

The ROYAL MARSDEN

NHS Foundation Trust

Docetaxel and cyclophosphamide (TC) chemotherapy for early breast cancer

Breast Unit

Patient Information



NHS

Introduction

Your doctors have suggested that you are likely to benefit from a combination of docetaxel and cyclophosphamide chemotherapy. This treatment is to try to destroy any possible microscopic cancer cells that may be left and increase your chance of cure. Your doctor will have discussed these potential benefits and possible side effects with you. If you still have concerns or questions then please ask. This booklet explains what you can expect from the treatment you will receive.

This booklet should be read together with The Royal Marsden booklet *Chemotherapy; your questions answered* or Breast Cancer Now's *Chemotherapy and breast cancer*. These booklets offer general information about chemotherapy and details about many of these side effects and how to manage them. If you have not yet received either of these booklets, please ask your clinical team.

Treatment plan

You will be given a combination of docetaxel and cyclophosphamide every **three** weeks for a total of up to six treatments.

The drugs are colourless and are given by intravenous (into a vein) injection through a cannula (thin tube) sited in your arm. Treatment will take about one and a half hours.

A new cannula will be placed in your arm before each treatment and will remain there only while that chemotherapy is being given. You will have blood tests carried out before each cycle of chemotherapy and treatment may be delayed if your blood cell count is not at a suitable level.

Important: Dexamethasone (a steroid drug) will be given to you to take the day before, and for two days after your chemotherapy. This is to reduce the risk of you having an allergic reaction to the drug docetaxel and to help minimise fluid retention. It is very important you take these tablets as prescribed. If you forget to take this medication, please let your doctor or nurse know before you start your chemotherapy.

During treatment: Let your doctor or nurse know immediately if you develop any redness, soreness or pain at the injection site, skin rash, itching, fever, shivers, shakes, redness of the face, pain, dizziness, wheezing or become short of breath.

At home:

- It is important to take your anti-sickness drugs as prescribed, even if you do not feel sick at the time. This is because it is easier to prevent sickness than to stop it once it has started.
- Tell your doctor if you develop any numbness or tingling in your fingers or toes.
- Practise regular mouth care.

If you feel unwell at any time or have a temperature (38°C/100°F or higher) you should contact the hospital immediately as you may need to be admitted for intravenous antibiotics. For further information, please refer to The Royal Marsden booklet *Chemotherapy; your questions answered*.

Possible side effects of TC chemotherapy

All drugs can have some side effects and this includes docetaxel and cyclophosphamide chemotherapy. These vary and for some people they may not occur.

- **Increased infection risk** – This occurs because white blood cells help fight infection and they can become low while receiving chemotherapy. This is most common seven to 10 days after treatment. Contact your hospital straight away if you develop a high temperature, shivering, flu-like symptoms or other signs of infection such as a sore throat or cough. You may need to be admitted for intravenous antibiotics. A blood test will need to be done before your next treatment to check that your blood count has returned to normal. If your count is still low, it may be necessary to delay your next treatment.
- **Bruising or bleeding** – Docetaxel and cyclophosphamide can reduce the production of platelets (which help the blood

clot). Let your doctor know if you develop any unexplained bruising or bleeding, such as nosebleeds, blood spots or rashes on the skin, or bleeding gums.

- **Anaemia** – (low number of red blood cells) Can make you feel tired and breathless. Let your doctor or nurse know if you develop these symptoms. You may need a blood transfusion.
- **Nausea and vomiting** – You will be given anti-sickness medications to prevent this. If you start to feel or be sick, contact your doctor or nurse because your anti-sickness medication may need to be changed or increased.
- **Tiredness** – Many people feel tired during chemotherapy, particularly for the first few days after treatment. Gentle exercise each day, along with plenty of rest, has been shown to help improve fatigue.
- **Hair loss (alopecia)** – You usually lose all the hair from your head. You may also lose your eyelashes, eyebrows or other body hair. Hair loss is usually temporary, and your hair will usually grow back after treatment ends. But rarely, the hair loss is permanent. Hair may not grow back or it may be thinner than before. If you are worried about this, please talk to your cancer doctor or nurse.
- **Sore mouth and ulcers** – The lining of your mouth and throat may become sore and you may develop small ulcers. To prevent this, rinse your mouth after each meal and before bed with salty water (dissolve one teaspoon of salt in a glass of warm water). Use a soft toothbrush. Tell your doctor or nurse if you develop a painful mouth or throat, or white coating of your tongue, as they can prescribe some mouthwash.
- **Diarrhoea** – This is rarely severe. Drink plenty of fluid and tell your doctor if it persists or is severe (more than four episodes in 24 hours). It can be controlled with medication.
- **Muscle or bone pain** – Docetaxel can cause this. It can be treated with a combination of paracetamol and ibuprofen. Discuss this with your doctor or nurse.

