Myeloma
Haematology and Transplant Unit

CTD2

This leaflet is offered as a guide to you and your family. The possible benefits of treatment vary; for some people chemotherapy may reduce the risk of the cancer coming back, for others it may control the cancer and its symptoms. Chemotherapy is the most commonly prescribed anti-cancer treatment but other types of treatment are also used. Your doctor will explain to you whether you will receive chemotherapy or another type of treatment, or a combination of both. Your doctor or nurse will be happy to answer any questions you have about your treatment. You will find it useful to refer to the booklet *Chemotherapy, a guide* which gives general information on chemotherapy and side effects.

Your treatment

Your doctor or nurse clinician has prescribed for you a tablet treatment for your myeloma. This treatment consists of three tablets and is known as CTD2: cyclophosphamide, thalidomide and dexamethasone.

These tablets are given in cycles, each cycle lasting 28 days (see information sheet overleaf). CTD is given up to a maximum of six cycles.

The tablets which make up CTD are:

**Cyclophosphamide**: chemotherapy tablets taken once a week. It is important to drink plenty of fluids when taking these tablets (up to three litres a day) as cyclophosphamide can affect kidney function.

**Thalidomide**: taken every evening/night throughout treatment.

**Dexamethasone**: steroid tablets taken for four days, repeated twice in each cycle. Dexamethasone should be taken with food. It is better to take them earlier in the day, for example, with breakfast and lunch, since they can keep you awake if taken late in the day.

You will have a routine blood test before the start of each cycle of treatment.

Alongside your chemotherapy, you will be given other medications to prevent side effects. Please see the separate sheet entitled ‘Supportive Medications’ for details on these medicines.

This treatment can have serious or possibly life-threatening side effects. It is very important that you report side effects straight away. Don’t delay, if you feel unwell, please ring The Christie Hotline on 0161 446 3658. The lines are open 24 hours a day.
Possible side effects
Chemotherapy can cause many different side effects. Some are more likely to occur than others. Everyone is different and not everyone gets all the side effects. Most side effects are usually temporary, but in some rare cases they can be life-threatening. It is important to tell your hospital doctor or nurse about any side effects so they can be monitored and, where possible, treated.

Common side effects (more than 1 in 10)

- **Increased risk of serious infection**
  You are vulnerable to infection while you are having chemotherapy. Minor infections can become life-threatening in a matter of hours if left untreated. Symptoms of infection include fever, shivering, sweats, sore throat, diarrhoea, discomfort when you pass urine, cough or breathlessness. We recommend that you use a digital thermometer so you can check your temperature. You can buy one from your local chemist.

  **If your temperature is 37.5°C or above or below 36°C or you have symptoms of an infection, contact The Christie Hotline straight away.**

- **Anaemia (low number of red blood cells)**
  While having this treatment you may become anaemic. This may make you feel tired and breathless. Let your doctor or nurse know if these symptoms are a problem. You may need a blood transfusion.

- **Bruising or bleeding**
  This treatment can reduce the production of platelets which help the blood clot. Let your doctor know if you have any unexplained bruising or bleeding, such as nosebleeds, bloodspots or rashes on the skin, and bleeding gums. You may need a platelet transfusion.

- **Blood clots/thrombosis**
  There is a slightly increased risk of developing blood clots with thalidomide. You are likely to be prescribed an anti-clotting agent such as aspirin or a heparin injection to help prevent blood clots forming. Please report immediately to us if you develop a red and swollen leg or sudden onset of shortness of breath.

- **Nausea and vomiting (sickness)**
  The severity of this varies from person to person. Anti-sickness medication may be given along with your chemotherapy to prevent this. You may also be given anti-sickness tablets to take at home. If you continue to feel or be sick, contact your GP or this hospital, because your anti-sickness medication may need to be changed or increased.

- **Diarrhoea**
  If this becomes a problem while you are having treatment, anti-diarrhoea tablets can be bought from a pharmacy or prescribed by your GP for a temporary period until this is resolved. If the problem persists contact this hospital. **If you develop severe diarrhoea it is important to contact this hospital straightaway as this may be a sign of a serious infection. Don’t delay!**
• **Lethargy**
Some chemotherapy may make you feel tired and lacking in energy. It can be frustrating when you feel unable to cope with routine tasks. If you do feel tired, take rest and get help with household chores. If necessary, take time off work. Gentle exercise such as walking can be beneficial.

• **Constipation**
It is very common to become constipated with thalidomide. Try to drink plenty of fluids and eat foods high in fibre. Tell your doctor who may prescribe a suitable laxative. Ask the staff for a copy of ‘Eating: Help Yourself’ which has useful ideas about diet when you are having treatment.

