This factsheet is about a drug used to treat breast cancer called trastuzumab, which is also called Herceptin®. It explains what trastuzumab is, how it works, when it might be given, what the benefits are, and what side-effects may occur. For more information, call the National Cancer Helpline on 1800 200 700 or visit www.cancer.ie.

**What is trastuzumab?**
Trastuzumab belongs to a group of drugs known as monoclonal antibodies. These are sometimes called targeted therapies because they are designed to target cancer cells.

**How does trastuzumab work?**
Trastuzumab targets cancer cells that ‘overproduce’ or make too much of a substance called HER2. This is a protein found on the surface of cancer cells. Trastuzumab works by attaching to the HER2 protein which slows down or stops the cancer cells growing. It also helps your body’s immune system to kill cancer cells.

**Who might be offered trastuzumab?**
HER2 is a protein found on the surface of cancer cells. Trastuzumab is only used to treat cancers that have high levels of the HER2 protein or are HER2 positive. It may be used to treat both early and advanced breast cancer and stomach cancer. Nearly one-third of breast cancers overproduce HER2. It may also be used to treat other types of cancer as part of a clinical trial.

**Can I be tested for HER2?**
Your cancer can be tested for HER2 levels at the time of your surgery or from a biopsy.
How is trastuzumab given?
You will have your trastuzumab treatment as an outpatient, either once a week or every 3 weeks. You may be asked to remain in the outpatients department for a few hours after treatment to observe for any side-effects, especially after your first dose.

Trastuzumab is given into a vein in your arm or hand through a drip. The first dose is given slowly, usually for over an hour. If you do not have any side-effects then further doses are given over 30 minutes. You may be given trastuzumab on its own or with other chemotherapy drugs.

Trastuzumab is now also available as an injection under the skin (sub-cutaneous injection) for women with breast cancer. It is usually given into the thigh. The injection takes between 2 and 5 minutes.

How long will I be on trastuzumab?
The length of time trastuzumab is given will vary from person to person. Your specialist will talk to you about what is best for you. If you are being given trastuzumab with chemotherapy or are taking part in a clinical trial, you may be on it for a specific length of time.

What are the side-effects of trastuzumab?
Everyone reacts differently to drugs. Some people may experience more side-effects than others. As trastuzumab only affects cancer cells, it has fewer side-effects than chemotherapy drugs, which also affect healthy cells. If you are having both at the same time, you may have other side-effects from the chemotherapy that are not listed here. If you have any questions about side-effects, talk to your specialist or oncology nurse so that they can help you manage them.

Tell your doctor about any other medication you are taking, including vitamins, herbal supplements and other over-the-counter remedies.

Common side-effects
• Flu-like symptoms: You may have fever, chills and mild pain in some parts of your body shortly after the drug has been given. These are only temporary and can be helped with mild painkillers such as paracetamol.
• Nausea: If you feel sick, it is usually mild and temporary and can be treated with anti-sickness drugs.
• Diarrhoea: You may have mild diarrhoea, but your specialist or GP can prescribe medication to help control this problem.

Less common side-effects
You may have other symptoms after your first treatment. For example, headache, dizziness, rash, vomiting or breathlessness. These symptoms are usually very mild and do not usually recur with later treatments.

Rare side-effects
Effects on the heart: A small number of people receiving trastuzumab may develop heart problems, such as low blood pressure or palpitations. Most symptoms can be treated successfully. Heart problems seem to be more common where trastuzumab is given with certain chemotherapy drugs. This may be more of a risk if you are over 65. Your heart function will be checked before you start trastuzumab to check that it is normal. This test is called an echocardiogram (ECHO).

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Further support

If you have any concerns about taking trastuzumab, talk to your specialist, chemotherapy nurse or breast care nurse. With a cancer diagnosis, there may be times when you feel overcome by fear, anxiety, sadness, depression or anger. If you find you need extra support, do talk to your cancer nurse or public health nurse.

You might also find it easier to share your feelings with someone who has had a similar experience to you. For example, Reach to Recovery is a programme set up to help and support women who have had a recent breast cancer diagnosis.

A counsellor or psychotherapist may be suitable if you need more long-term professional help. The Irish Cancer Society funds a counselling service for patients diagnosed with cancer. A counsellor will provide emotional support by allowing you to express your feelings and fears. You may be able to express worries or concerns to a counsellor that you do not wish to discuss with others. For further information on counselling or Reach to Recovery, call the National Cancer Helpline on 1800 200 700 or visit www.cancer.ie.
Useful organisations and websites

Reach to Recovery
43/45 Northumberland Road, Dublin 4
National Cancer Helpline 1800 200 700
Email: helpline@irishcancer.ie
Website: www.cancer.ie

American Cancer Society
Website: www.cancer.org

Irish Nutrition & Dietetic Institute
Website: www.indi.ie

For more information on trastuzumab (Herceptin®) or for confidential advice from our cancer nurse specialists, call the National Cancer Helpline on Freephone 1800 200 700

(Monday–Thursday, 9am–7pm, Friday 9am–5pm) or email helpline@irishcancer.ie.

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