

Lenalidomide (Revlimid[®])

AL amyloidosis
Treatment Guide

What is lenalidomide?

Lenalidomide, also known as Revlimid[®], is an immunomodulatory drug (IMiD) used in the treatment of AL amyloidosis.

How does it work?

Treatment for AL amyloidosis aims to kill the abnormal plasma cells responsible for producing amyloid protein, preventing more amyloid being produced and enabling the body to clear existing deposits gradually.

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

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

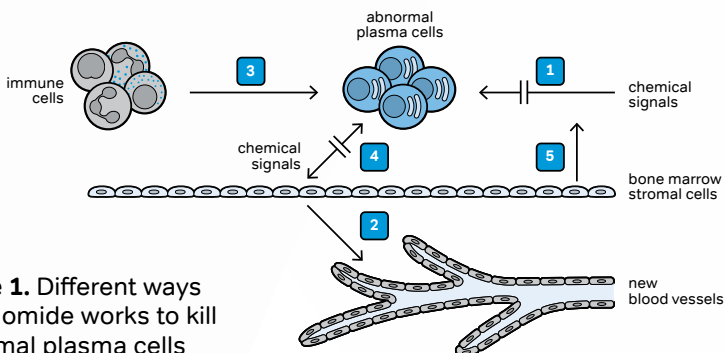


Figure 1. Different ways lenalidomide works to kill abnormal plasma cells

How is lenalidomide given?



Lenalidomide is a capsule taken orally (by mouth).



Lenalidomide can be given in combination with other anti-AL amyloidosis treatments, including: dexamethasone, cyclophosphamide and bortezomib.



Lenalidomide is normally taken for 21 days followed by a 7 day rest period. This forms one 28 day (4 week) cycle. Lenalidomide is taken until there is disease progression, meaning there are signs your AL amyloidosis is becoming more active. Individual treatment plans may vary, your healthcare team will let you know your specific plan.

Other information about lenalidomide



You must not take lenalidomide during pregnancy as it is expected to be harmful to an unborn baby. This means you must use effective methods of contraception while on this treatment if you or your partner could become pregnant. You will be required to adhere to a strict pregnancy prevention programme.



You should not breastfeed when taking lenalidomide as it is not known if the drug can pass to the milk.

Possible side effects

Lenalidomide 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 so they can be treated or managed promptly.

The side effects listed here are those experienced most often. For a complete list of side effects please refer to the patient information leaflet which is included in the pack with the treatment. If you do not have this, ask your healthcare team for it.



Gastrointestinal disturbances

Lenalidomide can cause diarrhoea and/or constipation. Maintaining a good fluid intake (staying within your daily allowance) and a balanced diet is important. Your doctor may prescribe specific treatment which can help prevent or control the symptoms.

Bile acid malabsorption (BAM) can be a cause of persistent diarrhoea in patients taking lenalidomide. BAM is a condition in which patients do not absorb bile acids properly from their intestines. It can be treated by restricting the amount of fat in the diet, but often other treatment, such as a drug called colesevelam, is also needed.



Birth defects

It is important that anyone taking lenalidomide is aware of the possible birth defects it can cause. This risk to an unborn baby can be passed on from either parent if they are taking lenalidomide. Every effort is therefore taken to ensure that this does not occur and lenalidomide is stored, prescribed, handled and taken safely and a pregnancy prevention programme is in place.



Blood clots

Lenalidomide can cause the formation of blood clots in veins, which is called a venous thromboembolic event (VTE). This most often occurs in the legs, where it is 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.

 **Skin rash**

Some patients taking lenalidomide can develop a skin rash, which may be itchy and need treatment with antihistamines and/or steroid creams. Some skin rashes are rare but serious. These include:

- Rash which starts in one area but begins to spread widely
- Rash with high temperature
- Rash with swelling of the eyes or mouth, or difficulty breathing

You should contact your healthcare team urgently if you experience any of these.

 **Low blood counts**

Lenalidomide may cause a decrease in the number of red blood cells, white blood cells and platelets in your blood. This can cause anaemia (which can cause shortness of breath, tiredness and weakness) and fatigue, as well as making you more susceptible to infection and increasing your risk of bleeding. If necessary, you will be given supportive treatment to help with these side effects and to boost your blood cell counts.

 **Peripheral neuropathy**

Peripheral neuropathy is damage to nerves in the hands, feet, arms or legs. This can lead to numbness, tingling, increased sensitivity and pain. This is particularly problematic for patients whose AL amyloidosis already affects peripheral nerves.

Symptoms usually improve or disappear after the dose and/or frequency of administration of lenalidomide is reduced. However, in some cases, lenalidomide may need to be temporarily stopped or discontinued and other options discussed. If you have severe peripheral neuropathy, it may affect other future treatment options.

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

 **Fatigue**

Fatigue usually resolves shortly after treatment has finished. There are a number of strategies you may try to manage fatigue. For example, treatment for anaemia may reduce fatigue if it is caused by low red blood cell counts. Increasing your activity levels and having complementary therapies, such as aromatherapy or massage, may also help.



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.



We're here for everything a diagnosis of AL amyloidosis brings

Get in touch to find out more about how we can support you

Call the Myeloma UK Infoline on

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