

Busulfan APOTEX Injection

60mg/10mL

Contains the active ingredient busulfan

Consumer Medicine Information

Keep this leaflet with your medicine.
You may want to read it again.

For a copy of a large print
leaflet, Ph: 1800 195 055

What is in this leaflet

Read this leaflet carefully before taking your medicine.

This leaflet answers some common questions about busulfan. It does not contain all the available information. It does not take the place of talking to your doctor or pharmacist.

The information in this leaflet was last updated on the date listed on the last page. More recent information on this medicine may be available.

Ask your doctor or pharmacist:

- if there is anything you do not understand in this leaflet,
- if you are worried about taking your medicine, or
- to obtain the most up-to-date information.

You can also download the most up-to-date leaflet from www.apotex.com.au.

All medicines have risks and benefits. Your doctor has weighed the risks of you using this medicine against the benefits they expect it will have for you.

Pharmaceutical companies cannot give you medical advice or an individual diagnosis.

What this medicine is used for

The name of your medicine is Busulfan APOTEX Injection. It contains the active ingredient busulfan.

It is used in adults, new-born infants, children and adolescents as a treatment prior to transplantation of either bone marrow or blood stem cells. It is used in combination with other chemotherapeutic drugs, namely cyclophosphamide, melphalan or fludarabine.

Ask your doctor if you have any questions about why this medicine has been prescribed for you. Your doctor may have prescribed this medicine for another reason.

This medicine is available only with a doctor's prescription.

How it works

Busulfan belongs to a group of medicines called alkylating agents. Busulfan destroys the original bone marrow before the transplant.

There is no evidence that this medicine is addictive.

Use in children

This medicine may be used in new-born infants, children and adolescents.

Before you are given this medicine

When you must not be given it

Do not take this medicine if:

- **You are pregnant.**
Busulfan may affect your developing baby if you are given it during pregnancy.
- **You are breastfeeding.**
Busulfan may pass into human breast milk.
- **You are hypersensitive to, or have had an allergic reaction to, busulfan or any of the ingredients listed at the end of this leaflet.**
Symptoms of an allergic reaction may include: cough, shortness of breath, wheezing or difficulty breathing; swelling of the face, lips, tongue, throat or other parts of the body; rash, itching or hives on the skin; fainting; or hay fever-like symptoms.
If you think you are having an allergic reaction, contact your doctor immediately or go to the Accident and Emergency department at the nearest hospital.
- **The expiry date (EXP) printed on the pack has passed.**
- **The packaging is torn, shows signs of tampering or it does not look quite right.**

Before you are given it

Before you start taking this medicine, tell your doctor if:

1. You have allergies to:
 - any other medicines
 - any other substances, such as foods, preservatives or dyes.
2. You have or have had any medical conditions, especially the following:
 - have a liver, kidney, heart or lung problem
 - have a history of seizures.
3. You are currently pregnant or you plan to become pregnant. You must not be given this medicine whilst pregnant. Women should avoid becoming pregnant during treatment with busulfan and up to 6 months after treatment. Men treated with busulfan are advised not to father a child during and up to 6 months after treatment. It may no longer be possible for you to achieve a pregnancy (infertility) after treatment with busulfan. If you are concerned about having children, you should discuss this with your doctor before treatment.
4. You are currently breastfeeding or you plan to breastfeed. You must not be given this medicine whilst breastfeeding.
5. You are planning to have surgery or an anaesthetic.
6. You are currently receiving or are planning to receive dental treatment.
7. You are taking or are planning to take any other medicines. This includes vitamins and supplements that are available from your pharmacy, supermarket or health food shop.

Some medicines may interact with busulfan. These include:

- itraconazole (used for certain types of infections)
- ketobemidone (used to treat pain)
- cyclophosphamide and melphalan, often used in combination with busulfan,

should not be taken for 24 hours after busulfan injection
paracetamol within 72 hours of (and during) busulfan administration should be used with caution.

