

1 **MEDICATION GUIDE**

2 **PEG-Intron® Redipen® Single-dose Delivery System**

3 **Peginterferon alfa-2b**

4  
5 **Including appendix with instructions for using PEG-Intron® Redipen® Single-dose**  
6 **Delivery System**

7  
8 Read this Medication Guide carefully before you start taking PEG-Intron (Peg In-tron) or  
9 PEG-Intron/REBETOL (REB-eh-tole) combination therapy. Read the Medication Guide  
10 each time you refill your prescription because there may be new information. The  
11 information in this Medication Guide does not take the place of talking with your health care  
12 provider (doctor, nurse, nurse practitioner, or physician's assistant).  
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14 **If you are taking PEG-Intron/REBETOL combination therapy, also read the**  
15 **Medication Guide for REBETOL (ribavirin, USP) Capsules.**

16  
17 **What is the most important information I should know about PEG-Intron and**  
18 **PEG-Intron/REBETOL combination therapy?**  
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20 PEG-Intron (peginterferon) is a treatment for some people who are infected with hepatitis C  
21 virus. However, PEG-Intron and PEG-Intron/REBETOL combination therapy can have  
22 serious side effects that may cause death in rare cases. Before you decide to start treatment,  
23 you should talk to your health care provider about the possible benefits and side effects of  
24 PEG-Intron or PEG-Intron/REBETOL combination therapy. If you begin treatment you will  
25 need to see your health care provider regularly for medical examinations and lab tests to  
26 make sure your treatment is working and to check for side effects.  
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28 **REBETOL capsules may cause birth defects and/or death of an unborn child. If you**  
29 **are pregnant, you or your male partner must not take PEG-Intron/REBETOL**  
30 **combination therapy. You must not become pregnant while either you or your partner**  
31 **are being treated with the combination PEG-Intron/REBETOL therapy, or for 6**  
32 **months after stopping therapy. Men and women should use birth control while taking**  
33 **the combination therapy and for 6 months afterwards. If you or your partner are being**  
34 **treated and you become pregnant, either during treatment or within 6 months of**  
35 **stopping treatment, call your health care provider right away.**  
36

37 **If you are taking PEG-Intron or PEG-Intron/REBETOL therapy you should call your**  
38 **health care provider immediately if you develop any of these symptoms:**  
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40 **New or worsening mental health problems, such as thoughts about killing or hurting**  
41 **yourself or others, trouble breathing, chest pain, severe stomach or lower back pain,**  
42 **bloody diarrhea or bloody bowel movements, high fever, bruising, bleeding, or**  
43 **decreased vision.**  
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45 **The most serious possible side effects of PEG-Intron and PEG-Intron/REBETOL therapy**  
46 **include:**



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**Problems with Pregnancy.** Combination PEG-Intron/REBETOL therapy can cause death, serious birth defects, or other harm to your unborn child. If you are a woman of childbearing age, you must not become pregnant during treatment and for 6 months after you have stopped therapy. You must have a negative pregnancy test immediately before beginning treatment, during treatment, and for 6 months after you have stopped therapy. Both males and female patients must use effective forms of birth control during treatment and for the 6 months after treatment is completed. Male patients should use a condom. If you are a female, you must use birth control even if you believe that you are not fertile or that your fertility is low. You should talk to your health care provider about birth control for you and your partner.

**Mental health problems and suicide.** PEG-Intron and PEG-Intron/REBETOL therapies may cause patients to develop mood or behavioral problems. These can include irritability (getting easily upset) and depression (feeling low, feeling bad about yourself, or feeling hopeless). Some patients may have aggressive behavior. Former drug addicts may fall back into drug addiction or overdose. Some patients think about hurting or killing themselves or other people and some have killed (suicide) or hurt themselves or others. You must tell your health care provider if you are being treated for a mental illness or had treatment in the past for any mental illness, including depression and suicidal behavior. You should tell your health care provider if you have ever been addicted to drugs or alcohol.

**Heart problems.** Some patients taking PEG-Intron or PEG-Intron/REBETOL therapy may develop problems with their heart, including low blood pressure, fast heart rate, and very rarely, heart attacks. Tell your health care provider if you have had any heart problems in the past.

**Blood problems.** PEG-Intron and PEG-Intron/REBETOL therapies commonly lower two types of blood cells (white blood cells and platelets). In some patients, these blood counts may fall to dangerously low levels. If your blood counts become very low, this could lead to infections or bleeding.

