

Thalidomide

Treatment Guide

What is thalidomide?

Thalidomide is an immunomodulatory drug (IMiD) used in the treatment of myeloma.

How does it work?

Thalidomide works by affecting the body's immune system. It helps to kill myeloma cells in a number of different ways:

1. Directly killing or stopping the growth of myeloma cells
2. Blocking the growth of new blood vessels that supply the myeloma cells with oxygen and nutrition (anti-angiogenesis)
3. Boosting the immune response against the myeloma cells
4. Altering the production of chemical messages involved in the growth and survival of the myeloma cells
5. Preventing the myeloma cells from sticking to the bone marrow stroma (the tissue and cells not involved in blood cell production)

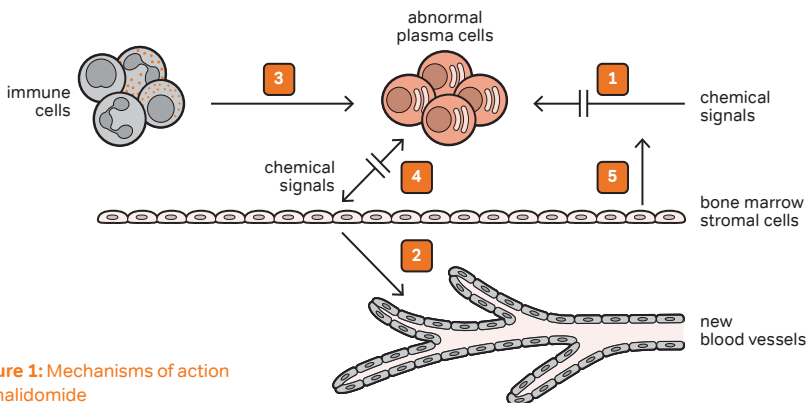


Figure 1: Mechanisms of action of thalidomide

How is thalidomide given?

Thalidomide is a capsule which is taken orally (by mouth).

Thalidomide can be given with a variety of other anti-myeloma drugs. It is usually given in combination with the steroid dexamethasone and either the proteasome inhibitor drug bortezomib (Velcade®) (combination known as VTD) or the chemotherapy drug cyclophosphamide (CTD), or the steroid prednisolone and chemotherapy drug melphalan (MPT).



The tablets should be swallowed whole with water.



It is best to take thalidomide about an hour after eating and ideally two to three hours before going to bed as it can make you sleepy.

Other information about thalidomide



Women must not take thalidomide if they are pregnant, and must not become pregnant whilst taking thalidomide, as it is harmful to an unborn baby.

You will be required to adhere to a pregnancy prevention programme. This means you must use effective methods of contraception while you are on treatment if you are a woman of childbearing potential or if you are a man and your partner is a woman of child bearing potential.

Possible side effects of thalidomide

Thalidomide has a number of possible side effects which can vary considerably from patient to patient.

It is important to report any side effects to your doctor or nurse as soon as possible so they can be treated or managed promptly.



Blood clots or venous thromboembolic events

Thalidomide can cause blood clots in veins, called a venous thromboembolic event (VTE). This most often occurs in the legs (known as deep vein thrombosis (DVT)). More rarely, clots can travel to the lungs causing a pulmonary embolism (PE). This can be a serious complication.

You may be prescribed an anticoagulant (anti-clotting) drug such as aspirin, low-dose heparin or warfarin either to prevent or to treat VTE.

It is very important that you tell your doctor or nurse if you notice any red, swollen or painful areas in your body, particularly in your calf, and the area is warm to touch. Any new episodes of shortness of breath and/or chest pains must be reported immediately.



Birth defects

It is important that anyone taking thalidomide is aware of the possible risks of birth defects associated with its use. Both men and women who are taking thalidomide can pass these side effects to their unborn baby. Every effort is therefore taken to ensure that this does not occur and thalidomide is stored, prescribed, handled and used safely.



Drowsiness

Drowsiness usually lessens with continued use at the same dose but you may need a dose reduction if severe drowsiness occurs. Sleepiness during the day can be minimised by taking thalidomide in the evening before going to bed. It will vary from patient to patient but generally, thalidomide is best taken two to three hours before bedtime.



Constipation

Constipation can be a problem, particularly with higher doses of thalidomide. It can be prevented or minimised with a good fluid intake (two to three litres per day) and a high fibre diet with plenty of fresh fruit and vegetables. It may be necessary to use laxatives as prescribed by your doctor.



Peripheral neuropathy

Peripheral neuropathy is damage to the nerves in the peripheral parts of the body such as the hands, feet, arms or legs. This causes numbness, tingling, increased sensitivity or pain.

For most patients, symptoms will improve or disappear after the dose and/or frequency of administration of thalidomide is reduced. However, sometimes, thalidomide may need to be temporarily stopped or discontinued and other options discussed. If you have severe peripheral neuropathy you may not be able to have other treatments in the future that are also known to cause it.

Pain and discomfort can often be alleviated by gentle massage, warm baths, cold/heat packs and specific nerve painkilling drugs such as gabapentin and pregabalin.



Skin rashes

Thalidomide can sometimes cause a rash which may begin on the trunk (body) and spread to the arms and legs. This can occur within the first two to six weeks of starting treatment but usually clears up by itself. Sometimes the rash may need treatment with anti-histamines and/or steroid creams.

Rarely, some rashes are a sign of a potentially more serious reaction to thalidomide causing the skin to turn red, blister and peel (Stevens-Johnson syndrome or toxic epidermal necrolysis). If this happens, you should tell your doctor immediately and thalidomide should be stopped straight away.



Low blood counts

Thalidomide may cause a decrease in the number of red blood cells, white blood cells and platelets in your blood. This can cause anaemia and fatigue, as well as making you more susceptible to infection and increasing your risk of bleeding. You may be given supportive treatment to help alleviate these side effects and boost your blood cell counts.



If you have any questions about your treatment, speak to your medical team. They are the best people to ask if you have questions about your individual situation. The information in this publication is not meant to replace their advice.



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