- **Numbness or tingling in the hands and feet (peripheral neuropathy)** – This is due to the effect of docetaxel on the nerves. You may notice you have difficulty doing up buttons or picking up small items. Tell your doctor if you experience these symptoms as they need to be monitored. The problem usually improves slowly over a few months after finishing chemotherapy.
- **Nail changes** – This treatment may cause your nails to become darker than usual, develop ridges and become brittle. These changes will grow out after finishing the chemotherapy.
- **Skin changes** – Your skin may become dry and you may develop a rash. Keep your skin moisturised with a gentle cream such as aqueous cream. Report any rash to your doctor.
- **Photosensitivity** – During treatment, and for several months afterwards, you will be more sensitive to the sun and you may burn more easily. You should always wear a high sun protection factor sun cream and cover up with clothes.
- **Tissue damage (extravasation)** – This can occur if docetaxel leaks out of the vein and into the surrounding tissues. This can result in pain and ulceration, and take some time to heal. Tell your nurse or doctor immediately if you notice any burning or stinging while the chemotherapy is being given, or if the surrounding area becomes red or swollen at any time.
- **Cystitis and urine discolouration** – Rarely cyclophosphamide can cause bladder irritation. We recommend you drink about an extra half a litre of fluid in the 24 hours after each injection.
- **Fluid retention** – This treatment can cause you to retain fluid. The dexamethasone medication that you will be given to take before treatment will help prevent this. If you notice swelling in your hands or feet or any unusual weight gain, let your doctor or nurse know.
- **Taste changes** – You may notice your food tastes different. Normal taste will usually return after chemotherapy finishes.

- **Eye irritation** – Some patients experience dry, gritty or weepy eyes. Your doctor may be able to prescribe soothing eye drops.
- **Allergic reaction** – Some people can have an allergic reaction to docetaxel while it is being given. Let your doctor or nurse know immediately if you develop any skin rash, itching, high temperature, shivering, dizziness, headache or breathlessness during treatment so that it can be managed quickly.
- **Memory and concentration** – Some patients find that their short-term memory and concentration are not so good while they are undergoing chemotherapy. This usually resolves soon after treatment has finished.

Fertility, pregnancy and breastfeeding

Loss of periods – Chemotherapy affects the ovaries such that your periods may become irregular and may eventually stop. Often this is temporary, but in some women this may be permanent. This will result in menopausal symptoms such as hot flushes, sweats and vaginal dryness. If you find these symptoms distressing, please discuss them with your doctor as there are some treatments available.

Fertility – Chemotherapy can damage the testis or ovary. This may affect your ability to conceive (or father a child). Infertility can be temporary or more permanent. Sometimes in women, chemotherapy can lead to premature menopause. If relevant to you, you may wish to discuss the issue of fertility with your doctor before treatment is started.

Pregnancy – During chemotherapy and for up to a year afterwards, if sperm or eggs are produced, they may be abnormal. Treatment can also harm an unborn child. We recommend that you or your partner use a barrier method of contraception, such as condoms, during treatment and for one year afterwards. If you know you are pregnant before starting treatment or become pregnant during treatment, you must tell your doctor immediately.

Breastfeeding – There is a risk of harm to a child who is being breastfed since the drug may be concentrated in the milk. It is very important that women do **not** breastfeed while receiving chemotherapy.

We have listed the most common and serious side effects of this treatment. As with all drugs there may be other side effects that you may experience. Because of the risk of side effects it is important that you:

- **Always** tell your doctor if you suffer from any of these side effects, or if you have experienced any new symptoms since your last visit. Your doctor can help you by giving you medication or advice, to reduce or stop these side effects from occurring in the future.
- **Always** tell your doctor about any other medicine you are taking or planning to take, including herbal and complementary therapies.
- **Always** consult your doctor before having any other procedure, for example, dental work or vaccinations.

Blood clots

Some cancers increase the risk of developing blood clots. Chemotherapy drugs can also cause an increase in the risk of patients developing blood clots whilst they are on treatment. The most common place for blood clots to form is in the calf. This is called a deep vein thrombosis (DVT) and causes the leg to swell. If a part of the clot breaks free, it may travel to the lungs, causing shortness of breath or chest pain. This is called a pulmonary embolus (PE). Blood clots can be life threatening and treatment with blood-thinning drugs (anti-coagulants) is usually given to help 'dissolve' the clot and prevent further problems. Please inform your doctor immediately if you are worried you may have a blood clot.

Airline travel is also associated with an increased risk of blood clots. It is important that you inform your hospital team of any travel plans while you are on treatment.

Contact details

Please contact us if you have any concerns or queries.

Your consultant

Specialist registrar

IV team, Sutton (NHS patients)	020 8661 3084/3825
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Robert Tiffany Day Unit, Sutton (private patients)	020 8661 3944
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Medical Day Unit, Chelsea (NHS patient)	020 7808 2320
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GH Day Unit, Chelsea (private patients)	020 7808 2872
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If you cannot get through to these numbers and your call is urgent or if you need to call after 5pm or at the weekend, please call:

The Royal Marsden Macmillan Hotline 020 8915 6899
(available 24 hours a day, 7 days a week)

Notes and questions

References

This booklet is evidence based wherever the appropriate evidence is available, and represents an accumulation of expert opinion and professional interpretation.

Details of the references used in writing this booklet are available on request from:

The Royal Marsden Help Centre

Telephone: Chelsea 020 7811 8438 / 020 7808 2083

Sutton 020 8661 3759 / 3951

Email: patientcentre@rmh.nhs.uk

No conflicts of interest were declared in the production of this booklet.

Should you require information in an alternative format, please contact The Royal Marsden Help Centre.

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