REBETOL therapy causes a decrease in the number of red blood cells you have (anemia). This can be dangerous, especially for patients who already have heart or circulatory (cardiovascular) problems. Talk with your health care provider before taking combination PEG-Intron/REBETOL therapy if you have, or have ever had any cardiovascular problems.

**Body organ problems.** Certain symptoms like severe stomach pain may mean that your internal organs are being damaged.

*For other possible side effects, see "What are the possible side effects of PEG-Intron and PEG-Intron/REBETOL" in this Medication Guide.*

**What is PEG-Intron and PEG-Intron/REBETOL combination therapy?**

The PEG-Intron product is a drug used to treat adults who have a lasting (chronic) infection with hepatitis C virus and who show signs that the virus is damaging the liver.



93 PEG-Intron/REBETOL combination therapy consists of two medications also used to treat  
94 hepatitis C infection. Patients with hepatitis C have the virus in their blood and in their liver.  
95 PEG-Intron reduces the amount of virus in the body and helps the body's immune system  
96 fight the virus. REBETOL (ribavirin) is a drug that helps to fight the viral infection, but does  
97 not work when used by itself to treat chronic hepatitis C.

98  
99 It is not known if PEG-Intron or PEG-Intron/REBETOL therapies can cure hepatitis C  
100 (permanently eliminate the virus), or if it can prevent liver failure or liver cancer that is  
101 caused by hepatitis C infection.

102  
103 It is also not known if PEG-Intron or PEG-Intron/REBETOL combination therapy will  
104 prevent one infected person from infecting another person with hepatitis C.

105  
106 **Who should not take PEG-Intron or PEG-Intron/REBETOL therapy?**

107 Do not take PEG-Intron or PEG-Intron/REBETOL therapy if you:

- 108 • are pregnant, planning to get pregnant during treatment or during the 6 months after  
109 treatment, or breast-feeding
- 110  
111 • are a male patient with a female sexual partner who is pregnant, or plans to become  
112 pregnant at any time while you are being treated with REBETOL, or during the 6  
113 months after your treatment has ended.
- 114  
115 • have hepatitis caused by your immune system attacking your liver (autoimmune  
116 hepatitis) or unstable liver disease
- 117  
118 • had an allergic reaction to another alpha interferon or are allergic to any of the  
119 ingredients in PEG-Intron or REBETOL Capsules. If you have any doubts, ask your  
120 health care provider.
- 121  
122 • Do not take PEG-Intron/REBETOL combination therapy if you have abnormal red  
123 blood cells such as sickle-cell anemia or thalassemia major.
- 124

125 **If you have any of the following conditions or serious medical problems, discuss them**  
126 **with your health care provider before taking PEG-Intron or PEG-Intron/REBETOL**  
127 **therapy:**

- 128 • depression or anxiety
- 129 • sleep problems
- 130 • high blood pressure
- 131 • previous heart attack, or other heart problems
- 132 • liver problems (other than hepatitis C infection)
- 133 • any kind of autoimmune disease (where the body's immune system attacks the body's  
134 own cells), such as psoriasis, systemic lupus erythematosus, rheumatoid arthritis
- 135 • thyroid problems
- 136 • diabetes
- 137 • colitis (inflammation of the bowels)



- 138 • cancer
- 139 • hepatitis B infection
- 140 • HIV infection
- 141 • kidney problems
- 142 • bleeding problems
- 143 • alcoholism
- 144 • drug abuse or addiction
- 145 • body organ transplant and are taking medicine that keeps your body from rejecting your
- 146 transplant (suppresses your immune system).
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149 **How should I take PEG-Intron or PEG-Intron/REBETOL?**

150 Your health care provider will decide whether you will take PEG-Intron therapy alone or the  
151 combination of PEG-Intron/REBETOL, as well as the correct dose (based on your weight).  
152 PEG-Intron and PEG-Intron/REBETOL are given for one year. Take your prescribed dose of  
153 PEG-Intron once a week, on the same day of each week and at approximately the same time.  
154 Take the medicine for the full year and do not take more than the prescribed dose.  
155 REBETOL Capsules should be taken with food. When you take REBETOL with food, more  
156 of the medicine (70% more on average) is taken up by your body. You should take  
157 REBETOL the same way every day (twice a day with food) to keep the medicine in your  
158 body at a steady level. This will help your health care provider to decide how your treatment  
159 is working and how to change the number of REBETOL capsules you take if you have side  
160 effects from REBETOL. **Be sure to read the Medication Guide for REBETOL**  
161 **(ribavirin, USP) for complete instructions on how to take the REBETOL capsules.**  
162

