

Get to know BESREMI[®] (ropeginterferon alfa-2b) and the ForYOU[™] Patient Support Program.

For adults with polycythemia vera.



We have designed this booklet to help support you during your BESREMI[®] treatment. Remember, you are not alone on this journey. Your healthcare team is here to support you every step of the way. If you have any questions or concerns, please don't hesitate to reach out and share how you are feeling or how things are going. Your experiences and questions are important, and your healthcare team is here to help.

Interferons, including BESREMI[®], cause or aggravate fatal or life-threatening neuropsychiatric (mental illness), autoimmune (where the body's immune system attacks the body's own cells), ischemic (conditions in which blood flow, and thus oxygen, is restricted to a part of the body) and infectious disorders. If you have persistently severe or worsening signs or symptoms of these conditions you should contact your doctor. Your doctor will assess you and may discontinue you from therapy. In many cases, but not all cases, these disorders resolve after stopping interferon therapy.

This brochure is intended for patients who have been prescribed BESREMI[®] and should be used together with guidance from your healthcare provider.

Patients should consult their healthcare provider, and the Patient Medication Information included with the BESREMI[®] package for complete safety information, including serious warnings and precautions, contraindications, adverse reactions, dosing considerations, and monitoring requirements for BESREMI[®].

What is Polycythemia Vera (PV)?

Polycythemia vera (pol-e-sy-THÉE-me-uh VEER-uh), or PV, is a rare and chronic blood cancer. It's part of a group of blood cancers called myeloproliferative neoplasms (my-e-lo-pro-lif-er-a-tive neo-plasms), or MPNs.

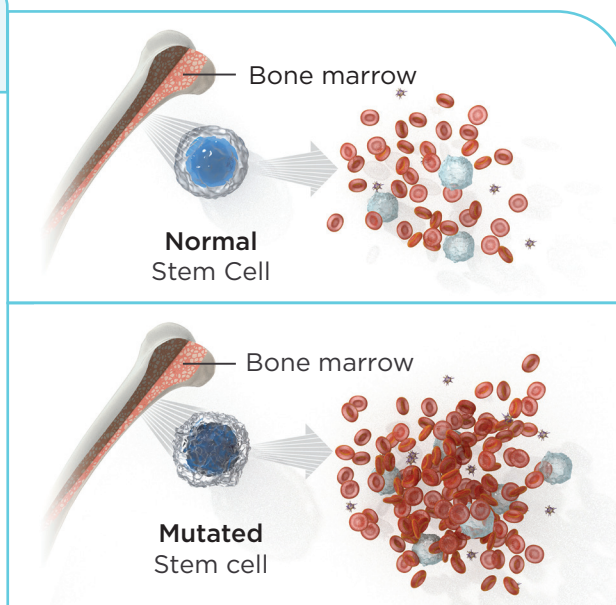
Stem cells in the bone marrow make all the blood cells in your body: red blood cells, white blood cells, and platelets. Your body needs a certain amount of each of these. Normally, your body keeps everything in balance.

It all starts in the bone marrow


Red blood cell


White blood cell


Platelet



PV occurs when a single stem cell in the bone marrow develops a mutation (or DNA change) and starts to make too many blood cells. This DNA change often happens in a gene called *JAK2*, which helps make a protein that controls how blood cells grow and divide. Most people with PV have a *JAK2* mutation.

The *JAK2* mutation can cause the bone marrow to make too many red blood cells, white blood cells, and platelets. The excess of blood cells can cause symptoms and complications of PV. Having too many red blood cells makes the blood thicker, which slows down its flow. Too many platelets can lead to the formation of blood clots. That's when serious health problems, like heart attack and stroke, may occur. Your doctor may refer to these as “thrombotic events”.

White blood cells also matter in PV. Although white blood cells normally help the body fight infection, higher white blood cell counts have been linked with an increased risk of thrombotic events in people with PV. This is one reason your doctor may monitor your blood counts regularly, including red blood cells, white blood cells, and platelets.

