PATIENT MEDICATION INFORMATION

READ THIS FOR SAFE AND EFFECTIVE USE OF YOUR MEDICINE

PrIMBRUVICA®

ibrutinib tablets

ibrutinib capsules

Read this carefully before you start taking **IMBRUVICA®** and each time you get a refill. This leaflet is a summary and will not tell you everything about this drug. Talk to your healthcare professional about your medical condition and treatment and ask if there is any new information about **IMBRUVICA®**.

Serious Warnings and Precautions

IMBRUVICA® should only be prescribed by a qualified doctor who is experienced in the use of anticancer drugs.

- Major bleeding events, some fatal, have been reported (see below)
- IMBRUVICA* should not be used in patients with moderate or severe liver problems (see below)
- IMBRUVICA® should not be used with certain medications that can increase the blood level of IMBRUVICA® (see below)

What is IMBRUVICA® used for?

IMBRUVICA® is used to treat adults with:

- Chronic Lymphocytic Leukemia (CLL):
 - who have not had prior therapy, including those with a specific chromosome deletion, called the 17p deletion. For these patients, IMBRUVICA® can be used alone or in combination with obinutuzumab or rituximab.
 - who have received at least one prior therapy, including those patients with the 17p deletion. For these patients, IMBRUVICA® can be used alone or in combination with bendamustine and rituximab.
- Mantle Cell Lymphoma (MCL): that was previously treated but has come back or did not respond to treatment.
- Marginal Zone Lymphoma (MZL): who have received at least one previous therapy including an antibody that acts against their cancer. This antibody is called anti-CD20. For these patients, IMBRUVICA® is used when patients need medicine and not radiation or surgery.
- Waldenström's Macroglobulinemia (WM): For these patients, IMBRUVICA® can be used alone or in combination with rituximab.
- Chronic Graft Versus Host Disease (cGVHD): when first line corticosteroid therapy did not work, and additional therapy is needed.

It is not known if IMBRUVICA® is safe and effective in children under the age of 18 years.

How does IMBRUVICA® work?

IMBRUVICA® blocks a specific protein in the body that helps cancer cells live and grow. This protein is called "Bruton's Tyrosine Kinase." By blocking this protein, IMBRUVICA® may help kill and reduce the number of cancer cells and slow the spread of the cancer.

What are the ingredients in IMBRUVICA®?

Medicinal ingredient: ibrutinib

Non-medicinal ingredients:

Tablets:

colloidal silicon dioxide, croscarmellose sodium, lactose monohydrate, magnesium stearate, microcrystalline cellulose, povidone, and sodium lauryl sulfate. The tablet film coatings contain black iron oxide (140 mg, 280 mg, 420 mg tablets), polyethylene glycol, polyvinyl alcohol, red iron oxide (280 mg, 560 mg tablets), talc, titanium dioxide, and yellow iron oxide (140 mg, 420 mg, 560 mg tablets).

Capsules:

croscarmellose sodium, magnesium stearate, microcrystalline cellulose, and sodium lauryl sulfate. The white capsule shell contains gelatin and titanium dioxide. Capsules are printed with ink containing iron oxide black and shellac.

IMBRUVICA® comes in the following dosage forms:

Tablets: 140 mg, 280 mg, 420 mg, 560 mg

Capsules: 140 mg

Do not use IMBRUVICA® if:

 you are allergic to ibrutinib or any of the other ingredients in this medicine or components of the container. If you are not sure about this, talk to your healthcare professional before taking IMBRUVICA®.

To help avoid side effects and ensure proper use, talk to your healthcare professional before you take IMBRUVICA®. Talk about any health conditions or problems you may have, including if you:

- have ever had unusual bleeding or bruising or are on any medicines that increase your risk of bleeding such as aspirin, anti-inflammatories (e.g., ibuprofen, naproxen, and others), warfarin, heparin, other medications to prevent or treat blood clots (e.g., dabigatran, rivaroxaban, apixaban), or any supplements that increase your risk of bleeding such as fish oil, flaxseed, or vitamin E.
- have or have had heart rhythm problems or severe heart failure, or if you have any of the following: fast and irregular heartbeat, light-headedness, dizziness, shortness of breath, chest discomfort, swollen legs, or if you faint.
- have or are at increased risk of heart disease.
- have high blood pressure.

- have any infection.
- have had a hepatitis B infection (a viral infection of the liver).
- have liver or kidney problems. You should not take this drug if you have certain liver problems.
- are planning to have any medical, surgical or dental procedure. Your doctor may ask you to stop taking IMBRUVICA® for a short time.