163 You should be completely comfortable with how to prepare PEG-Intron, how to set the dose  
164 you take, and how to inject yourself before you use PEG-Intron for the first time. PEG-  
165 Intron comes in two different forms, a powder in a single-use vial and a Redipen® single-use  
166 delivery system. See the attached appendix for detailed instructions for preparing and giving  
167 a dose of PEG-Intron.  
168

169 If you miss a dose of the PEG-Intron product, take the missed dose as soon as possible during  
170 the same day or the next day, then continue on your regular dosing schedule. If several days  
171 go by after you miss a dose, check with your health care provider about what to do. Do not  
172 double the next dose or take more than one dose a week without talking to your health care  
173 provider. Call your health care provider right away if you take more than your prescribed  
174 PEG-Intron dose. Your health care provider may wish to examine you more closely, and  
175 take blood for testing.  
176

177 If you miss a dose of REBETOL capsules, take the missed dose as soon as possible during  
178 the same day. If an entire day has gone by, check with your health care provider about what  
179 to do. Do not double the next dose.  
180

181 You must get regular blood tests to help your health care provider check how the treatment is  
182 working and to check for side effects.  
183



184 Tell your health care provider if you are taking or planning to take other prescription or non-  
185 prescription medicines, including vitamin and mineral supplements and herbal medicines.  
186

187 **What should I avoid while taking PEG-Intron or PEG-Intron/REBETOL therapies?**

- 188 • If you are pregnant do not start taking PEG-Intron/REBETOL combination therapy.  
189 • Avoid becoming pregnant while taking PEG-Intron or PEG-Intron/REBETOL.  
190 PEG-Intron and PEG-Intron/REBETOL may harm your unborn child (death or serious birth  
191 defects) or cause you to lose your baby (miscarry). If you or your partner becomes  
192 pregnant during treatment or during the 6 months after treatment with PEG-  
193 Intron/REBETOL combination therapy, immediately report the pregnancy to your  
194 health care provider. You or your health care provider should call (800) 727-7064. By  
195 calling this number, information about you and/or your partner will be added to a pregnancy  
196 registry that will be used to help you and your health care provider make decisions about  
197 your treatment for hepatitis in the future. You, your partner, and/or your health care provider  
198 will be asked to provide follow-up information on the outcome of the pregnancy.  
199
- 200 • Do not breast-feed your baby while taking PEG-Intron.  
201

202 **What are the possible side effects of PEG-Intron and PEG-Intron/REBETOL**  
203 **combination therapy?**  
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205 **Possible, serious side effects include:**

206 **Mental health problems including suicide, blood problems, heart problems, body organ**  
207 **problems.** See "What is the most important information I should know about PEG-Intron  
208 and PEG-Intron/REBETOL combination therapy?"  
209

210 **Other body organ problems.** A few patients have lung problems (such as pneumonia or  
211 inflammation of the lung tissue), inflammation of the kidney, and eye disorders.  
212

213 **New or worsening autoimmune disease.** Some patients taking PEG-Intron or PEG-  
214 Intron/REBETOL develop autoimmune diseases (a condition where the body's immune cells  
215 attack other cells or organs in the body), including rheumatoid arthritis, systemic lupus  
216 erythematosus, and psoriasis. In some patients who already have an autoimmune disease, the  
217 disease worsens on PEG-Intron and PEG-Intron/REBETOL combination therapy.  
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219 **Common but less serious side effects include:**

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221 **Flu-like symptoms.** Most patients who take PEG-Intron or PEG-Intron/REBETOL therapy  
222 have "flu-like" symptoms (headache, muscle aches, tiredness, and fever). Some of these  
223 symptoms (fever, headache) usually lessen after the first few weeks of therapy. You can  
224 reduce some of these symptoms by injecting your PEG-Intron dose at bedtime. Over-the-  
225 counter pain and fever reducers, such as acetaminophen or ibuprofen, can be used to prevent  
226 or reduce the fever and headache.  
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228 **Extreme fatigue (tiredness).** Many patients become extremely tired while on PEG-Intron or  
229 PEG-Intron/REBETOL combination therapy.