Your doctor may also talk about “*JAK2* allele burden”. This refers to the proportion of blood-forming cells with the *JAK2* mutation. Emerging research suggests that a higher *JAK2* allele burden may be associated with worse outcomes in PV, including blood clots and progression to myelofibrosis. Research is also exploring whether reducing the number of cells carrying the *JAK2* mutation may be linked with better long-term outcomes.

PV symptoms are different for everyone

Some common PV symptoms are listed below. People living with PV may experience none or any combination of these symptoms. Some symptoms might be easy to ignore or attribute to something else—but it's important to tell your healthcare team about them so you get the care you need.



Itchy skin (especially after a warm bath or shower)



Numbness in the hands, feet, arms, or legs (might also be described as tingling, burning, or weakness)



Bloating or abdominal pain (a feeling of fullness soon after eating or pain especially in your upper left abdomen)



Unusual bleeding (nosebleeds, bleeding gums)



Painful swelling of the joint (often the big toe)



Shortness of breath or difficulty breathing when lying down



Headache



Dizziness



Fatigue (needing to nap during the day, or not having the energy to do things you usually do)



Blurred vision



Night sweats (severe, drenching sweating episodes during sleep that soak clothes and bedding)



Bone pain (severe ache or discomfort)

See a term you don't recognize?
Flip to the glossary at the back of this brochure!

Treating PV for the long-term

Everyone's experience with PV is unique. Your healthcare team looks at your overall health, symptoms, and individual medical profile when developing your treatment plan.

The goals of treatment are to:

- Help manage symptoms and support your daily energy levels
- Reduce risk of thrombotic events and bleeding by working towards keeping your blood cell counts within a healthy, normal range
- Slow down or prevent disease progression

Having too many red blood cells makes the blood thicker, which slows down its flow. Too many platelets can lead to the formation of blood clots. That's when serious health problems, such as heart attack, stroke, or blood clots in your abdomen, arms, legs, and/or lungs, may occur. Your doctor may refer to these as **"thrombotic events"**.

Normal amount of cells

Too many cells

Did you know?

What causes it:

- **In the majority of PV cases**, a change in a gene called *JAK2* is responsible. Approximately 95% of patients have a specific point mutation (called *JAK2* V617F), which tells the body to make extra blood cells.

Who gets it:

- **While PV can affect anyone**, it is more commonly diagnosed in men and adults **aged 60 years or older**.

Main risks:

- **Managing your blood counts helps lower the risk of complications**, such as blood clots (in the legs, lungs, or abdomen), heart attacks, or strokes.

Long-term outlook:

- While there is a small chance the disease can progress to myelofibrosis or leukemia over time, **staying on top of your treatment plan can help support your long-term health**.

Common approaches to treatment

Your treatment plan is based on your age, overall health, symptoms, and individual medical profile. Your healthcare team will continue to partner with you to monitor your condition and manage your long-term treatment approach. Below are common treatment options your doctor may have discussed with you before prescribing BESREMI[®].

Phlebotomy (blood removal)

A procedure that removes blood from the body

Helps reduce the excess number of red blood cells and make the blood less thick

Often used early in treatment and may be continued over time

Low-dose aspirin

May be used to reduce the risk of blood clots

Works by helping prevent platelets from forming clots

Drug therapies

Medications may be used to help control blood cell production, particularly for patients at higher risk of complications.

Treatments like ropeginterferon alfa-2b, hydroxyurea, and ruxolitinib each use a different approach to help your body lower and maintain healthy blood counts.