If you are taking any of these you may need a different dose or you may need to take different medicines.

Other medicines not listed above may also interact with busulfan.

How this medicine is given

Follow carefully all directions given to you by your doctor. Their instructions may be different to the information in this leaflet.

How much is given

Your doctor will determine how much of this medicine you will be given. This will depend on your condition and whether you are taking any other medicines.

Adults

The dose will be calculated according to your body weight.

The recommended dose of busulfan is up to 3.2 mg per kg of body weight per day, in combination with cyclophosphamide, melphalan or fludarabine.

In new-born infants, children and adolescents (0 to 17 years)

The recommended dose is based on body weight and may be up to 4.8 mg/kg/day.

How it is given

Busulfan is given by a qualified healthcare professional as a central intravenous infusion, after dilution of the individual vial. Each infusion will last 2 to 3 hours. Blood samples may be taken for testing the levels of busulfan in your blood.

Before receiving busulfan you will be given anticonvulsive drugs to prevent seizures (phenytoin or

benzodiazepines) and antiemetic drugs to prevent vomiting.

When it is given

Busulfan will be given 1 to 4 times a day for up to 4 days prior to transplant.

If you take too much (overdose)

As busulfan is given to you in hospital under the supervision of your doctor, it is unlikely that you will receive an overdose.

If you think that you or anyone else may have taken too much of this medicine, immediately telephone your doctor or the Poisons Information Centre (Tel: 13 11 26 in Australia) for advice. Alternatively, go to the Accident and Emergency department at your nearest hospital.

Symptoms of busulfan overdose include the side effects listed below in the Possible side effects section, but are usually of a more severe nature.

While you are being given this medicine

Things you must do

Tell your doctor that you are taking this medicine if:

- you are about to be started on any new medicine
- you are pregnant or are planning to become pregnant
- you are breastfeeding or are planning to breastfeed
- you are about to have any blood tests
- you are going to have surgery or an anaesthetic or are going into hospital.

Your doctor may occasionally do tests to make sure the medicine is working and to prevent side effects.

Go to your doctor regularly for a check-up.

Tell any other doctors, dentists and pharmacists who are treating you that you are being given this medicine.

Things to be careful of

Be careful when driving or operating machinery until you know how this medicine affects you.

Busulfan is a powerful cytotoxic drug that results in a huge decrease of blood cells. It is possible that use of busulfan may increase the risk of suffering another malignancy in the future.

Busulfan can also produce symptoms of menopause and in pre-adolescent girls it can prevent the onset of puberty.

Possible side effects

Tell your doctor as soon as possible if you do not feel well while you are being given busulfan or if you have any questions or concerns.

Do not be alarmed by the following lists of side effects. You may not experience any of them. All medicines can have side effects. Sometimes they are serious but most of the time they are not.

The most serious side effects may include decrease in circulation blood cell counts (intended effect of the drug to prepare you for your transplant infusion), infection, liver disorders including blocking of a liver vein, graft versus host disease (the graft attacks your body) and pulmonary complications. Your doctor will monitor your blood counts and liver enzymes regularly to detect and manage these events.

Tell your doctor as soon as possible if you notice any of the following: These side effects of busulfan are very common (reported in more than 1 patient out of 10):

- Blood: decrease of blood circulating cells (red and white) and platelets.
- Infections and Infestations: infections, fever, chills.
- Nervous system: insomnia, anxiety, dizziness, and depression.
- Nutrition: loss of appetite, decrease in magnesium, calcium, potassium, phosphate in blood and increase in blood sugar.
- Cardiac: increase in heart rate, increase or decrease of blood pressure, vasodilation (a state of increased calibre of the blood vessels) and blood clots.
- Respiratory: shortness of breath, nasal secretion (rhinitis), sore throat, cough, hiccup, nosebleeds, abnormal breath sounds.
- Gastro-intestinal: nausea, inflammation of the mucosa of the mouth, vomiting, abdominal pain, diarrhoea, constipation, heart burn, anus discomfort, liquid in the abdomen.
- Hepatic: enlarged liver, jaundice.
- Skin: loss of hairs.
- Muscle and bone: back, muscle and joint pain.
- Renal: increase in creatinine elimination, discomfort in urination, and decrease in urine output.
- General: fever, headache, weakness, chills, pain, oedema, general pain or inflammation at injection site, chest pain, inflammation of the mucosa.
- Investigations: elevated liver enzymes, increased weight.

