MEDICATION GUIDE

REBIF
interferon beta-1a
Injection for subcutaneous use

Read this Medication Guide before you start using REBIF and each time you get a refill. There may be new information. The information does not take the place of talking with your healthcare provider about your medical condition or your treatment.

What is the most important information I should know about REBIF?

REBIF can cause serious side effects. Tell your healthcare provider right away if you have any of the symptoms listed below while taking REBIF.

1. Behavioral health problems including depression and suicidal thoughts. You may have mood problems including:
   - depression (feeling hopeless or feeling bad about yourself)
   - thoughts of hurting yourself or suicide

2. Liver problems or worsening of liver problems including liver failure. Symptoms may include:
   - nausea
   - loss of appetite
   - tiredness
   - dark colored urine and pale stools
   - yellowing of your skin or the white part of your eye
   - bleeding more easily than normal
   - confusion
   - sleepiness

   During your treatment with REBIF you will need to see your healthcare provider regularly and have regular blood tests to check for side effects.

3. Serious allergic and skin reactions. Symptoms may include:
   - itching
   - swelling of your face, eyes, lips, tongue or throat
   - trouble breathing
   - anxiousness
   - feeling faint
   - skin rash, hives, sores in your mouth, or skin blisters and peels

4. Injection site problems. Symptoms at the injection site may include:
What is REBIF?

REBIF is a prescription medicine used to treat adults with relapsing forms of multiple sclerosis (MS). It is a form of protein called beta interferon that is produced in the body.

REBIF will not cure your MS but may decrease the number of flare-ups of the disease and slow the occurrence of some of the physical disability that is common in people with MS.

The way REBIF works in MS is not known.

It is not known if REBIF is safe and effective in children.

Who should not take REBIF?

Do not take REBIF if you:

• are allergic to interferon beta, human albumin, or any of the ingredients in REBIF. See the end of this Medication Guide for a complete list of ingredients in REBIF.

What should I tell my healthcare provider before taking REBIF?

Before you take REBIF, tell your healthcare provider if have or have had any of the following conditions:

• mental illness, including depression and suicidal behavior
• liver problems
• bleeding problems or blood clots
• low blood cell counts
• seizures (epilepsy)
• thyroid problems
• drink alcohol
• you are pregnant or plan to become pregnant. (It is not known if REBIF will harm your unborn baby. Tell your healthcare provider if you become pregnant during your treatment with REBIF.)
• you are breastfeeding or plan to breastfeed. (It is not known if REBIF passes into your breast milk. You and your healthcare provider should decide if you will use REBIF or breastfeed. You should not do both.)
Tell your healthcare provider about all medicines you take, including prescription and over-the-counter medicines, vitamins and herbal supplements.

REBIF and other medicines may affect each other causing side effects.

Ask your healthcare provider or pharmacist for a list of these medicines, if you are not sure.

Know the medicines you take. Keep a list of them to show your healthcare provider and pharmacist when you get a new medicine.

How should I use REBIF?

- See the Instructions for Use at the end of this Medication Guide on how to prepare and give an injection of REBIF using a prefilled syringe. For the REBIF Rebidose autoinjector, read the Instructions for Use that comes with the REBIF Rebidose autoinjector.
- Your healthcare provider should show you how to prepare and measure your dose of REBIF and how to inject your REBIF before you use it for the first time.
- REBIF is given by injection under the skin (subcutaneous injection) on the same 3 days a week, for example, Monday, Wednesday and Friday.
- Your injections should be at least 48 hours apart. Take them the same time each day.
- Inject REBIF exactly as your healthcare provider tells you.
- Your healthcare provider will tell you how much REBIF to inject, and may change the dose based on how your body responds. Do not inject more than your healthcare provider tells you to.
- Do not change your dose unless your healthcare provider tells you to.
- Change (rotate) your injection site you choose with each injection. This will help decrease the chance that you will have an injection site reaction.
- Do not inject REBIF into an area of the body where the skin is irritated, reddened, bruised, infected or scarred in any way.
- REBIF comes as a:
  - prefilled syringe (REBIF)
  - single-use prefilled autoinjector (REBIF Rebidose autoinjector)

Your healthcare provider will decide which is best for you. Always use a new, unopened, prefilled syringe of REBIF or REBIF Rebidose autoinjector for each injection. Do not reuse prefilled syringes or REBIF Rebidose autoinjectors.

What are the possible side effects of REBIF?

REBIF may cause serious side effects, including:
• See “What is the most important information I should know about REBIF?”

• **Blood problems.** REBIF can affect your bone marrow and cause low red and white blood cell, and platelet counts. In some people, these blood cell counts may fall to dangerously low levels. If your blood cell counts become very low, you can get infections and problems with bleeding and bruising. Your healthcare provider may ask you to have regular blood tests to check for blood problems.

• **Seizures.** Some people have had seizures while taking REBIF.