Supportive care

Additional treatments may be used to help manage symptoms or complications, such as:

- Medications to reduce itching
- Treatments to manage uric acid levels (to help prevent gout)

Monitoring your PV treatment

Regular follow-up is an important part of managing PV. Your healthcare provider will:

- Monitor your blood counts
- Assess symptoms
- Adjust your treatment as needed

Your healthcare team will review:

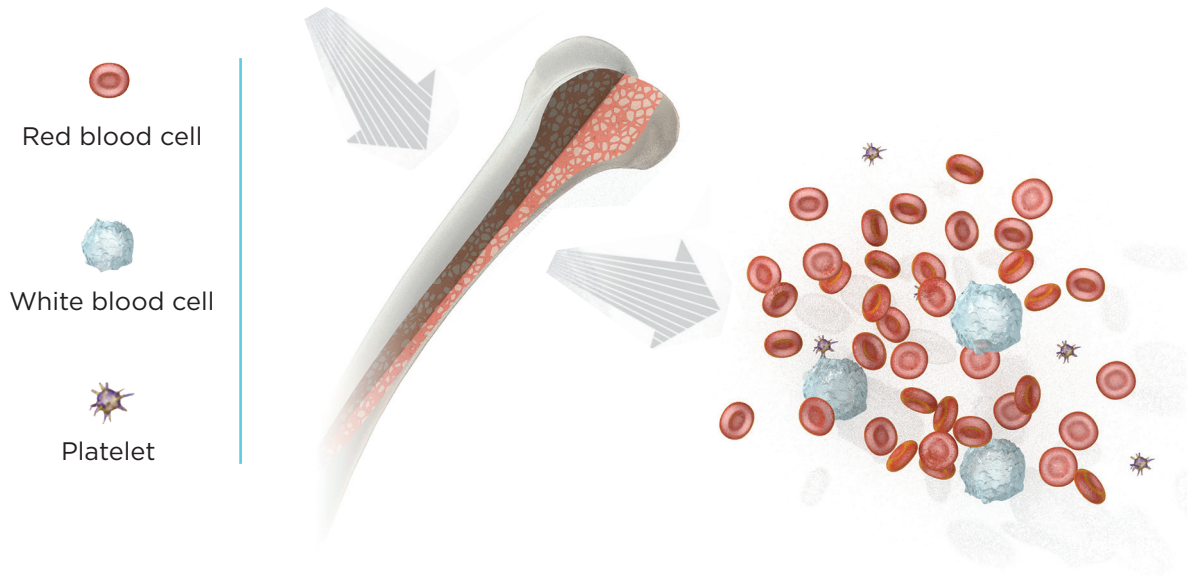
 Red blood cell count	 White blood cell count	 Platelet count
 Time since last phlebotomy (fluh-bot-uh-mee)	 Spleen size	 Presence or absence of thromboembolic events

Partnering with your healthcare team

- Managing PV is an ongoing journey. Sharing any new or changing symptoms with your healthcare team is important. It helps them monitor your health and support your care over time.

What is BESREMI[®]?

BESREMI[®] (ropeginterferon alfa-2b) is a type of medicine called an interferon. BESREMI[®] slows down or stops the abnormal growth of blood cells.



BESREMI[®] slows down or stops the abnormal growth of blood cells.

How to use BESREMI[®]

BESREMI[®] comes in a single-use, pre-filled syringe containing 500 mcg of ropeginterferon alfa-2b in 1 mL volume.

BESREMI[®] is an injection you self-administer at home typically once every 2 weeks, though your schedule may be adjusted by your doctor over time.



Dosing schedule



Starting dose

The usual starting dose of BESREMI[®] is 50 mcg or 100 mcg every 2 weeks. This depends on whether or not you were already taking other drugs to treat your disease.



Continuing treatment

Once you start taking BESREMI[®], your doctor will gradually increase your prescribed dose and may adjust your dose during treatment until your blood cell counts are stable or until you reach the maximum dose.



Once you have maintained a stable dose and stable blood counts for at least 1 year, your healthcare provider may choose to expand your dosing interval to once every 4 weeks. It is important to follow the dose and injection schedule recommended by your healthcare provider.

Follow-up and monitoring

Your healthcare provider should do blood tests before you start BESREMI[®], and regularly during treatment to monitor your PV, and to check you for side effects.

What to do if I miss a dose

You should inject the dose as soon as you remember. However, if more than 2 days have passed since you missed a dose, skip that dose and inject the next dose when it is due.