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**Appetite problems.** Nausea, loss of appetite, and weight loss, occur commonly.

**Thyroid problems.** Some patients develop changes in the function of their thyroid. Symptoms of thyroid changes include the inability to concentrate, feeling cold or hot all the time, a change in your weight, and changes to your skin.

**Blood sugar problems.** Some patients develop problems with the way their body controls their blood sugar, and may develop high blood sugar or diabetes.

**Skin reactions.** Redness, swelling, and itching are common at the site of injection. If after several days these symptoms do not disappear contact your health care provider. You may get a rash during therapy. If this occurs, your health care provider may recommend medicine to treat the rash.

**Hair thinning.** Hair thinning is common during PEG-Intron and PEG-Intron/REBETOL treatment. Hair loss stops and hair growth returns after therapy is stopped.

These are not all of the side effects of PEG-Intron or PEG-Intron/REBETOL combination therapy. Your health care provider or pharmacist can give you a more complete list.

**General advice about prescription medicines:**

Medicines are sometimes prescribed for purposes other than those listed in a Medication Guide. If you have any concerns about PEG-Intron, ask your health care provider. Your health care provider or pharmacist can give you information about PEG-Intron that was written for health care professionals. Do not use PEG-Intron for a condition for which it was not prescribed. Do not share this medication with other people.

**If you are taking PEG-Intron/REBETOL combination therapy, also read the Medication Guide for REBETOL (ribavirin, USP) Capsules.**

*This Medication Guide has been approved by the U.S. Food and Drug Administration.*

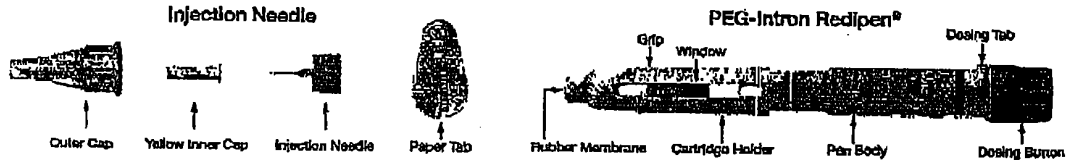
**How do I prepare and inject the PEG-Intron Redipen® Dose?**

The PEG-Intron Redipen® system is for a single use, by one person only, once a week. The Redipen® must not be shared. Use only the injection needle provided in the packaging for the PEG-Intron Redipen® system. If you have problems with the Redipen® system or the PEG-Intron solution, you should contact your health care provider, or pharmacist.

**The following instructions explain how to prepare and inject yourself with the PEG-Intron Redipen® system. Please read the instructions carefully and follow them step by step. Your health care provider will instruct you on how to self-inject with the PEG-Intron Redipen®.**



275 Do not attempt to inject yourself unless you are sure you understand the procedure and  
276 requirements for self-injection.



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279 **How to use the PEG-Intron Redipen® single-dose delivery system.**

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281 **Storing PEG-Intron**

282 PEG-Intron Redipen® should be stored in the refrigerator at 2°C to 8°C (36°F to 46°F); avoid  
283 exposure to heat. After mixing, the PEG-Intron solution should be used immediately but may  
284 be stored in the refrigerator up to 24 hours at 2°C to 8°C (36°F to 46°F). The solution  
285 contains no preservatives. **DO NOT FREEZE.**

286

287 **Preparation**

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- 289 1. Find a clean, well-lit, non-slip flat working surface and assemble all of the supplies you  
290 will need for an injection. All of the supplies you will need are in the PEG-Intron  
291 Redipen® package. The package contains:
- 292     ▪ a PEG-Intron Redipen® single-dose delivery system
  - 293     ▪ one disposable needle
  - 294     ▪ two alcohol swabs, and
  - 295     ▪ Dosing tray; (The dosing tray is the bottom half of the Redipen® package.)
- 296
- 297 2. Take the PEG-Intron Redipen® out of the refrigerator and allow the medicine to come to  
298 room temperature. Before removing the Redipen® from the carton, check the expiration  
299 date printed on the PEG-Intron Redipen® carton to make sure that the expiration date has  
300 not passed. Do not use if the expiration date has passed.
- 301 3. After taking the PEG-Intron Redipen® out of the carton, look in the window of the  
302 Redipen® and make sure the PEG-Intron in the cartridge holder window is a white, to off  
303 white tablet that is whole, or in pieces, or powdered.
- 304 4. Wash your hands thoroughly with soap and water, rinse, and towel dry. It is important to  
305 keep your work area, your hands, and the injection site clean to minimize the risk of  
306 infection.



307 **1. Mix the Drug**

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309 **Key points:**

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311 **Before you mix the PEG-Intron, make sure it is at room temperature. It is important**  
312 **that you keep the PEG-Intron Redipen® UPRIGHT (Dosing Button down) as shown in**  
313 **Figure 1.**

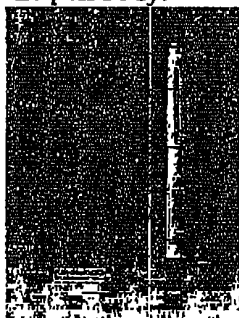
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315 **a. Hold the PEG-Intron Redipen® UPRIGHT (Figure 1a) in the dosing tray on a hard,**  
316 **flat, non-slip surface with the dosing button down. You may want to hold the Redipen®**  
317 **using the grip.**

318

319 **b. To mix the powder and the liquid, keep the Redipen® upright in the dosing tray and**  
320 **press the top half of the Redipen® downward toward the hard, flat, non-slip surface until**  
321 **you hear the click (Figure 1b). Once you've heard the click, you will notice in the**  
322 **window that both dark stoppers are now touching. The dosing button should be flush with**  
323 **the pen body.**

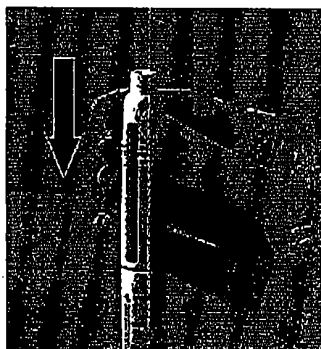
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**Figure 1a**

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**Figure 1b**

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330 **c. Wait several seconds for the powder to completely dissolve.**

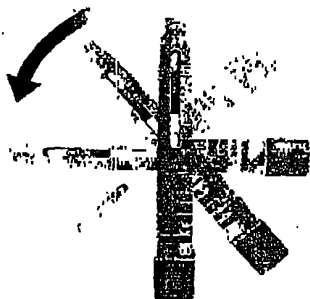
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d. Gently turn the PEG-Intron Redipen® upside down twice (Figure 2). To avoid excessive foaming, **DO NOT SHAKE**.



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Figure 2

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e. Keeping the PEG-Intron Redipen® UPRIGHT, with the dosing button down, check through the Redipen® window to see if the mixed PEG-Intron solution is completely dissolved. The solution should be clear, colorless, and without particles **before use**. It is normal to see some small bubbles near the top of the solution. Do not use if the solution is not clear, or if you see particles.

f. Place the PEG-Intron Redipen® back into the dosing tray provided in the packaging (Figure 3). The dosing button will be on the bottom.



Figure 3

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## 2. Attach the Needle

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- a. Wipe the rubber membrane of the PEG-Intron Redipen® with one alcohol swab.
- b. Remove the protective paper tab from the injection needle, but do NOT remove either the outer cap or the yellow inner cap from the injection needle. Keeping the PEG-Intron Redipen® UPRIGHT in the dosing tray, FIRMLY push the injection needle straight into the Redipen®