The most common side effects of REBIF include:

• flu-like symptoms. You may have flu-like symptoms when you first start taking REBIF. You may be able to manage these flu-like symptoms by taking over-the-counter pain and fever reducers. For many people, these symptoms lessen or go away over time. Symptoms may include:
  - muscle aches
  - fever
  - tiredness
  - chills

• stomach pain
• change in liver blood tests

Tell your healthcare provider if you have any side effect that bothers you or that does not go away.

These are not all the possible side effects of REBIF. For more information, ask your healthcare provider or pharmacist.

Call your doctor for medical advice about side effects. You may report side effects to the FDA at 1-800-FDA-1088.

**How should I store REBIF?**

• Store REBIF in the refrigerator between 36°F to 46°F (2°C to 8°C).

• **Do not** freeze REBIF.

• If you cannot refrigerate your REBIF, you can store your REBIF at temperatures above 36°F and below 77°F (2°C to 25°C) for up to 30 days.

• Keep REBIF away from heat and light.

**Keep REBIF and all medicines out of the reach of children.**

**General information about the safe and effective use of REBIF**

Medicines are sometimes prescribed for purposes other than those listed in a Medication Guide. Do not use REBIF for a condition for which it was not
prescribed. Do not give REBIF to other people, even if they have the same symptoms that you have. It may harm them.

This Medication Guide summarizes the most important information about REBIF. If you would like more information, talk with your healthcare provider. You may ask your healthcare provider or pharmacist for information about REBIF that is written for healthcare professionals.

For more information, go to www.REBIF.com or call toll-free 1-877-447-3243.

What are the ingredients in REBIF?

Active ingredient: interferon beta-1a

Inactive ingredients: albumin (human), mannitol, sodium acetate, water for injection

Instructions for Use

REBIF (Re-bif)
interferon beta-1a
(in-ter-feer-on beta-one-â)
Injection for subcutaneous use
Prefilled Syringe

Read and follow the Instructions for Use that come with your REBIF prefilled syringe before you start using it and each time you get a refill. Before you use a REBIF prefilled syringe for the first time, make sure your healthcare provider shows you the right way to use it.

Important: For the REBIF Rebidose autoinjector, read the Instructions for Use that come with the REBIF Rebidose autoinjector.

Parts of your REBIF Prefilled Syringe (See Figure A).
**Figure A**

**Supplies needed for a REBIF Injection (See Figure B):**

- REBIF prefilled syringe
- alcohol pad or cotton balls and rubbing alcohol
- small adhesive bandage strip if desired
- puncture resistant safety container for disposal of used syringes. See “Disposing of your Needles and Syringes Section” in Step 4 of the IFU.
- antibacterial soap
- an over-the-counter pain or fever reducing medicine, if your healthcare provider has recommended that you take this before, at the same time, or after you give yourself REBIF to help decrease the fever, chills, sweating and muscle aches (flu-like symptoms) that may happen.
Titration (Dosing) Schedule

- When first starting treatment with REBIF, your healthcare provider may prescribe either the 22 mcg or 44 mcg dose of REBIF. You should gradually increase the dose over 4 weeks, starting at 20% of the prescribed dose for the first 2 weeks, half-dose for the second 2 weeks (weeks 3 and 4), and then the full dose prescribed by your healthcare provider.

If your prescribed dose is 22 mcg of REBIF, a REBIF Titration Pack containing 6 prefilled syringes with 8.8 mcg and 6 prefilled syringes with 22 mcg should be prescribed to you for use during the 4-week starting period. Table 1 explains the amount to inject using the REBIF Titration Pack syringes to gradually increase to 22 mcg.

<table>
<thead>
<tr>
<th>Week of Use</th>
<th>Syringe to Use</th>
<th>Amount of syringe</th>
</tr>
</thead>
<tbody>
<tr>
<td>Week 1 Titration</td>
<td>8.8 mcg syringe</td>
<td>Use half of syringe</td>
</tr>
<tr>
<td>Week 2 Titration</td>
<td>8.8 mcg syringe</td>
<td>Use half of syringe</td>
</tr>
</tbody>
</table>
Week 3 Titration | 22 mcg syringe | Use half of syringe
--- | --- | ---
Week 4 Titration | 22 mcg syringe | Use half of syringe
Week 5 and on | 22 mcg syringe or autoinjector | Use full syringe or autoinjector

*Only prefilled syringes can be used to titrate to the 22 mcg Prescribed Dose

If your prescribed dose is 44 mcg, you may be prescribed either a REBIF Titration Pack (described above) or REBIF Rebidose Titration Pack containing 6 autoinjectors with 8.8 mcg and 6 autoinjectors with 22 mcg for use during the 4 week titration period. Table 2 explains the amount to inject using the REBIF Titration Pack or REBIF Rebidose Titration Pack to gradually increase to 44 mcg.