Do not inject a double dose to make up for a forgotten dose. Check with your doctor or pharmacist if you are not sure what to do after missing a dose.

What to do if I take too much BESREMI[®]

If you have taken more BESREMI[®] than you should, tell your doctor as soon as possible.

If you think you, or a person you are caring for, have taken too much BESREMI[®], contact a healthcare provider, hospital emergency department, regional poison control centre or Health Canada's toll-free number, 1-844 POISON-X (1-844-764-7669) immediately, even if there are no signs or symptoms.

Download the Instructions for Use guide and watch a step-by-step instructional video on how to use BESREMI[®] at www.besremi.ca.



What should I know when taking BESREMI®?

Do not use BESREMI® if:

- You are allergic to ropeginterferon alfa-2b or any of the other ingredients of this medicine.
- You have or had severe mental disorders (such as depression or suicidal thoughts or if you tried to kill yourself).
- You have or had an autoimmune disease (such as rheumatoid arthritis, psoriasis or inflammatory bowel disease).
- You had an organ transplantation and you take medicines which suppress your immune system.
- You have advanced, uncontrolled liver disease.
- You have severe kidney disease.

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

- Have or ever had any problems with your heart including heart attack or high blood pressure.
- Are being treated for a mental illness or had treatment in the past for any mental illness, including depression and have had thoughts of hurting yourself or others.
- Have thyroid disease.
- Have diabetes or high blood pressure. Your doctor may ask you to have an eye examination.
- Have liver problems. You will have blood tests regularly to check how your liver is working if you are on long-term BESREMI® therapy.
- Have or have had pancreas problems such as inflammation of the pancreas.
- Have kidney problems.
- Have a history of intestinal disorders such as colitis (inflammation of the colon).
- Have lung (respiratory) problems, such as pneumonia, shortness of breath, and Chronic Obstructive Pulmonary Disease (COPD).
- Have vision problems due to diseases such as diabetes or hypertension.
- Are pregnant or plan to become pregnant.
- Have psoriasis or other skin problems because they may get worse during treatment with BESREMI®.

Other warnings you should know about:

- Dental and gum disorders, which may lead to loss of teeth, can occur with interferon medicines. In addition, dry mouth could damage teeth and the lining of the mouth during long-term treatment with BESREMI[®]. You should brush your teeth thoroughly twice daily and have regular dental checks.
- Reaching the optimal dose of BESREMI[®] may take time and can be different for different people. Your doctor will decide if it is necessary to treat you with another medicine for an early reduction of your blood cell number to prevent blood clots and bleeding.
- Give yourself time after taking BESREMI[®] to see how you feel before driving a vehicle or operating machinery.

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



Understanding side effects and what to expect with BESREMI[®]

- Like all medicines, BESREMI[®] can cause side effects. Not everyone will experience side effects, and they may vary from person to person.
- Talk to your healthcare provider before taking any medications, including acetaminophen or ibuprofen, to help manage symptoms such as fever, aches, or discomfort.
- Individual response to treatment may vary, and your healthcare provider will monitor your response over time.

Practical tips to help manage side effects

BESREMI[®] triggers your immune system to start working, which may make you more likely to experience some side effects. Here are some suggestions for how to manage the most common side effects of BESREMI[®]:



Flu-like symptoms (such as tiredness, weakness, fever, chills, muscle aches, and joint pain)

- Start injections on a day and time that is convenient for your schedule
- Talk with your doctor about taking acetaminophen to help reduce fever symptoms or ibuprofen to help reduce aches and pains
- Alternate periods of rest and activity
- Stay hydrated



Sore throat

- Drink hot tea or hot soup
- Try sucking on lozenges, hard candies, or ice chips
- Gargle salt water



Injection site reactions

- Apply a cold compress to the injection site
- Rotate (change) your injection site



Itching

- Avoid hot showers
- Use unscented body products
- Ask your doctor about taking an antihistamine

If you are looking for more information around managing side effects, you can visit:

- www.cancercareontario.ca/en/symptom-management
- www.cancer.ca/en/treatments/side-effects

These external websites are provided for general information only and are not controlled by FORUS Therapeutics Inc. Their content may not be specific to BESREMI[®] or to your individual situation. Please speak with your healthcare provider about any side effects or treatment-related questions.

Possible side effects from using BESREMI[®]

- Decrease in the number of types of white blood cells (called leukocytes and neutrophils) that may increase your risk of infection, cause fever, chills or unusual fatigue, and in blood clotting cells (called platelets) which can result in bleeding if the number of cells drops too low
- Feeling anxious, mood changes
- Runny nose, sneezing, coughing, fever
- Joint or muscle pain, back pain, bone pain
- Increase or decrease in thyroid gland activity, increase of thyroid stimulating hormone leading to fatigue, weight gain or loss, rapid heartbeat, cold intolerance, dry skin
- Tiredness, weakness, feeling very sleepy
- Dry eyes
- Headache
- Loss of appetite
- Dry mouth, constipation
- Diarrhea, abdominal pain
- In blood tests, increases in certain liver enzymes
- Itchy skin, hair loss, red skin, increased sweating, dry skin

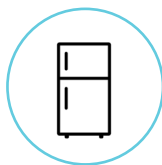
These are not all the possible side effects you may have when taking BESREMI[®]. If you experience any side effects not listed here, tell your healthcare provider.

Serious side effects and when to talk to your healthcare provider

Talk to your healthcare provider if you experience any of the following:

- Common:
 - Anxiety: feeling irritable, nervous or panic-stricken
 - Atrial fibrillation (when the heart beats very fast and uneven): chest discomfort with unpleasant awareness of your heartbeat, fatigue, weakness, dizziness, shortness of breath, feeling faint
 - Cataracts (clouding of the lens of the eye): blurry vision, seeing double, sensitivity to light or glare
 - Hypertension (high blood pressure): pounding in the ears, headache, blurred vision
 - Influenza like illness (flu-like symptoms) only if severe: headache, muscle aches, chills or a fever
 - Pancreatitis (severe and ongoing pain in the stomach area which could be a sign of inflamed pancreas)
 - Urinary tract infection (infection in urinary system including kidneys, ureters, bladder and urethra): frequent urination, pain or burning sensation while urinating, blood in the urine, pain in the pelvis, strong smelling urine, cloudy urine
- Uncommon:
 - Liver problems yellowing of the skin or eyes, dark urine, abdominal pain, nausea, vomiting, loss of appetite, itching
- Unknown:
 - Endocrine disorders diabetes, increased thirst, frequent urination, unexplained weight loss, blurred vision, fatigue
 - Respiratory problems shortness of breath, fatigue, dizziness, chest pain, swelling of the ankles or legs

Practical tips



Storage

- Store the BESREMI[®] carton containing the pre-filled syringe and needle in the refrigerator between 2 °C to 8 °C. Do not freeze.
- Keep out of reach and sight of children.



Follow instructions

- Use BESREMI[®] exactly as your healthcare provider tells you to. Your healthcare provider will tell you how much BESREMI[®] to inject and when to inject it. Do not inject more than your prescribed dose.



Injection training

- BESREMI[®] is given as an injection under your skin (subcutaneous injection). Your healthcare provider should show you how to prepare and measure your dose of BESREMI[®], and how to inject yourself before you use BESREMI[®] for the first time.
- The Instructions for Use guide and injection training video are available online at www.besremi.ca and can help remind you of the steps for preparing and injecting BESREMI[®].



Proper use

- You should not inject BESREMI[®] until your healthcare provider has shown you how to use BESREMI[®] the right way. Your healthcare provider will prescribe the amount of BESREMI[®] that is right for you.



Dosing frequency

- Always inject BESREMI[®] exactly as prescribed by your healthcare provider. Do not change your dosing frequency and do not inject more than 1 dose of BESREMI[®] every 2 weeks without guidance from your healthcare team.



