

BeGeV

(Bendamustine, gemcitabine and vinorelbine)

The possible benefits of treatment vary; for some people this chemotherapy may reduce the risk of the cancer coming back, for others it may control the cancer and its symptoms. 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 'SACT, a guide' which gives general information on chemotherapy and side effects.

Your treatment

Your doctor or nurse clinician has prescribed a treatment which includes the chemotherapy bendamustine, gemcitabine, vinorelbine, and prednisolone steroid tablets. This treatment is given as an injection (bolus), as an infusion (drip) into the vein, and tablets. It is repeated every 21 days for 4 cycles. The treatment consists of the following:

Day 1 Gemcitabine infusion over 30 mins
Vinorelbine short infusion over 5 mins
Prednisolone tablets every day for 4 days

Day 2 Bendamustine infusion over 30/60mins

Day 3 Bendamustine infusion over 30/60 mins

Day 4 Gemcitabine infusion over 30 mins

Day 5 Filgrastim injection every day for 7-10 days

You will have a blood test and medical review before the start of each cycle of treatment. This is so your team can monitor and manage any side effects as well as assess your response to treatment. Occasionally we may not be able to go ahead with your treatment until your blood counts return to a safe level.

Take your prednisolone tablets with breakfast in the morning, not on an empty stomach as they may cause indigestion. It is also better to take them earlier in the day since they can make you feel more alert and prevent sleep.

If you have Hodgkin lymphoma, and need a blood or platelet transfusion, the blood transfusion laboratory will select 'irradiated' blood. This is to reduce the risk of a serious reaction. We will give you more information about this.

If you are taking any other medicines: It is important to tell the doctor if you are taking medicine for any other condition. Some medicines can react with your treatment. So always tell your doctor at every visit about any other medicines or tablets you are taking.

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.



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.

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)

If you feel unwell, you have symptoms of an infection or your temperature is 37.5°C or above, or below 36°C 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.

- **Fluid retention**

Your feet/legs may become swollen on this chemotherapy. If this is mild, no specific treatment is needed. Keeping your feet and legs raised may help. Tell your doctor if the swelling is severe.

- **Tingling & numbness in the fingers or toes/muscle weakness**

This is usually only mild and temporary. It can sometimes last for some time or become permanent. Sometimes you may also have difficulty controlling the muscles in your arms and legs or your balance. Please report these symptoms to your doctor on your next hospital visit.

- **Nausea and vomiting (sickness)**

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

- **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.

- **Hair thinning**

Some hair loss may occur during treatment. 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 by visiting the cancer information centre, or call **0161 446 8439**. Ask the staff for a copy of 'The Wig Fitting Service.'

The Maggie's Centre can support you with hair loss by helping you to consider the practicalities as well as the emotional impact. You can call into Maggie's Monday to Friday, 9am to 5pm to speak with their professional team. Maggie's provides expert care and support to everyone with cancer and those who love them. Contact Maggie's on **0161 641 4848**, email: manchester@maggies.org or drop in, their address is The Robert Parfett Building, 15 Kinnaird Road, Manchester, M20 4QL.

- **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.

- **Upset bowels**

You may get upset bowels with this chemotherapy:

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 The Christie. Ask the staff for a copy of 'Eating: Help Yourself' which has useful ideas about diet when you are having treatment.

Constipation. Try to drink plenty of fluids and eat foods high in fibre. Tell your doctor who may prescribe a suitable laxative.

- **Vein pain**

Vinorelbine can cause pain along the vein during and after treatment. This should only be temporary but contact your hospital doctor or nurse if this becomes severe.

- **Strange taste**

Chemotherapy can often leave a strange, metallic taste in your mouth. It can also make food seem tasteless and bland. Normal taste will usually come back after the treatment finishes. Ask the staff for dietary booklets which you may find helpful.

- **Increased sensitivity to the sun**

Your skin will tan/burn in the sun more easily. Sit in the shade, avoid too much sun and use sunblock cream/hats.

Uncommon side effects (less than 1 in 10)

Loss of periods: Due to the effect of chemotherapy on the ovaries, you may find that your periods become irregular or stop. This is more likely in women over the age of 40 when most women will notice some change in their periods. It is less common in women under the age of 40 but does still happen and can result in significant menopausal symptoms (see section below). Even if your periods stop completely during chemotherapy your periods may come back several years later. This means that you may be able to become pregnant even many years after chemotherapy. It is very important to use contraception if you don't want to get pregnant.

Menopausal symptoms: When the ovaries stop working due to chemotherapy or during a natural menopause most women experience symptoms such as hot flushes, sweats (night and day) and vaginal dryness. These hormonal changes can make the vagina feel as though it has shrunk and become less easy to stretch. This is called vaginal atrophy and can result in discomfort, pain on sexual intercourse, itching and recurrent urine infections. If your ovaries don't start to work again the vaginal symptoms can be permanent, although the flushes and sweats tend to reduce and stop over a small number of years.