**Table 2: Titration Schedule for a 44 mcg Prescribed Dose**

<table>
<thead>
<tr>
<th>Week of Use</th>
<th>Syringe or Autoinjector to Use</th>
<th>Amount of syringe or autoinjector</th>
</tr>
</thead>
<tbody>
<tr>
<td>Week 1 Titration</td>
<td>8.8 mcg syringe or autoinjector</td>
<td>Use full syringe or autoinjector</td>
</tr>
<tr>
<td>Week 2 Titration</td>
<td>8.8 mcg syringe or autoinjector</td>
<td>Use full syringe or autoinjector</td>
</tr>
<tr>
<td>Week 3 Titration</td>
<td>22 mcg syringe or autoinjector</td>
<td>Use full syringe or autoinjector</td>
</tr>
<tr>
<td>Week 4 Titration</td>
<td>22 mcg syringe or autoinjector</td>
<td>Use full syringe or autoinjector</td>
</tr>
<tr>
<td>Week 5 and on</td>
<td>44 mcg syringe or autoinjector</td>
<td>Use full syringe or autoinjector</td>
</tr>
</tbody>
</table>

**Prefilled syringes or autoinjectors can be used to titrate to 44 mcg Prescribed Dose

**Step 1. Preparing for your REBIF Injection**

- Check the expiration date. **Do not use if the medication is expired.** The expiration date is printed on the syringe, plastic syringe packaging and carton.
- Remove your REBIF syringe from the refrigerator at least 30 minutes before you plan to use it so it can warm to room temperature. **Do not** heat or microwave the medication.
• Be sure that the dose, either, 8.8 mcg, 22 mcg or 44 mcg, described on the carton is the same as the dose prescribed by your healthcare provider.
• Remove the REBIF syringe from the plastic packaging. Keep the needle capped.
• Look at the contents of the syringe carefully. The liquid should be clear to slightly yellow. **Do not use if the liquid is cloudy, discolored or contains particles.** Use a different syringe.

**Step 2. Choose and Prepare your Injection Site**

• The best sites for giving yourself an injection are those areas with a layer of fat between the skin and muscle, like your thigh, the outer surface of your upper arm, your stomach or buttocks.
• **Do not** use the area near your waistline or within 2 inches of your navel. If you are very thin, use only the thigh or outer surface of the arm for injection.
• Use a different site each time you inject such as the thigh, hip, stomach or upper arm (See Figure C).

![Figure C](image)

• **Do not** inject REBIF into an area of your body where the skin is irritated, reddened, bruised, infected or abnormal in any way.
• Wash your hands thoroughly with antibacterial soap before preparing to inject the medicine.
• Clean the injection site with an alcohol pad or cotton ball with rubbing alcohol using a circular motion. To avoid stinging, you should let your skin dry before you inject REBIF.

**Step 3. Inject your REBIF**

• Remove the needle cap from the syringe needle.
• If your healthcare provider has told you to use less than the full 0.5 mL dose, slowly push the plunger in until the amount of medicine left in the syringe is the amount healthcare provider told you to use.
• Use your thumb and forefinger to pinch a pad of skin surrounding the cleaned injection site (See Figure D). Hold the syringe like a pencil with your other hand.

![Figure D](image)

• While still pinching the skin, quickly insert the needle like a dart at about a 90 degree angle (just under the skin) into the pad of tissue as shown (See Figure E).

![Figure E](image)
• After the needle is in, remove the hand that you used to pinch your skin and inject the medicine using a slow, steady push on the plunger until all the medicine is injected and the syringe is empty (See Figure F).

Figure F

• Withdraw the needle and apply gentle pressure to the injection site with a dry cotton ball or sterile gauze. Applying a cold compress or ice pack to the injection site after injection may help reduce local skin reactions.
• Put a small adhesive bandage strip over the injection site, if desired.
• Keep a record of the date and location of each injection.
• After 2 hours, check the injection site for redness, swelling, or tenderness. If you have a skin reaction and it does not clear up in a few days, call your healthcare provider.

Step 4. Disposing of your Needles and Syringes
• Put your used needles, syringes, and autoinjectors, including REBIF, in an FDA-cleared sharps container right away after use. Do not throw away (dispose of) any syringes or autoinjectors in your household trash.

If you do not have an FDA-cleared sharps disposal container, you may use a household container that is:
  o made of a heavy-duty plastic,
  o closed with a tight-fitting, puncture-resistant lid,
  o upright and stable during use,
  o leak-resistant, and
  o properly labeled to warn of hazardous waste inside the container.

• When your sharps disposal container is almost full, you will need to follow your community guidelines for the right way to dispose of your sharps disposal container. There may be state or local laws about how you should throw away used autoinjectors and syringe needles. For more information about safe sharps disposal, and for specific information about
sharps disposal in the state that you live in, go to the FDA’s website at: http://www.fda.gov/safesharpsdisposal.

- Do not dispose of your used sharps disposal container in your household trash unless your community guidelines permit this. Do not recycle your used sharps disposal container.

This Medication Guide and Instructions for Use has been approved by the U.S. Food and Drug Administration.

Manufactured by:
EMD Serono, Inc.
Rockland, MA 02370
U.S. License 1773

Marketed by:
EMD Serono, Inc.
Rockland, MA 02370

Revised November 2015