Safe disposal of sharps

- Throw away (dispose of) the BESREMI[®] pre-filled syringe, with needle attached, into a sharps disposal container right away after use.
- Do not re-use the single-use pre-filled syringe.

ForYOU[™] Patient Support Program



Support throughout your BESREMI[®] journey

The ForYOU[™] Patient Support Program is designed to support you and your caregivers throughout your treatment journey.

Once enrolled, the ForYOU[™] Patient Support Program may offer the following services based on the needs identified by you and your healthcare providers:



Reimbursement navigation and financial support

Support eligible patients in gaining access to BESREMI[®].



Treatment support

Education by a bilingual program oncology nurse for you and your caregivers related to polycythemia vera and treatment with BESREMI[®]. Ongoing support available throughout treatment based on individual needs.



Initial injection training

Personalized BESREMI[®] injection training led by nurses to help you and your caregivers build confidence and learn proper injection techniques.



Personalized solutions

Connections for you and your caregivers to third-party resources, providing practical support throughout your BESREMI[®] treatment journey.

Learn more

For inquiries and more information on the ForYOU[™] Patient Support Program, please call 1-833-4YOU PSP (1-833-496-8777) between 9AM-5PM ET Monday-Friday, or email besremi@foryoupsp.com.

My healthcare team

Use this space to record your healthcare team's contact information and keep a list of questions or notes for your next appointment.

Contact information

Doctor: _____

Name: _____

Phone number: _____

Nurse: _____

Name: _____

Phone number: _____

Pharmacist: _____

Name: _____

Phone number: _____

Social worker: _____

Name: _____

Phone number: _____

ForYOU™ Patient Support Program Contact:

Phone: 1-833-4YOU PSP (1-833-496-8777)

Email: besremi@foryoupsp.com

Other medications

Additional notes / questions

My medication tracker

Use this tracker to record the date, dose, and injection site for each injection. If you run out of space, simply continue your record on another page or somewhere that works for you.

Date of injection	Dose	Injection site

Other available resources*

Patient organizations

Living with PV can raise questions and challenges. The organizations below offer educational materials, support programs, and connections to others who may be experiencing similar situations.

Canadian MPN Network (CMPNN)

Leukemia & Lymphoma Society of Canada (LLSC) | Polycythemia Vera (PV)

Canadian Cancer Society (CCS)

Canadian MPN Research Foundation (CMPNRF)

Wellspring Cancer Support Foundation

* These groups are not affiliated with FORUS Therapeutics Inc. and are provided as potential third-party resources for patient and caregiver consideration. Your healthcare team may provide additional resources.

Stay informed with a glossary of PV terms

Get to know some key words you may hear or see when learning about PV and BESREMI[®]. Some of the terms below may not appear in the brochure. However, your healthcare team may use these terms when discussing PV, treatment, or care. Understanding these terms may help you feel more informed and prepared for conversations with your healthcare team.

Glossary of terms

A

Adverse event (AE)

Any unwanted medical effect that happens while taking a medication, whether or not it is caused by the treatment.

Autoimmune condition

A condition where the immune system mistakenly attacks the body's own tissues.

B

BESREMI[®] (ropeginterferon alfa-2b)

A prescription medication used to treat adults with polycythemia vera (PV). It helps regulate the production of blood cells.

Bone marrow

The soft tissue inside bones where blood cells are made.

C

Complete hematologic response (CHR)

A treatment outcome where blood counts are controlled within target levels defined by your healthcare provider.

Contraindication

A situation where a medication should not be used because it may be harmful (for example, certain medical conditions).

D

Dose

The amount of medication taken at one time.

Dose adjustment (titration)

A gradual change in dose over time to find the most appropriate amount for a patient.

E

Endocrine system

The group of glands that produce hormones (such as the thyroid).

F

Fatigue

A feeling of tiredness or lack of energy that does not improve with rest.

H

Hematocrit

The percentage of blood made up of red blood cells. High levels are common in PV.

Hematologic response

An improvement in blood counts toward target levels.

Hypersensitivity

An allergic reaction to a medication or substance.

