at the lymph nodes in your armpit and above your collarbone.

Will I be offered hormonal therapy?

Yes, if you have a tumour that is identified as one that is likely to respond to hormones. In that case, your doctor will probably recommend that you take tamoxifen (a drug that blocks the effect of estrogens) for 5 years after you finish the chemotherapy and radiotherapy, to decrease the chance of the cancer returning. Women who may not tolerate chemotherapy may be offered tamoxifen instead.