359 rubber membrane, and screw it firmly in place, in a clockwise direction (Figure 4). Remember  
360 to leave the needle caps in place when you attach the needle to the Redipen®. Pushing the  
361 needle through the rubber membrane, "primes" the needle and allows the extra liquid and air in  
362 the pen to be removed.  
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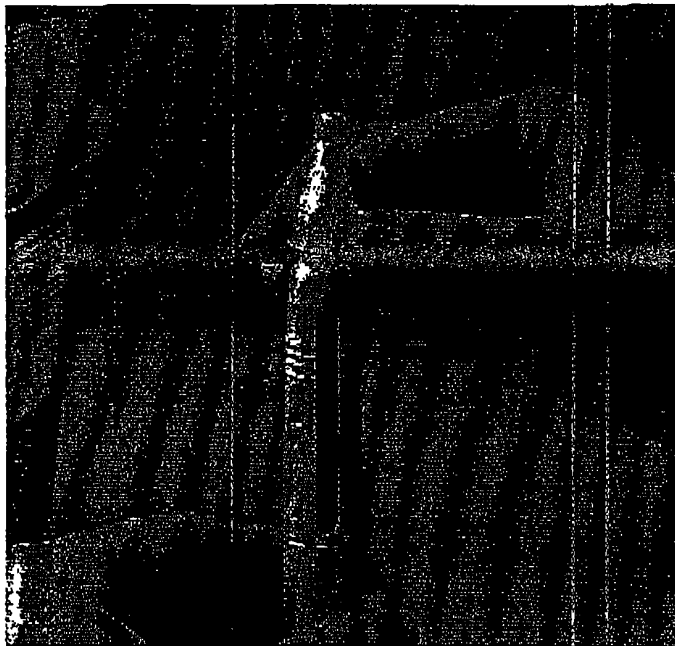


Figure 4

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NOTE: Some fluid will trickle out. This is normal. The dark stoppers move up and you will no longer see the fluid in the window once the needle is successfully primed.

c. IMPORTANT: Keep the Redipen® in the UPRIGHT position and keep the outer needle cap on until you are ready to inject.

### 3. Dialing the Dose

a. Remove the PEG-Intron Redipen® from the dosing tray (Figure 5a).  
Holding the PEG-Intron Redipen® firmly, pull the dosing button out as far as it will go.  
You will see a dark band-

**Do not push the dosing button in until you are ready to self-inject the PEG-Intron dose.**



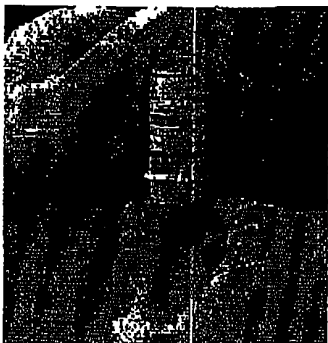


Figure 5a

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b. Turn the dosing button until your prescribed dose is lined up with the dosing tab (Figure 5b). The dosing button will turn freely. If you have trouble dialing your dose, check to make sure the dosing button has been pulled out as far as it will go (Figure 5c).



Figure 5b

Figure 5c

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c. Carefully lay the PEG-Intron Redipen® down on a hard, flat, non-slip surface. Do NOT remove either of the needle caps and do NOT push the dosing button in until you are ready to self-inject the PEG-Intron dose.

#### **4. Injecting the PEG-Intron Dose**

##### **Choosing an 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, and abdomen. Do not inject yourself in the area near your navel or waistline. If you are very thin, you should only use the thigh or outer surface of the arm for injection.

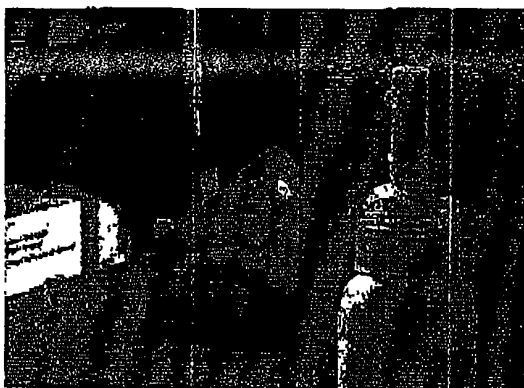


408 You should use a different site each time you inject PEG-Intron to avoid soreness at any  
409 one site. Do not inject PEG-Intron into an area where the skin is irritated, red, bruised,  
410 infected, or has scars, stretch marks, or lumps.

411  
412 a. Clean the skin where the injection is to be given with the second alcohol swab provided,  
413 and wait for the area to dry.

414 b. Remove the outer cap from the needle (Figure 6a). There may be some liquid around the  
415 yellow inner needle cap (Figure 6b). This is normal.

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Figure 6a

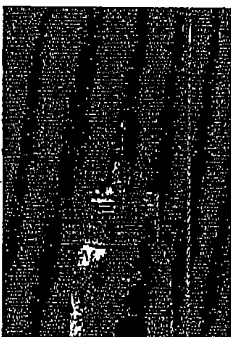
Figure 6b

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423 c. Once the injection site is dry, remove the yellow inner needle cap (Figure 6c). You are  
424 now ready to inject.