Some women who have already gone through the menopause may notice their symptoms worsening for a time after chemotherapy. The vaginal symptoms can start early and the longer they are left the harder they can be to treat. Please contact your specialist nurse either in clinic or by phone when the symptoms first develop if you would like help. Symptoms can be managed in several ways including gels, pessaries and sometimes local oestrogen replacement. You may also find it helpful to request the booklet 'Menopausal symptoms and breast cancer' by Breast Cancer Care (either from your breast care nurse, the cancer information centre at The Christie or online).

⚠ • Infusion related reactions

Bendamustine can sometimes cause an allergic reaction during the infusion and the drip may need to be slowed down or stopped. You may experience chills, fever and shivering. If you have any of these side effects please tell your nurse straightaway, however, your progress will be monitored regularly.

⚠ • Effect on the heart

Although this is not common, Bendamustine can cause palpitations, irregular heartbeat or pain in the chest. Please phone for an ambulance if you have chest pain. It is very rare for Bendamustine to cause heart attacks. If you have questions about this side effect, please discuss this with your doctor.

• Skin rash

You may develop a skin rash. This is usually mild and easily treated. Please tell your doctor on your next visit.

• Blood clots

During chemotherapy you are more at risk of blood clots in the legs (DVT) or lungs (PE).

Occasionally these clots can be life-threatening. To help prevent clots, keep mobile and drink plenty of non-alcoholic fluids.

• Hepatitis B

You must tell your doctor at The Christie before starting your treatment if you have previously been diagnosed with Hepatitis B. Speak to your doctor if you wish to discuss this further.

• Weakened bones

Prednisolone tablets can weaken your bones. This increases the risk of fracturing a bone during, or shortly after, treatment. Sometimes this can happen without a known injury. Some people are at higher risk of developing fractures than others. If this is the case, then your doctor may recommend getting X-rays to assess your bone strength (DEXA scan) and taking extra medication to protect your bones. If you develop new back pain during treatment then please let your doctor know. Bone strength usually improves after treatment has finished.

Rare side effects (less than 1 in 100)

• Extravasation

This is when chemotherapy leaks outside the vein. If you develop redness, soreness or pain at the injection site at any time please let us know straight away.

• Breathlessness

Very rarely this chemotherapy can cause inflammation of your lungs. This can make you breathless. Tell your doctor if you develop this problem while you are having this chemotherapy. Stopping the chemotherapy and taking steroids will help.

Serious and potentially life-threatening side effects

In a small proportion of patients, chemotherapy can result in very severe side effects which may result in death. The team caring for you will discuss the risk of these side effects with you.

Sex, contraception and fertility

Protecting your partner and contraception:

We recommend that you or your partner use a barrier form of contraception during sexual intercourse while you are having the course of chemotherapy. Chemotherapy is dangerous to unborn babies, and this will also protect you and your partner from any chemotherapy drugs that may be present in semen and in the vagina. If you suspect that you may be pregnant, please tell your doctor immediately.

Fertility:

This chemotherapy may affect your ability to have children. Your doctor or nurse should have discussed this with you. If not, please ask them before you start treatment.

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.

Contacts

If you have any general questions or concerns about your treatment, please ring the area where you are having treatment:

Haematology day unit – **0161 446 3924**

Lymphoma clinical nurse specialists – **0161 446 8573**

General enquiries – **0161 446 3000**

Lymphoma secretaries

Professor Linton/Dr Phillips/Dr Broadbent/Dr Gibb/Dr Shotton – **0161 446 3453**

Professor Illidge – **0161 446 8574**

Dr Hague – **0161 446 3333**

Dr Harris/Dr Chan/Dr Brocklehurst – **0161 446 3302**

Professor Bloor – **0161 446 3869**

Your hospital number is:

Your key worker is:

© 2025 The Christie NHS Foundation Trust. This document may be copied for use within the NHS only on the condition that The Christie NHS Foundation Trust is acknowledged as the creator.

If you need information in a different format, such as easy read, large print, BSL, braille, email, SMS text or other communication support, please tell your ward or clinic nurse.

The Christie is committed to producing high quality, evidence based information for patients. Our patient information adheres to the principles and quality statements of the Information Standard. If you would like to have details about the sources used please contact **the-christie.patient.information@nhs.net**

For information and advice visit the cancer information centres at Withington, Oldham, Salford or Macclesfield. Opening times can vary, please check before making a special journey.



Contact The Christie Hotline for
urgent support and specialist advice
The Christie Hotline: 0161 446 3658
Open 24 hours a day, 7 days a week