Generic Name: Ibrutinib
Trade Name(s): Imbruvica

Drug Type:
Ibrutinib is a targeted therapy that inhibits the function of Bruton’s tyrosine kinase (BTK).

What Conditions Are Treated by Ibrutinib:
Ibrutinib is approved for the treatment of Waldenstrom’s macroglobulinemia by the US Food and Drug Administration (FDA), the European Commission, and Health Canada.

How Ibrutinib Is Given:
Ibrutinib is a capsule, taken by mouth once daily. Typically, capsules are taken at approximately the same time each day. The capsules should be swallowed whole with at least 8 ounces of water. Phase II clinical trials of WM patients established a dosage of three 140-mg capsules daily.

Ibrutinib Side Effects:
Most people will not experience all of the side effects listed. Side effects are often predictable in terms of their onset, duration, and severity. They are almost always reversible and will go away after therapy is completed.

The following ibrutinib side effects are common (occurring in greater than 30% of patients): decreased platelets, diarrhea, decreased neutrophils, decreased hemoglobin, fatigue, musculoskeletal pain, swelling, upper respiratory tract infection, nausea, and bruising.

The following are less common side effects (occurring in about 10-30% of patients): shortness of breath, constipation, rash, abdominal pain, vomiting, decreased appetite, cough, fever, inflammation of the mouth and lips, dizziness, urinary tract infection, pneumonia, skin infections, weakness or loss of body strength, muscle spasms, sinusitis, headache, dehydration, indigestion, petechiae (red or purple spots caused by capillary bleeding), joint pain, and nosebleeds.

The long-term safety profile of ibrutinib is not known.

When to Contact Your Doctor or Health Care Provider:
Contact your doctor or health care provider immediately, day or night, if you should experience any of the following symptoms: fever of 100.5°F (38°C) or higher or chills (both are possible signs of infection), shortness of breath or other breathing problems, cough, and bleeding that won’t stop.

The following symptoms also require medical attention. Contact your doctor or health care provider if you notice any of the following: frequent diarrhea, black or tarry stools or blood in your stools, long-lasting headache, confusion, change in speech, nausea, vomiting, inability to eat or drink for 24 hours, signs of dehydration, yellowing of the skin or whites of the eyes, dark or brown urine, pain on the right side of the stomach, easy bleeding or bruising, rash, itching, blisters, cough with or without mucus, mouth sores, pain or burning with urination, and extreme fatigue.

Always inform your health care provider if you experience any unusual symptoms.
Self-Care Tips While Taking Ibrutinib:
Do not drink grapefruit juice, eat grapefruit, or eat Seville oranges while taking ibrutinib.

Stay well hydrated and drink at least 2-3 quarts of fluid every 24 hours, unless you are instructed otherwise.

Wash your hands often and after taking each dose of ibrutinib.

You may be at risk of infection so try to avoid crowds or people with colds and report fever or any other signs of infection immediately to your doctor.

Make sure you tell your doctor about any other medications you are taking (including prescription, over-the-counter, vitamins, herbal remedies, etc.).

Use an electric razor and a soft toothbrush to minimize bleeding.

Avoid contact sports or activities that could cause injury.

To help treat/prevent mouth sores while taking ibrutinib, rinse mouth three times a day with 1 teaspoon of baking soda mixed with 8 ounces of water.

To reduce nausea, take anti-nausea medications as prescribed by your doctor and eat small, frequent meals. In general, drinking alcoholic beverages should be kept to a minimum or avoided while taking ibrutinib. Maintain good nutrition and get plenty of rest.

Do not receive any kind of immunization or vaccination without your doctor's approval.

Avoid sun exposure. Wear SPF 15 (or higher) sun block and protective clothing.

Monitoring and Testing While Taking Ibrutinib:
You will be checked regularly by your doctor while you are taking ibrutinib to monitor side effects and check your response to therapy. Periodic blood work will be obtained to monitor your complete blood count (CBC) as well as the function of other organs (such as your kidneys and liver).

How Ibrutinib Works:
Ibrutinib is termed a “targeted therapy.” Targeted therapy is the result of years of research dedicated to understanding the differences between cancer cells and normal cells. This information is used to create a therapy to attack the cancer cells while causing minimal damage to the normal cells, leading to fewer side effects. Each type of targeted therapy works a little differently, but all interfere with the ability of the cancer cell to grow, divide, repair and/or communicate with other cells.

Ibrutinib inhibits the function of Bruton’s tyrosine kinase (BTK). BTK is a key signaling molecule of the B-cell receptor signaling complex that plays an important role in the survival of malignant B-cells. Ibrutinib blocks signals that stimulate malignant B-cells to grow and divide uncontrollably.
NOTE: The information in this fact sheet is intended to be helpful and educational, but it does not constitute an endorsement by the IWMF and is not meant to be a substitute for professional medical advice.

Adapted from the Chemocare website, www.chemocare.com, sponsored by the Cleveland Clinic