## Patient Education

### Ponatinib (poe-NA-ti-nib)

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<th>Brand Name</th>
<th>Iclusig®</th>
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**How is Ponatinib Administered?**  
Ponatinib comes as a tablet, which is taken by mouth, with or without food, once a day.

**What is it Used For?**  
Ponatinib is used for CML (chronic myeloide leukemia). It is also used for ALL (acute lymphocytic leukemia) with a specific DNA mutation called the Philadelphia chromosome. Ponatinib may also be used for other leukemias or conditions if your physician feels it may be beneficial.

**How Does it Work?**  
Ponatinib is a type of targeted therapy, rather than tradition chemotherapy. Specifically, it is a tyrosine kinase inhibitor (TKI).

Cancer is a group of diseases in which abnormal cells multiply without control. Traditional chemotherapy agents identify cancer cells by their rapid rate of multiplication— and then attack those cells. Unfortunately, it also attacks normal cells that multiply quickly. Targeted therapy identifies other differences between normal cells and cancer cells, and then uses that difference to attack the cancer cells, sparing the normal cells.

Ponatinib works by blocking the action of an abnormal protein that signals cancer cells to multiply. Ponatinib is specially designed to work in patients that have not had an adequate response to other medications that treat CML or ALL.

**What Should I Tell My Doctor Before I Begin Receiving Ponatinib?**

- Tell your doctor if you:
  - have had an allergic reaction to ponatinib in the past
  - are taking warfarin (Coumadin®), aspirin, products containing aspirin, over-the-counter pain medicines, vitamins, or herbal supplements
  - are taking any medications to prevent or manage heartburn or acid reflux (GERD)
  - have had surgery within the last 28 days or are planning any surgery
  - have any chronic or non-healing wounds
  - are pregnant or breastfeeding

This drug may interact with other medications or cause harmful side effects. Tell your doctor and pharmacist about all prescription or over-the-counter medications, vitamins, herbal or diet supplements that you are taking.
What Are Some Possible Side Effects I May Experience?

- High blood pressure. We may add blood pressure medications to control this.
- *Low blood counts* (decreased red blood cells, white blood cells, and platelets), which increase your risk of fatigue, infections, and bleeding problems. You may require blood transfusions while on this medication. If this becomes severe, we may need to decrease your ponatinib dose.
- *Fluid retention*. Excess fluids can build up in your legs, face, abdomen, or other areas of the body. If fluid collects around your lung, you may feel short of breath or have a dry cough. Call your doctor immediately if you experience new or worsening shortness of breath.
- *Increased blood sugar, especially in patients with diabetes*
- *Diarrhea, nausea, vomiting, decreased appetite*
- *Generalized weakness or dizziness*
- *Fever, headache, muscle or bone pain*
- *Skin rash*
- *Delayed wound healing*
- *Liver or pancreas damage* (rarely this can be severe)
- *Changes in heart rhythm* have been reported, but are uncommon.

How Can I Manage These Side Effects?

- Stay away from crowds or people with colds, flu, or other infections. Wash your hands often, and talk to your doctor before you have any vaccinations (immunizations), such as a flu shot.
- If your blood counts drop, we may instruct to use an electric razor, instead of a conventional razor blade, and to avoid contact sports or activities that could cause injury to reduce the risk of bleeding.
- If you have a low platelet count, be aware that intercourse and other sexual activities may cause bleeding. Talk to your doctor or nurse about whether sexual activity is safe for you at this time. If intercourse is permitted, use a water-based lubricant and avoid forceful thrusting.
- For oral care, use a soft toothbrush or a toothette with mouthwash.
- Monitor your blood pressure using a home blood pressure cuff. Keep a log of your blood pressure and bring it to clinic appointments. Notify your physician if blood pressure is elevated (higher than 140/90) or if you develop severe headache, lightheadedness, numbness, tingling, or difficulty speaking.
- If you develop high blood pressure, limit sodium (salt) in your diet.
- Get plenty of rest and maintain good nutrition.
- Drink at least 2-3 quarts of fluid (especially water) every 24 hours, unless your doctor tells you otherwise.
- Ask your doctor about medication to help prevent or lessen nausea and vomiting. If you develop nausea related to ponatinib, try taking ponatinib with food to decrease the nausea.
• Acetaminophen and ibuprofen may help with discomfort from fever, headache, and/or aches and pain but talk to your doctor before taking any of these medications.
• Drinking alcoholic beverages should be kept to a minimum or avoided completely. Discuss this with your doctor.

When Should I Call the Doctor?

Go to the nearest emergency room if you develop severe headache or neurological symptoms such as numbness, tingling, or difficulty speaking.

Call the clinic immediately if you experience:
• fever of 100.4°F (38°C or higher), chills
• any other signs of infection such as a sore throat, painful urination, or a skin wound that is red, swollen, painful, and/or warm to the touch
• abdominal pain
• unusual bleeding

Call your doctor as soon as possible if you experience:
• a significant increase in blood pressure - a top number (systolic) above 160 or a bottom number (diastolic) above 100
• swelling or weight gain greater than 2 pounds in a day or 5 pounds in a week, or increasing shortness of breath
• nausea that interferes with eating and is unrelieved with medication
• diarrhea (4-6 episodes) or vomiting (more than 4-5 times) in 24 hours
• black, tarry, or bloody stools
• pain or burning with urination or blood in urine
• extreme fatigue that makes it difficult to care for yourself

What Else Should I Know About Ponatinib?

• Do not chew, crush, or break the tablets.
• You must remember to take ponatinib every day, as prescribed. Consider using a tablet box or a reminder system to help you remember to take your medication.
• If you develop heartburn, you may take over-the-counter antacid medications but you must take them more than 2 hours before or 2 hours after taking bosutinib. Other types of heartburn medications should be avoided including omeprazole (Prilosec®), esomeprazole (Nexium®), pantoprazole (Protonix®), rabeprazole (Aciphex®), lansoprazole (Prevacid®), ranitidine (Zantac®), and famotidine (Pepcid®)
• The amount of ponatinib you will receive is dependent on many factors and your doctor will determine your exact dosage and schedule. Do not stop taking ponatinib without notifying the doctor.
• Do not eat grapefruit, drink grapefruit juice, or take any supplements containing grapefruit extract while on ponatinib.
• If you miss a dose, take next scheduled dose at its regular time; do not take 2 doses of ponatinib at once in order to catch up for the missed dose.

• You may burn more easily, so avoid exposure to direct sunlight. Wear protective clothing and sunscreen with SPF of 30 or higher.

• Ponatinib should be held for at least one week before any surgeries. Discuss this with your doctor before stopping ponatinib.

• Tell your doctor if you are pregnant or may become pregnant before starting ponatinib. Both men and women should use effective methods of birth control during treatment. This drug may be harmful to a fetus.

• Breast feeding while on ponatinib is discouraged. Talk to your doctor for more details.

• You will have regularly scheduled lab tests while on this medication to watch your blood counts and your liver and kidney function.

• Monitor your blood pressure using a home blood pressure cuff. Keep a log of your blood pressure and bring it to clinic appointments. Notify your physician if blood pressure is elevated (higher than 140/90).

• A rare but serious side effect of ponatinib is stroke, heart attack, or blood clot formation. Patients with other risk factors for heart disease are at increased risk.

• If you have any questions about ponatinib, talk to your doctor.