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Figure 6c

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429 d. Hold the PEG-Intron Redipen<sup>®</sup> with your fingers wrapped around the pen body  
430 barrel and your thumb on the dosing button (Figure 7).

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- With your other hand, pinch the skin in the area you have cleaned for injection.



- 432 • Insert the needle into the pinched skin at an angle of 45° to 90°.
- 433 • Press the dosing button down slowly and firmly until you can't push it any further.
- 434 • Keep your thumb pressed down on the dosing button for an additional 5 seconds to
- 435 ensure that you get the complete dose.
- 436 • Remove the needle from your skin.



437  
438 **Figure 7**

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440 **e. Gently press the injection site with a small bandage or sterile gauze if necessary for a**  
441 **few seconds but do not massage the injection site. If there is bleeding, cover with an**  
442 **adhesive bandage. DO NOT RECAP THE NEEDLE and DO NOT REUSE the**  
443 **Redipen®.**

444  
445 **How do I Dispose of the Redipen®?**

446 Discard the Redipen® and needle and any solution remaining in the Redipen® in a sharps  
447 container or other puncture-resistant container like a metal coffee can. DO NOT use glass or  
448 clear plastic containers. Ask your health care provider how to dispose of a full container.  
449 Always keep the container out of reach of children.

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451 **After 2 hours, check the injection site for redness, swelling, or tenderness.**  
452 **If you have a skin reaction and it doesn't clear up in a few days, contact**  
453 **your health care provider.**

454  
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456 **Manufactured by: Schering Corporation, Kenilworth, NJ 07033 USA**  
457 **DATE 2/05**  
458



1 **MEDICATION GUIDE**

2 **PEG-Intron®**

3 **Peginterferon alfa-2b**

4  
5 **Including appendix with instructions for using PEG-Intron® Powder for Injection**

6  
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11 provider (doctor, nurse, nurse practitioner, or physician's assistant).

12  
13 **If you are taking PEG-Intron/REBETOL combination therapy, also read the**  
14 **Medication Guide for REBETOL (ribavirin, USP) Capsules.**

15  
16 **What is the most important information I should know about PEG-Intron and**  
17 **PEG-Intron/REBETOL combination therapy?**

18  
19 PEG-Intron (peginterferon) is a treatment for some people who are infected with hepatitis C  
20 virus. However, PEG-Intron and PEG-Intron/REBETOL combination therapy can have  
21 serious side effects that may cause death in rare cases. Before you decide to start treatment,  
22 you should talk to your health care provider about the possible benefits and side effects of  
23 PEG-Intron or PEG-Intron/REBETOL combination therapy. If you begin treatment you will  
24 need to see your health care provider regularly for medical examinations and lab tests to  
25 make sure your treatment is working and to check for side effects.

26  
27 **REBETOL capsules may cause birth defects and/or death of an unborn child. If you**  
28 **are pregnant, you or your male partner must not take PEG-Intron/REBETOL**  
29 **combination therapy. You must not become pregnant while either you or your partner**  
30 **are being treated with the combination PEG-Intron/REBETOL therapy, or for 6**  
31 **months after stopping therapy. Men and women should use birth control while taking**  
32 **the combination therapy and for 6 months afterwards. If you or your partner are being**  
33 **treated and you become pregnant, either during treatment or within 6 months of**  
34 **stopping treatment, call your health care provider right away.**

35  
36 **If you are taking PEG-Intron or PEG-Intron/REBETOL therapy you should call your**  
37 **health care provider immediately if you develop any of these symptoms:**

38  
39 **New or worsening mental health problems, such as thoughts about killing or hurting**  
40 **yourself or others, trouble breathing, chest pain, severe stomach or lower back pain,**  
41 **bloody diarrhea or bloody bowel movements, high fever, bruising, bleeding, or**  
42 **decreased vision.**

43  
44 **The most serious possible side effects of PEG-Intron and PEG-Intron/REBETOL therapy**  
45 **include:**

46



47 **Problems with Pregnancy.** Combination PEG-Intron/REBETOL therapy can cause  
48 death, serious birth defects, or other harm to your unborn child. If you are a woman  
49 of childbearing age, you must not become pregnant during treatment and for 6 months  
50 after you have stopped therapy. You must have a negative pregnancy test immediately  
51 before beginning treatment, during treatment and for 6 months after you have stopped  
52 therapy. Both males and female patients must use effective forms of birth control  
53 during treatment and for the 6 months after treatment is completed. Male patients  
54 should use a condom. If you are a female, you must use birth control even if you believe  
55 that you are not fertile or that your fertility is low. You should talk to your health care  
56 provider about birth control for you and your partner.

