Myeloma Australia

TREATMENT FACT SHEET

Pomalidomide (Pomalyst®)

What is Pomalidomide?

Pomalidomide, also known as Pomalyst®, belongs to a group of drugs called immunomodulatory drugs (IMiD) which work by modifying the immune system. The immune system is a collection of tissues and organs that help to protect the body from infection and against disease.

Pomalidomide is a third generation IMiD and has a similar chemical structure to other immunomodulatory drugs, such as thalidomide and lenalidomide which are also used to treat myeloma.

How does Pomalidomide work?

Pomalidomide is a more targeted therapy than conventional chemotherapy and is thought to have several mechanisms of action that affect myeloma cell survival. However, the mechanism of action is not fully understood.

Pomalidomide is thought to work in the following ways:

1. Directly killing or stopping the growth of myeloma cells
2. Boosting the immune response against the myeloma cells
3. Altering the production of chemical messages involved in the growth and survival of myeloma cells
4. Blocking the growth of new blood vessels that supply the myeloma cells with oxygen and nutrition (anti-angiogenesis)
5. Preventing the myeloma cells from sticking to the bone marrow.

How is pomalidomide given?

Pomalidomide comes in tablet form and is taken orally. The tablets should be swallowed whole with water and can be taken either with or without food. Pomalidomide can be taken at any time of the day but it is best to take it at approximately the same time each day.

Pomalidomide usually taken for 21 days followed by a seven-day rest which completes the 28-day cycle. Most people will continue this regime until it is thought that a deep response has been achieved or the myeloma is showing signs of increasing.

Pomalidomide is often given in combination with a steroid tablet, dexamethasone.

When is pomalidomide available for use in Australia on the Pharmaceutical Benefits Scheme (PBS)?

In Australia pomalidomide is subsidised on the PBS for patients where their myeloma has progressed through at least two prior therapies and have progressed on bortezomib as well as lenalidomide.

How to tell if pomalidomide is working

Patients may observe a reduction in the symptoms caused by the myeloma associated with an improved quality of life. The doctor will also order tests at the start of each treatment cycle to monitor response. These tests may vary from patient to patient but generally include regular blood and/or urine testing and occasional x-rays or bone marrow biopsies.

What are the potential side effects?

As with all drugs, pomalidomide has many potential side effects. They can vary considerably from patient to patient and may be mild or more serious. Often the best way to reduce side effects is to lower the dose. It is possible to do this without compromising on efficacy. As side effects can usually be treated or managed, it is very important to highlight them promptly to the doctor or nurse.

Birth defects

Both men and women who are taking pomalidomide are educated on the risks to an unborn child and are asked strictly not to reproduce while taking pomalidomide. The manufacturer has a pregnancy prevention programme in place to ensure that pomalidomide is stored, prescribed, handled and taken safely.

Low blood counts

Pomalidomide can cause a decrease in the number of red blood cells, white blood cells and platelets in the blood. A low red blood cell count may cause anaemia and fatigue. If anaemic a blood transfusion may be necessary.

A low white blood cell count will increase the risk of infection and extra precautions will be required such as diligent hand washing and avoidance of people with infections. A sign of infection is a fever or temperature of 38°C or above.

If a patient's temperature is 38°C or above, medical attention must be sought immediately

If the white cell count is consistently low,it may be necessary to have an injection of granulocyte-colony stimulating factor (G-CSF), to increase the white blood cell count.

A low platelet count (thrombocytopenia) increases the risk of bruising and bleeding. If the platelet count is too low a platelet transfusion may be required.

The blood counts will be measured regularly to monitor for changes. In some cases,treatment may be delayed until blood counts have improved.

Blood clots or venous thromboembolic events

Developing a blood clot in deep veins is a potentially serious side effect of treatment with pomalidomide. The condition is called deep vein thrombosis (DVT). Symptoms include redness, swelling, tenderness and pain. If patients develop any of these symptoms, the doctor must be informed immediately. Sometimes a piece of the clot breaks off and travels to the lung. This can be life threatening and is called pulmonary embolism (PE). Symptoms of PE include anxiety, shortness of breath with or without exertion and chest pain/tightness. Patients must seek medical assistance urgently if these symptoms occur.

Peripheral neuropathy

While pomalidomide is less likely to cause peripheral neuropathy that it's cousin thalidomide, it can in some cases cause damage to the long nerves radiating from the spine, usually starting in in the hands and/or feet then progressing up the arms and legs. This can present as feelings of numbness, tingling, increased sensitivity, burning, pain or cramps. It can also present as constipation, dizziness, or loss of balance.

The best way to manage peripheral neuropathy is to report any symptoms to the doctor or nurse as soon as possible. They may recommend a dose reduction or taking a break until symptoms subside. The effects of peripheral neuropathy can be irreversible if left unattended for too long.

Cramps

A cramp is an uncontrollable and painful spasm of a muscle and may also be accompanied by twitching. Twitching is an involuntary contraction then relaxation of a muscle which is sometimes caused by nerve damage from pomalidomide. Cramps and twitches often occur at night as muscles try to relax. Gentle stretching, massage and ensuring adequate salt balance in the body can help relieve the symptoms of cramps.

For more information about peripheral neuropathy and cramps, please see the ***Managing Peripheral Neuropathy Book – A guide for people with myeloma*** at www.myeloma.org.au or call head office for a copy.

Fatigue

Many patients on pomalidomide have fatigue. It can be difficult to distinguish between fatigue that is directly related to pomalidomide treatment and fatigue that is caused by the myeloma itself. A balanced diet, adequate fluid intake, regular exercise and adequate sleep can help minimise the effects of fatigue.

Diarrhoea

Whilst usually mild and easily manageable, diarrhoea can become problematic in some cases but easily managed with simple treatments. It is important to alert the doctor as soon as symptoms commence. Bile acid malabsorption (BAM) can be a cause of persistent diarrhoea in myeloma patients taking pomalidomide. BAM is a condition in which patients do not absorb bile acids properly from their intestines. It can be treated by making some dietary changes such as making sure that fat does not make up more than 20% of the diet. Often another medication is also needed. The doctor will recommend if treatment is necessary for diarrhoea.

Constipation

A decrease in the normal frequency of bowel movements may occur whilst taking pomalidomide. It may be accompanied by gas, pain, or pressure in the stomach. Constipation is usually easier to prevent than to treat.

To relieve the symptoms of constipation, patients can eat a healthy diet which is high in fibre. Fibre absorbs water making stools softer, bulkier and easier to eliminate. Drinking plenty of fluids (aim for about 8 glasses of water a day) helps the fibre work. Pear or prune juice may also help. Regular gentle exercise keeps the bowels more active to help move things along. Gentle laxatives (consult a nurse or pharmacist) may be needed but if constipation continues to be a problem, talk with the doctor.

Special precautions

Patients receiving pomalidomide under this PBS listing must be registered in the i-access risk management program, run by the manufacturer, Celgene. This is an information and consent process, to ensure safety recommendations are adhered to.

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For further information please contact our Myeloma Support Nurses on our toll free Support Line:

1800 MYELOMA (1800 693 566)

or visit our website: www.myeloma.org.au