• **Tingling & numbness in the fingers or toes (peripheral neuropathy)**
Thalidomide can cause nerve damage. This causes numbness or pins and needles in your fingers or toes. **It is important to tell us if this happens** as the dose of thalidomide may have to be reduced or stopped.

This is only usually mild and temporary, but sometimes lasts for some time or may become permanent. Please report these symptoms promptly to the myeloma nurse specialist or to your doctor.

• **Steroid side effects**
Your dexamethasone tablets should be taken with food as they may cause indigestion. They may also increase your appetite. It is better to take them earlier in the day, for example, with breakfast and lunch, since they can make you feel more alert and prevent sleep.

Dexamethasone tablets can **alter your mood** causing you to feel low, irritable or agitated. Please tell the doctor at your next clinic visit if this is a problem.

• **Blood sugar**
Dexamethasone can cause your blood sugar to rise. If you are diabetic then you may need to increase the dose of any diabetic medication you take (insulin or tablets). You should discuss this with your doctor before starting the chemotherapy. Dexamethasone can also induce diabetes in people not known to have this disease. This is normally reversible although you may need to take some diabetic medication while you are having chemotherapy.

**Uncommon side effects (less than 1 in 10)**

• **Hair thinning**
It is uncommon to lose hair with this treatment although it may thin a little. It is advisable to avoid perms, colours, use of hot brushes and vigorous, frequent washing that could increase hair loss. Please remember that this is a temporary side effect and your hair will grow back when your treatment is completed. If you would like an appointment with the wig service, this can be arranged for you. Ask the staff for a copy of ‘The Wig Fitting Service.’

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• **Bladder irritation**  
Cyclophosphamide may cause a burning sensation or irritation on passing urine because the chemotherapy irritates the bladder wall. Try to drink plenty of fluids on the day of the treatment, and for 72 hours afterwards. Also, try to pass urine as soon as the urge is felt. If you do have any irritation or burning on passing urine, please contact the hospital.

**Rare side effects (less than 1 in 100)**

• **Skin colouring**  
Sometimes as a result of the chemotherapy, your skin may appear darker in colour or lightly tanned, especially around the joints. This is known as hyperpigmentation. The skin will return to normal when the treatment is finished. Asian and African-Caribbean people may develop noticeable light patches on their skin.

• **Sore mouth**  
Your mouth may become sore or dry, or you may notice small mouth ulcers during this treatment. Drinking plenty of fluids and cleaning your teeth regularly and gently with a soft toothbrush can help to reduce the risk of this happening. We can prescribe a mouthwash for you to use during treatment. You can dilute this with water if your mouth is sore. Ask your doctor or nurse for further advice. There is also general mouth care information in the chemotherapy booklet. If you continue to have a sore mouth, please contact The Christie Hotline.

**Serious and potentially life threatening side effects**  
In a small proportion of patients chemotherapy can result in very severe side effects which may rarely result in death. The team caring for you will discuss the risk of these side effects with you.

**Sex, contraception & fertility**

⚠️ Because of the devastating side effects caused in the past to unborn children, it is of the highest importance that thalidomide is used safely.

Women who have any chance of becoming pregnant MUST use two forms of birth control. Pregnancy tests are performed every four weeks prior to a new prescription of thalidomide.

Thalidomide can be present in semen, so male patients must use a condom whenever they have sexual intercourse (even if they have had a vasectomy).
Late side effects
Some side effects may become evident only after a number of years. In reaching any decision with you about treatment, the potential benefit you receive from treatment will be weighed against the risks of serious long term side effects to the heart, lungs, kidneys and bone marrow. With some drugs there is also a small but definite risk of developing another cancer. If any of these problems specifically applies to you, the doctor will discuss these with you and note this on your consent form.

- Tingling and numbness in the fingers or toes: On rare occasions it may be permanent.

Contacts
If you have any general questions or concerns about your treatment, please contact the myeloma nurse specialist or the Haematology and Transplant Unit.

- Myeloma nurse specialist 0161 446 8167
- Haematology and Transplant Unit 0161 446 3925
- General enquiries 0161 446 3000

For urgent advice ring The Christie Hotline on 0161 446 3658 (24 hours)

Your consultant is: .................................................................

Your hospital number is: .......................................................

Your key worker is: ...............................................................
## CTD (2) Treatment Chart

| Day: | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 |
|------|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| **Date:** | Cycle 1 | Cycle 2 | Cycle 3 | Cycle 4 | Cycle 5 | Cycle 6 |
| **Cyclophosphamide** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **Dose:** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **Thalidomide** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **Dose:** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **Dexamethasone** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **Dose:** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **Other medicines:** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |