



getting answers

A patient's guide to glivec®

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 NOVARTIS
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 glivec®
imatinib

 glivec®
imatinib

about this guide

If you are reading this guide, your physician has probably prescribed for you one of the latest advances in chronic myeloid leukaemia (CML) therapy—Glivec® (imatinib). Glivec (pronounced GLEE-vek) is a unique therapy that is specifically designed to target the molecular abnormality that causes CML. You probably have many questions about the therapy and how it might benefit you. This booklet will help you understand what CML is, what Glivec is, and how it works. It will also help you understand how your treatment will be given and how your body might react to treatment.

Knowing what to expect is important as you receive therapy. Remember that each person reacts differently to treatment, so it is important to talk to your physician and nurse about how you feel. In addition, if you would like to contact other people with CML or support groups dedicated to helping cancer patients and their families, you can refer to the organisations listed at the end of this booklet.

Please refer to this guide as often as necessary and contact your physician or nurse if you have any additional questions about Glivec or other treatments your physician has prescribed.

Note: Underlined words are defined in a glossary at the end of this brochure.

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Keith Pratt

learning more about CML

what it is

Leukaemia is a type of cancer of the blood and the bone marrow (the inner part of bones where blood cells are made). With leukaemia, 2 things happen. First, certain blood cells become abnormal. Second, the body keeps producing large numbers of these abnormal cells.

CML is one type of leukaemia. "Chronic" means that it is a slow-acting cancer that may take years to progress. "Myeloid" means that the type of abnormal blood cell being overproduced is a type of white blood cell called a myeloid cell. So, chronic myeloid leukaemia is a slow-acting cancer that makes the body produce too many cancerous myeloid white blood cells.

There are 3 phases of CML: the chronic phase, the accelerated phase, and the blast crisis phase. As patients move through these phases, their disease progresses, and they experience more physical symptoms.

For more information, please see the enclosed Patient Leaflet or contact your physician.

why it happens

When a person is healthy, signals in the body tell it to grow new blood cells. These signals reach the “parents” of blood cells, which are called stem cells. The signals turn stem cells on and off as necessary to produce the number of blood cells the body needs. When a person has CML, a change takes place in the person’s DNA and makes this signal stay on constantly. Because this signal stays on, the body produces more and more leukaemia cells.

how it is treated

CML is usually treated with a bone marrow transplant (BMT), with drug therapy, or with a combination of the 2.

BMT is also known as a stem cell transplant (SCT). This type of therapy involves 2 steps. First, a very high dose of a drug is given to the patient to kill most of the cells in the bone marrow (cancer cells and healthy cells). The second step is to replace all of the stem cells that were destroyed with only healthy cells. These replacement cells are usually taken from someone else (this is known as an allogeneic transplant), and are occasionally taken from the patient (this is known as an autologous transplant).

Whether a patient receives an allogeneic transplant or an autologous transplant, once the stem cells are replaced, they settle into the patient’s bone marrow and start to grow and produce blood cells.

BMT is the only treatment that has been shown to cure some patients with CML, so this is the first treatment that physicians consider for their patients. Unfortunately, there are many risks with the procedure, and only a fraction of patients are good candidates for it.

Patients who are unable to have a BMT are treated with drug therapy. The drugs most commonly used to treat CML are listed below.

Interferon-alpha (IFN- α). Interferons are natural substances produced by the body. Giving patients an injection of extra interferon may help slow the growth of leukaemia cells (and prolong life), but it does not provide a cure for CML. IFN- α is sometimes given alone, and sometimes given with the drug cytarabine (also called Ara-C). The most significant problem with this therapy has been with tolerability. Many people cannot tolerate the side-effects of IFN- α therapy. Therefore, new formulations are being developed so that people will be able to better tolerate IFN- α .



H Woolgrove

Hannah Woolgrove

Hydroxyurea/Busulfan. These 2 chemotherapy agents are typically used with patients who are unable to receive a BMT and who do not respond to or cannot tolerate IFN- α . Chemotherapy agents are chemicals (drugs) used to destroy leukaemia cells. Both of these therapies treat the symptoms of CML, but they do not prolong life. However, they are generally better tolerated than IFN- α therapy.

For more information, please see the enclosed Patient Leaflet or contact your physician.

learning more about glivec®

how it works

Glivec is a unique therapy that specifically targets the cause of CML. As mentioned earlier, with CML there is a constant signal that tells the body to keep producing abnormal white blood cells. Glivec works by blocking, or turning off, that signal so the extra white blood cells are not made.

This is the first time a therapy has targeted the cause of CML. This is a very important difference from other types of therapy. BMT destroys most of the cells in a patient's bone marrow (cancer cells and healthy cells). Side-effects can be severe. Chemotherapy enters the bloodstream and destroys as many cells as possible—again, cancer cells and healthy cells. Patients receiving certain types of chemotherapy also have many side-effects and are sometimes forced to stop their treatment.

Glivec, on the other hand, targets the signal that produces leukaemic cells, so most healthy cells are left unharmed. Most patients receiving Glivec do not have major problems with side-effects.

what to expect from glivec® therapy

It is important to remember that people respond differently to therapy. How you respond to treatment with Glivec will depend on many factors, but your physician has prescribed Glivec for you because he or she believed you might benefit from it.

There are 2 main goals of your treatment. The first goal is to decrease the number of abnormal white blood cells in your circulation. The second goal is to prevent your disease from getting worse, or even reverse it to a less serious stage. As a new treatment approach, it is possible that your therapy with Glivec will accomplish both of these goals.

In clinical studies with Glivec, many patients achieved a decrease in the number of white blood cells in their circulation. In a small percentage of patients, worsening of the disease was prevented. In fact, a fraction of them reversed their disease from a later phase of CML back to the chronic phase.

Glivec is an effective therapy that has been able to achieve both of these goals.



Sima Schorr

Sima Schorr

considering side-effects

Since Glivec® is designed to specifically target leukaemia cells, most normal cells are left unharmed. Side-effects do not typically present a major problem for patients receiving Glivec therapy. However, some patients in clinical studies did experience side-effects. These side-effects were usually not severe and rarely interrupted treatment.

The most frequently reported side-effects were mild nausea, vomiting, diarrhoea, muscle pain and muscle cramps—and were easily manageable; swelling around the eyes or lower legs was also common. However, more serious side-effects that made it necessary to discontinue therapy were reported in a small number of patients in clinical studies. Please see the enclosed Patient Leaflet for more information.

The ways to manage the most common side-effects seen with Glivec therapy are listed on the next two pages. If you experience any side-effects during Glivec therapy, including side-effects not listed here, contact your physician.

For more information, please see the enclosed Patient Leaflet or contact your physician.

nausea

The most common side-effect with Glivec® is mild nausea, sometimes accompanied by vomiting or upper abdominal pain. Taking Glivec with a meal and a large glass of water may greatly reduce these effects.

rash

Some patients taking Glivec develop a skin rash. If you notice any red patches or itchiness, contact your physician. You may be given an additional medication, such as an antihistamine or topical corticosteroid, to reduce the signs and symptoms of rash. If additional treatment does not help and the rash grows severe, your physician may find it necessary to interrupt or even discontinue your therapy.

fluid retention

Fluid retention and weight gain have been reported by patients taking Glivec. If you notice any increase in weight, or swelling around the eyes, lower legs, or other areas while taking Glivec, notify your physician. You may be given a drug called a diuretic, which makes you pass urine, to reduce the amount of fluids in your body.

diarrhoea

Some patients have also had diarrhoea while receiving Glivec®. If you experience diarrhoea during Glivec therapy, contact your physician before taking any other drugs. Diarrhoea is usually mild and can be managed with over-the-counter medications.

glivec® and other drugs

Like many medications, Glivec can affect, and can be affected by, other pharmaceutical products you may be taking. While taking Glivec, you should avoid taking over-the-counter medications containing paracetamol, and should consult with a physician about all medications you are currently taking or are planning to take in the future.

if you are pregnant

Glivec should not be given to women who are or could be pregnant, or who are breast-feeding. Please discuss these issues with your physician or nurse before beginning therapy with Glivec.

dosing and taking glivec®

Glivec is a convenient therapy for patients to take. Unlike many drugs that must be administered in the hospital, Glivec is available in capsule form and is taken by mouth once a day. It is recommended that patients take Glivec with a meal and a large glass of water to avoid gastrointestinal upset.

Your physician or nurse will discuss with you the dose that you should be taking. Generally, dosing of Glivec depends on your stage of CML (see below).