I

Injection (subcutaneous injection)

A way of giving medication under the skin, usually in the thigh or abdomen.

Interferon

A protein that helps regulate the immune system. BESREMI® is a long-acting interferon therapy.

J

JAK2 mutation

A genetic change commonly found in PV that leads to increased blood cell production.

L

Liver function tests

Blood tests used to check how well the liver is working.

M

Monitoring

Regular check-ups, blood tests, or assessments used to track how well treatment is working and to check for side effects.

P

Platelets

Blood cells that form clots to stop bleeding.

Polycythemia vera (PV)

A rare blood disorder in which the body produces too many red blood cells, and sometimes too many white blood cells and/or platelets as well.

R

Red blood cells (RBCs)

Cells that carry oxygen throughout the body.

S

Side effects

Unintended effects that can occur during treatment. These can vary in type and severity.

Spleen

An organ that filters blood and helps fight infection. It may become enlarged in PV.

T

Thromboembolic event

A blood clot that can block a blood vessel. PV may increase the risk of these events.

Thyroid

A gland that controls metabolism and energy levels. Its function may need to be monitored during treatment.

W

White blood cells (WBCs)

Cells that help the body fight infection.

Additional Practical Terms for Patients

Treatment response

How well your condition improves after starting therapy.

Long-term treatment

Medication taken over an extended period of time under medical supervision.

Healthcare provider

A trained professional (such as a doctor, nurse, or pharmacist) involved in your care.

Patients should consult their healthcare provider and the prescribing information included with the BESREMI® package for complete safety information, including serious warnings and precautions, contraindications, adverse reactions, dosing considerations, and monitoring requirements for BESREMI®.

What is BESREMI[®] used for?

BESREMI[®] is used to treat adults with a blood disorder called polycythemia vera.

Serious Warnings and Precautions

Interferons, including BESREMI[®], cause or aggravate fatal or life-threatening neuropsychiatric (mental illness), autoimmune (where the body's immune system attacks the body's own cells), ischemic (conditions in which blood flow, and thus oxygen, is restricted to a part of the body) and infectious disorders. If you have persistently severe or worsening signs or symptoms of these conditions you should contact your doctor. Your doctor will assess you and may discontinue you from therapy. In many cases, but not all cases, these disorders resolve after stopping interferon therapy.

Do not use BESREMI[®] if:

You are allergic to ropeginterferon alfa-2b or any of the other ingredients in BESREMI[®] or the container. You have or have had severe psychiatric disorders, particularly severe depression, suicidal thoughts, or a suicide attempt. You have decompensated cirrhosis of the liver. You have a history of or an active serious or untreated autoimmune disease. You are an immunosuppressed transplant recipient. You have thyroid disease unless it can be controlled with treatment. You have severe heart or blood vessel disease, such as uncontrolled high blood pressure, congestive heart failure, serious abnormal heart rhythm, significant narrowing of heart blood vessels, unstable angina, or recent stroke or heart attack. You have severe or end stage kidney disease.

These are not all the possible side effects you may have when taking BESREMI[®]. If you experience any side effects not listed here, tell your healthcare provider. If you have a troublesome symptom or side effect that is not listed here or becomes bad enough to interfere with your daily activities, tell your healthcare professional.

How to take BESREMI[®]

Use BESREMI[®] exactly as your healthcare provider tells you to. Your healthcare provider will tell you how much BESREMI[®] to inject and when to inject it. Do not inject more than your prescribed dose. Your healthcare provider should do blood tests before you start BESREMI[®], and regularly during treatment to monitor your polycythemia vera, and to check you for side effects.

For More Information

This brochure does not take the place of talking with your healthcare provider. For complete information about BESREMI[®], including Serious Warnings and Precautions, who should not use BESREMI[®], possible side effects, dosing, monitoring, and how to use BESREMI[®], please read the Patient Medication Information included with the BESREMI[®] package and speak with your healthcare professional. You can also visit www.besremipmi.ca or call FORUS Therapeutics Inc. at 1-866-542-7500.