Other warnings you should know about:

Tests and check-ups before and during treatment: Laboratory tests may show that your blood count contains more white blood cells (called "lymphocytes") in the first few weeks of treatment. This is expected and may last for a few weeks or months. This does not necessarily mean that your blood cancer is getting worse. Your doctor will check your blood counts before and during the treatment. In rare cases your doctor may need to give you another medicine. Talk to your doctor about what your test results mean.

Your doctor will check your heart before you start IMBRUVICA® and during your treatment. Your doctor will also check your blood pressure during treatment and may need to give you another medicine to control your blood pressure.

IMBRUVICA® can affect some blood tests. Tell your healthcare professional you are taking IMBRUVICA® each time you get blood work done.

Children and adolescents: IMBRUVICA® is not recommended for use in patients under 18 years of age.

IMBRUVICA® with food: Do not take IMBRUVICA® with grapefruit or Seville oranges; this includes eating them, drinking the juice, or taking supplements that might contain them. These products may increase the amount of IMBRUVICA® in your blood.

Pregnancy, breast-feeding and fertility:

• Female patients:

- IMBRUVICA® can harm your unborn baby.
- Do not get pregnant while you are taking IMBRUVICA®. Women of childbearing age must use
 highly effective birth control methods during treatment with IMBRUVICA® and for 3 months
 after the last dose of IMBRUVICA®.
- If you are pregnant, think you may be pregnant or are planning to have a baby, ask your healthcare professional for advice before taking IMBRUVICA®.
- Tell your healthcare professional immediately if you become pregnant.
- Do not breast-feed while you are taking IMBRUVICA®.

Male patients:

- Do not father a child while taking IMBRUVICA® and for 3 months after stopping treatment. Use condoms and do not donate sperm during treatment and for 3 months after your treatment has finished. If you plan to father a child, talk to your healthcare professional before taking IMBRUVICA®.
- Men who are sexually active with a pregnant woman must use a condom during and for 3
 months after treatment with IMBRUVICA®.

Driving and using machines: You may feel tired or dizzy after taking IMBRUVICA®, which may affect your ability to drive and use tools or machines. Ask your healthcare professional about your ability to drive and use tools or machines while taking IMBRUVICA®.

Tell your doctor or pharmacist about all the medicines you take, including any drugs, vitamins, minerals, natural supplements or alternative medicines.

The following may interact with IMBRUVICA®:

- medicines called antibiotics used to treat bacterial infections (clarithromycin, ciprofloxacin, erythromycin, rifampin).
- medicines for fungal infections (ketoconazole, itraconazole, fluconazole, voriconazole, posaconazole).
- medicines for HIV infection (indinavir, nelfinavir, ritonavir, saquinavir, atazanavir, darunavir/ritonavir, cobicistat, fosamprenavir, efavirenz).
- medicine to prevent nausea and vomiting (aprepitant).
- medicines called kinase inhibitors for treatment of other cancers (crizotinib, imatinib).
- medicines called calcium channel blockers for high blood pressure, chest pain, irregular heartbeat and other heart problems (diltiazem, verapamil).
- medicines called statins to treat high cholesterol (rosuvastatin).
- heart medicines/anti-arrhythmics (amiodarone, dronedarone).
- medicines that may increase your risk of bleeding, including:
 - aspirin and anti-inflammatories such as ibuprofen or naproxen.
 - blood thinners such as warfarin, heparin or other medicines for blood clots such as dabigatran, rivaroxaban, apixaban.
 - supplements such as fish oil, vitamin E and flaxseed.
- medicines used to prevent seizures or to treat epilepsy or medicines used to treat a painful condition of the face called trigeminal neuralgia (carbamazepine and phenytoin).
- a medicine to treat high blood pressure (aliskiren).
- a medicine to treat allergy symptoms (fexofenadine).
- a medicine to treat cancer (topotecan).
- an herbal medicine used for depression (St. John's Wort).

If you are taking digoxin, a medicine used for heart problems, or methotrexate, a medicine used to treat other cancers or to reduce the activity of the immune system (e.g., for rheumatoid arthritis or psoriasis), it should be taken at least 6 hours before or after IMBRUVICA®.

How to take IMBRUVICA®:

- Take IMBRUVICA® as prescribed by your doctor.
- Swallow IMBRUVICA® whole, with a glass of water. Do not open, break or chew capsules or tablets. Do not take IMBRUVICA® with grapefruit juice.
- Take IMBRUVICA® at about the same time each day.
- Drink plenty of fluids to stay hydrated while taking IMBRUVICA®. This will help your kidneys continue to function properly.

Usual dose:

- Chronic Lymphocytic Leukemia (CLL): 420 mg once a day
- Waldenström's Macroglobulinemia (WM): 420 mg once a day
- Chronic Graft Versus Host Disease (cGVHD): 420 mg once a day
- Mantle Cell Lymphoma (MCL): 560 mg once a day
- Marginal Zone Lymphoma (MZL): 560 mg once a day

Your doctor may decide that you should take a lower dose if you have liver problems or are taking certain medications. Your doctor may also lower your dose if you get side effects.

For the treatment of CLL and WM, your doctor may prescribe IMBRUVICA® alone or in combination with other treatments.

IMBRUVICA® is given as a continuous daily therapy, which means you need to take it every day until your disease no longer responds to treatment or you experience unacceptable side effects. Do not change your dose or stop taking IMBRUVICA® unless your doctor tells you to.

Overdose:

If you think you, or a person you are caring for, have taken too much IMBRUVICA®, contact a healthcare professional, hospital emergency department or regional Poison Control Centre immediately, even if there are no symptoms.

Missed dose:

If you miss a dose of IMBRUVICA® take it as soon as you remember on the same day. Take your next dose of IMBRUVICA® at your regular time on the next day. Do not take extra doses of IMBRUVICA® to make up for a missed dose. Call your healthcare professional if you are not sure of what to do.

What are possible side effects from using IMBRUVICA®?

These are not all the possible side effects you may feel when taking IMBRUVICA®. If you experience any side effects not listed here, contact your healthcare professional. Please also see Warnings and Precautions.

- Lymphocytosis: An increase in the number of white blood cells, specifically lymphocytes may be reported in your blood test results (see **Other warnings you should know about**). This increase in white blood cells is expected in the first few weeks of treatment and may last for 3 or more months. Uncommonly, this increase may be severe, causing cells to clump together (leukostasis). Your doctor will monitor your blood counts. Talk to your doctor about what your blood test results mean.
- Diarrhea: You may experience an increase in frequency of loose or watery stools. If you have diarrhea that lasts for more than a week, your doctor may need to give you treatment to manage your diarrhea such as a fluid and salt replacement or another medicine. Contact your doctor if your diarrhea persists.

- Viral, bacterial, or fungal infections: Infections can be serious and may lead to death. Contact your doctor if you have fever, chills, weakness, confusion, body aches, cold or flu symptoms, feel tired or feel short of breath, or have any other signs or symptoms of a possible infection.
- Fatigue, lack of energy, anxiety, difficulty falling or staying asleep
- Common cold, cough, stuffy nose
- Chills
- Muscle aches, muscle spasm, joint aches
- Headache, dizziness, weakness, anxiety
- Rash, itching, dry skin, skin infection
- Inflammation of the fatty tissue underneath the skin
- Nausea, sore mouth or throat, constipation, vomiting, loss of appetite, stomach pain, indigestion, mouth sores
- Nail changes such as brittle fingernails and toenails

IMBRUVICA® can cause abnormal blood test results. Your doctor will decide when to perform blood tests and will interpret the results.

Serious side effects and what to do about them				
Symptom / effect	Talk to your healthcare professional		Stop taking drug	
	Only if severe	In all cases	and get immediate medical help	
VERY COMMON				
Anemia (low red blood cells): fatigue, loss of energy, weakness, shortness of breath		✓		
Neutropenia (low neutrophils, a type of white blood cell): fever, chills or sweating or any signs of infection		✓		
Thrombocytopenia (low platelets): bruising, bleeding, fatigue and weakness		✓		
Edema (abnormal accumulation of fluid): swollen hands, ankles or feet		✓		
Being short of breath		✓		
Fever		✓		
Pneumonia (infection of the lungs): cough with or without mucus, fever, chills, shortness of breath		✓		
Sinusitis (sinus infection): thick, yellow, smelly discharge from the nose, pressure or pain in the face and eyes, congestion, headache		✓		
Bruising: small red or purple spots caused by bleeding under the skin	✓			
High blood pressure		✓		

Serious side effects and what to do about them				
Symptom / effect	Talk to your healthcare professional		Stop taking drug and get immediate	
	Only if severe	In all cases	medical help	
COMMON	'			
Urinary tract infection: pain or				
burning when urinating, bloody or		✓		
cloudy urine, foul smelling urine				
Hypokalemia (low potassium levels				
in the blood): muscle weakness,		✓		
cramps, twitches, abnormal heart		•		
rhythms				
Nose bleeds		✓		
Severe diarrhea: increased number				
of bowel movements, watery or		✓		
bloody stool, stomach pain and/or		•		
cramps				
Arrhythmia (irregular heart rhythm):				
palpitations, light-headedness,		✓		
dizziness, shortness of breath, chest		•		
discomfort, fainting				
Blurred vision	✓			
Infection of the blood: feeling dizzy				
or faint, confusion or disorientation,				
diarrhea, nausea, vomiting, slurred			•	
speech, severe muscle pain				
Serious bleeding problems				
sometimes resulting in death: blood				
in your stool or urine, bleeding that				
lasts for a long time or that you				
cannot control, coughing up blood			✓	
or blood clots, increased bruising,				
feel dizzy or weak, confusion,				
change in your speech, or a				
headache that lasts a long time				
Interstitial lung disease				
(inflammation within the lungs):		✓		
difficulty breathing or persistent		·		
cough				
Tumour Lysis Syndrome (sudden,				
rapid death of cancer cells due to				
the treatment): nausea, vomiting,			✓	
decreased urination, irregular				
heartbeat, confusion, delirium,				
seizures				

Serious side effects and what to do about them				
Symptom / effect	Talk to your healthcare professional		Stop taking drug	
	Only if severe	In all cases	and get immediate medical help	
Hyperuricemia (elevated levels of uric acid in the blood): red, warm, and swollen joints, flank pain, blood in urine, or cream-colored skin nodules		✓		
Peripheral Neuropathy: weakness, numbness, tingling, pain, or hot or cold sensation in hands, feet or other parts of the body	✓			
Kidney failure: decreased or lack of urination, nausea, swelling of the ankles, legs or feet, fatigue, confusion, seizures or coma			✓	
Heart failure (heart does not pump blood as well as it should): breathlessness, difficulty breathing when lying down, swelling of the feet, ankles or legs, weakness/tiredness		✓		
UNCOMMON	'			
Leukostasis (severe increase in white blood cells): fever, fainting, bleeding, bruising, weight loss, general pain, lack of energy, severe headache, trouble walking		✓		
Severe allergic reactions: swelling of face, eyes, lips, mouth, or tongue, trouble swallowing or breathing, itchy skin rash, redness of the skin			~	
Stevens-Johnson syndrome: severe rash with blisters and peeling skin, particularly around the mouth, nose, eyes, and genitals			✓	
Severe liver problems: nausea, loss of appetite, fatigue, jaundice (yellowing of your skin and eyes), pain in your upper right abdomen, dark urine, disorientation, confusion, pale stool Inflammation of the eye (pink eye)	√	✓		

Serious side effects and what to do about them				
Symptom / effect	Talk to your healthcare professional		Stop taking drug	
	Only if severe	In all cases	and get immediate medical help	
Mini-stroke (temporary low blood flow to the brain) or stroke (bleeding or blood clot in the brain): sudden numbness, weakness or tingling of the face, arm, or leg, particularly on one side of the body, difficulty speaking or understanding speech, blurred vision, dizziness, difficulty walking and loss of balance, sudden headache, difficulty swallowing			✓	
Squamous or basal cell cancer (types of skin cancer): unexplained skin discoloration, red, crusty, wart- like skin sores, shiny skin nodules		✓		
Neutrophilic dermatoses: one or more tender or painful bumps or ulcers on the skin, sometimes with a fever		✓		
Eye Hemorrhage (bleeding in the eye): red patch, line or dots on the white part of eye, seeing haze or shadows, floaters and cloudy vision, blurring or loss of vision		✓		
RARE Progressive multifesal				
Progressive multifocal leukoencephalopathy (a rare brain infection): progressive weakness on one side of the body, clumsiness of limbs, disturbance of vision, changes in thinking, memory and orientation, confusion, personality changes			✓	

If you have a troublesome symptom or side effect that is not listed here or becomes bad enough to interfere with your daily activities, talk to your healthcare professional.

Reporting Side Effects

You can report any suspected side effects associated with the use of health products to Health Canada by:

- Visiting the Web page on Adverse Reaction Reporting (https://www.canada.ca/en/health-canada/services/drugs-health-products/medeffect-canada.html) for information on how to report online, by mail or by fax; or
- Calling toll-free at 1-866-234-2345.

NOTE: Contact your health professional if you need information about how to manage your side effects. The Canada Vigilance Program does not provide medical advice.

Storage:

Store IMBRUVICA® at room temperature between 15°C and 30°C.

Keep out of the reach and sight of children.

If you want more information about IMBRUVICA®:

- Talk to your healthcare professional.
- For questions or concerns, contact the manufacturer, Janssen Inc. (www.janssen.com/canada).
- Find the full product monograph that is prepared for healthcare professionals and includes this Patient Medication Information by visiting the Health Canada website (https://www.canada.ca/en/health-canada/services/drugs-health-products/drug-products/drug-product-database.html), the manufacturer's website www.janssen.com/canada, or by contacting the manufacturer at: 1-800-567-3331 or 1-800-387-8781.

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