Patients with CML
in the chronic phase 400 mg/day

Patients with CML
in the accelerated or
blast crisis phase 600 mg/day

Glivec is supplied as 100-mg capsules, so you will need to take several capsules for each dose. If you are in the chronic phase of CML, you will need to take 4 capsules a day, and if you are in the advanced phase of CML, you will need to take 6 capsules a day.

Depending on your response to treatment, your physician may decide to either increase or decrease the dose of Glivec® that you are taking. He or she will talk to you about the reasons for any changes to your dose. If your daily dose is changed, be sure to follow your physician's recommendations.

what you need to do

Because Glivec is an oral therapy, you have the important responsibility of ensuring that you take the correct dose every day. It is possible that because of occasional side-effects you will want to take less of your medicine, or not take it at all. However, it is very important for you to continue taking Glivec unless your physician has told you to stop treatment. Following your prescribed dose is crucial in achieving optimal results. If you are feeling discouraged, talk to your physician, nurse, or a friend or family member about the way that you feel. Getting emotional support during your treatment is just as important as getting medical support. You may also contact the organisations listed on the next page for additional information and support.

Glivec is intended for patients with chronic myeloid leukaemia (CML) in the advanced stages of disease, also called the accelerated phase or blast crisis phase of CML. Glivec is also intended for patients with CML in the initial or chronic phase of the disease for whom the drug interferon-alpha has not been effective or tolerated.



Ken Iverson

Ken Iverson

getting more information

[Identify country-specific resources, such as telephone hotlines, available to patients receiving Glivec therapy.]

get all of your questions answered

This guide was developed to help you learn more about your therapy with Glivec®. If you have additional questions or would like more information, please contact your physician, [country-specific resources], or the organisations listed below.

other cancer/leukaemia resources

[Identify country-specific cancer-related organisations and provide full contact information.]

For more information, please see the enclosed Patient Leaflet or contact your physician.

glossary

Allogeneic transplant: A procedure in which a donor's stem cells are removed, stored, and placed into a patient's bone marrow after receiving high-dose drug therapy.

Antihistamine: An allergy medicine used to reduce a rash associated with therapy for CML.

Autologous transplant: A procedure in which a patient's own stem cells are removed, stored, and eventually replaced after the patient receives high-dose drug therapy.

Bone marrow: The soft, spongy inner part of bones where blood cells are made.

Bone marrow transplant: A procedure to replace bone marrow destroyed by high doses of anti-cancer drugs with healthy bone marrow.

Busulfan: A chemotherapy agent used to treat CML.

Chemotherapy: The use of drugs to kill cancer.

Chronic myeloid leukaemia (CML): A slowly progressing cancer that makes the body produce too many cancerous myeloid white blood cells.

Corticosteroid: A medicine used to reduce a rash associated with therapy for CML.

Diuretic: A drug or substance that promotes urination.

Hydroxyurea: A chemotherapy agent often used to treat CML.

Interferon-alpha (IFN- α): A drug made from a natural body substance that uses the body's own defences to fight cancer.

Myeloid: A type of white blood cell.

Stem cell: A "parent" cell that divides to produce new blood cells.

Stem cell transplant: Another name for a bone marrow transplant.

patient leaflet

General Information

Glivec® comes in an orange to greyish-orange opaque capsule. In general, the recommended daily dose will require taking multiple capsules per day. Your doctor will prescribe your dose based on the specifics of your disease.

Glivec 100-mg Hard Capsules

The active substance of Glivec is imatinib. It is supplied as a dry powder in hard gelatin capsules. Each capsule contains 100 mg of imatinib.

The other ingredients are microcrystalline cellulose, crospovidone, magnesium stearate, and anhydrous colloidal silica. The capsule shell is composed of gelatin, red iron oxide (E 172), yellow iron oxide (E 172), and titanium dioxide (E 171).

Marketing Authorisation Holder

Country specific.

Manufacturer

Country specific.

what glivec® is and what it is used for

Glivec is supplied as a dry powder in hard gelatin capsules.

Glivec is indicated for the treatment of patients with chronic myeloid leukaemia (CML) in blast crisis,

accelerated phase, or in chronic phase after failure of IFN- α therapy. Glivec® inactivates an enzyme called Bcr-Abl tyrosine kinase, which is crucial for the development of CML. Glivec thereby blocks the cellular processes that cause the normal bone marrow to become malignant and inhibits the growth of the leukaemic cells.