Less common side effects (reported in 1 to 10 out of 100 patients) include:

- Nervous system: confusion.
- Nutrition: low blood sodium.
- Cardiac: changes and abnormalities in heart rhythm, fluid retention or inflammation around the heart, decrease heart output.
- Respiratory: increase in breath rhythm, respiratory failure,

alveolar haemorrhages, asthma, collapse of small portions of the lung, fluid around the lung.

- Gastro-intestinal: inflammation of the mucosa oesophagus, paralysis of the gut, vomiting blood.
- Skin: skin colour disorder, redness of the skin, skin peeling.
- Renal: increase in the amount of nitrogen components in the blood stream, blood in urines, moderate renal insufficiency.

Uncommon side effects (reported in 1 to 10 out of 1000 patients) include:

- Nervous system: delirium, nervousness, hallucination, agitation, abnormal brain function, cerebral haemorrhage, and seizure.
- Cardiac: clotting of femoral artery, thrombosis, extra heart beats, decrease in heart rate, diffuse leak of fluid from the capillaries (small blood vessels).
- Respiratory: decrease in blood oxygen.
- Gastro-intestinal: bleeding in the stomach and/or the gut.

Febrile neutropenia, tumor lysis syndrome, thrombotic micro-angiopathy (TMA), severe bacterial, viral and fungal infections and sepsis have also been observed during treatment.

Other side effects not listed above may occur in some patients.

Allergic reactions

If you think you are having an allergic reaction to busulfan, do not take any more of this medicine and tell your doctor immediately or go to the Accident and Emergency department at your nearest hospital.

Symptoms of an allergic reaction may include some or all of the following:

- cough, shortness of breath, wheezing or difficulty breathing
- swelling of the face, lips, tongue, throat or other parts of the body
- rash, itching or hives on the skin

- fainting
- hay fever-like symptoms.

Storage and disposal

Storage

Keep your medicine in its original packaging until it is time to take it.

If you take your medicine out of its original packaging it may not keep well.

Keep your medicine in a cool dry place where the temperature will stay below 2-8°C.

Do not store your medicine, or any other medicine, in the bathroom or near a sink. Do not leave it on a window sill or in the car. Heat and dampness can destroy some medicines.

Keep this medicine where children cannot reach it.

A locked cupboard at least one-and-a-half metres above the ground is a good place to store medicines.

Disposal

If your doctor stops giving you this medicine or it has passed its expiry date, the medical staff will dispose of the remaining medicine safely.

Product description

What Busulfan APOTEX Injection looks like

Busulfan APOTEX Injection 60 mg/10 mL appears as a clear colourless solution. It is a sterile solution that contains no antimicrobial agent.

Busulfan APOTEX Injection is for single use in one patient only and is supplied in cartons each containing 8 single-dose 10 mL clear glass vials (type I).

Ingredients

Each vial contains 60 mg of busulfan as the active ingredient.

It also contains the following inactive ingredients:

- dimethylacetamide (DMA)
- macrogol 400

This medicine is gluten-free, lactose-free, sucrose-free, tartrazine-free and free of other azo dyes.

Australian Registration Numbers

Busulfan APOTEX Injection 60 mg/10 (pack of 8 glass vials): AUST R 210228.

Sponsor

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This leaflet was last updated in June 2015.