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

before you take glivec®

Carefully follow all instructions given to you by your doctor. They may differ from the information contained in this leaflet.

Read the following explanations before you use Glivec.

Who Should Take glivec

Glivec should be taken by patients with CML in blast crisis, accelerated phase, or in the chronic phase after failure with IFN- α therapy.

You Should Not Take glivec:

- If you are allergic (hypersensitive) to imatinib or any of the other ingredients of Glivec listed at the beginning of this leaflet

Ask your doctor if you have any further questions.

Take Special Care With glivec:

- If you have or have ever had a liver problem

- If you are or think you may be pregnant
- If you are breast-feeding (see following page)

During treatment with Glivec®, your body may retain water (fluid retention). Therefore, if you experience rapid weight gain, contact your doctor immediately.

Glivec should only be prescribed to you by a doctor who is experienced in the use of medicines to treat CML.

Your doctor will regularly monitor your condition to determine whether Glivec is having the desired effect. Your weight and blood will also be tested regularly while you are taking this medicine.

Taking glivec With Food and Drink

You should take Glivec with a meal and a large glass of water—to minimise the risk of stomach upset.

Use in the Elderly

Glivec can be used by elderly people.

Use in Children

The safety and effectiveness of Glivec in children have not been established.

Pregnancy

Tell your doctor if you are or think that you may be pregnant. Your doctor will discuss with you the potential risks of taking Glivec during pregnancy.

Glivec® should not be used during pregnancy unless clearly necessary. Women of childbearing potential are advised to use effective contraception during treatment.

Breast-Feeding

You should not breast-feed during treatment with Glivec.

Driving and Using Machines

It is not known whether Glivec has an effect on your ability to drive or use machines.

Taking Other Medicines

Inform your doctor or pharmacist if you are taking or have recently taken any other medicines, even those not prescribed by a doctor. Avoid taking any over-the-counter medicines that contain paracetamol while taking Glivec.

how to use glivec®

Carefully follow all instructions given to you by your doctor. This medicine has been prescribed only for you. Do not give it to anybody else or use it for any other illnesses.

How Much to Take

Your doctor will tell you how many capsules of Glivec to take. The usual starting dose is 4 or 6 capsules taken by mouth once a day. Depending on how you respond to treatment, your doctor may decide to increase or decrease your dosage.

How to Take glivec®

Swallow the capsules whole—without opening or crushing them—with a large glass of water. You should take Glivec with a meal.

When and How Long to Take glivec

Your doctor will determine when you will be given Glivec and for how long you should receive it. Do not exceed the recommended dosage and make sure you take Glivec for as long as prescribed.

If You Take More glivec Than You Should

If you think you may have taken more Glivec than you should have, talk to your doctor immediately. You may require medical attention.

possible side-effects

Like all medicines, Glivec can have some side-effects. These are usually mild to moderate.

During treatment with Glivec, your body may retain water, and this may result in rapid weight gain. Tell your doctor immediately if you experience such a side-effect.

Treatment with Glivec may decrease the number of white cells in your blood, which may lead to a higher sensitivity to infection. Consult your doctor immediately if you experience signs of infection such as fever, severe chills, sore throat, or mouth ulcers. You should also inform your doctor immediately if your skin appears yellowish in tone.

The most common side-effects reported with Glivec® were mild nausea, vomiting, diarrhoea, muscle pain, and muscle cramps—which were easily manageable. Swelling around the eyes or lower legs was also common. A few serious side-effects—such as fluid retention—occurred with Glivec, and were usually managed by interrupting Glivec therapy and with other supportive medicines.

If you experience any of the side-effects listed above, or any side-effects not mentioned in this leaflet, contact your doctor or pharmacist immediately.

storing glivec®

- Keep Glivec out of the reach and sight of children
- Do not store Glivec above 30°C
- Store Glivec in the original package
- Do not use Glivec after the expiry date shown on the box
- Do not use any Glivec pack that is damaged or shows signs of tampering

further information

If you have any questions about this medicinal product, please contact the local representative of the Marketing Authorisation Holder: country specific.

This leaflet was last approved on: country specific.