57  
58 **Mental health problems and suicide.** PEG-Intron and PEG-Intron/REBETOL therapies  
59 may cause patients to develop mood or behavioral problems. These can include irritability  
60 (getting easily upset) and depression (feeling low, feeling bad about yourself, or feeling  
61 hopeless). Some patients may have aggressive behavior. Former drug addicts may fall back  
62 into drug addiction or overdose. Some patients think about hurting or killing themselves or  
63 other people and some have killed (suicide) or hurt themselves or others. You must tell your  
64 health care provider if you are being treated for a mental illness or had treatment in the past  
65 for any mental illness, including depression and suicidal behavior. You should tell your  
66 health care provider if you have ever been addicted to drugs or alcohol.

67  
68 **Heart problems.** Some patients taking PEG-Intron or PEG-Intron/REBETOL therapy may  
69 develop problems with their heart, including low blood pressure, fast heart rate, and very  
70 rarely, heart attacks. Tell your health care provider if you have had any heart problems in the  
71 past.

72  
73 **Blood problems.** PEG-Intron and PEG-Intron/REBETOL therapies commonly lower two  
74 types of blood cells (white blood cells and platelets). In some patients, these blood counts  
75 may fall to dangerously low levels. If your blood counts become very low, this could lead to  
76 infections or bleeding.

77  
78 REBETOL therapy causes a decrease in the number of red blood cells you have (anemia).  
79 This can be dangerous, especially for patients who already have heart or circulatory  
80 (cardiovascular) problems. Talk with your health care provider before taking combination  
81 PEG-Intron/REBETOL therapy if you have, or have ever had any cardiovascular problems.

82  
83 **Body organ problems.** Certain symptoms like severe stomach pain may mean that your  
84 internal organs are being damaged.

85  
86 *For other possible side effects, see "What are the possible side effects of PEG-Intron and*  
87 *PEG-Intron/REBETOL" in this Medication Guide.*

88  
89 **What is PEG-Intron and PEG-Intron/REBETOL combination therapy?**  
90 The PEG-Intron product is a drug used to treat adults who have a lasting (chronic) infection  
91 with hepatitis C virus and who show signs that the virus is damaging the liver.



92 PEG-Intron/REBETOL combination therapy consists of two medications also used to treat  
93 hepatitis C infection. Patients with hepatitis C have the virus in their blood and in their liver.  
94 PEG-Intron reduces the amount of virus in the body and helps the body's immune system  
95 fight the virus. REBETOL (ribavirin) is a drug that helps to fight the viral infection but does  
96 not work when used by itself to treat chronic hepatitis C.  
97

98 It is not known if PEG-Intron or PEG-Intron/REBETOL therapies can cure hepatitis C  
99 (permanently eliminate the virus), or if it can prevent liver failure or liver cancer that is  
100 caused by hepatitis C infection.  
101

102 It is also not known if PEG-Intron or PEG-Intron/REBETOL combination therapy will  
103 prevent one infected person from infecting another person with hepatitis C.  
104

105 **Who should not take PEG-Intron or PEG-Intron/REBETOL therapy?**

106 Do not take PEG-Intron or PEG-Intron/REBETOL therapy if you:

- 107 • are pregnant, planning to get pregnant during treatment or during the 6 months after  
108 treatment, or breast-feeding
- 109
- 110 • are a male patient with a female sexual partner who is pregnant or plans to become  
111 pregnant at any time while you are being treated with REBETOL or during the 6  
112 months after your treatment has ended.
- 113
- 114 • have hepatitis caused by your immune system attacking your liver (autoimmune  
115 hepatitis) or unstable liver disease
- 116
- 117 • had an allergic reaction to another alpha interferon or are allergic to any of the  
118 ingredients in PEG-Intron or REBETOL Capsules. If you have any doubts, ask your  
119 health care provider.
- 120
- 121 • Do not take PEG-Intron/REBETOL combination therapy if you have abnormal red  
122 blood cells such as sickle-cell anemia or thalassemia major.  
123

124 **If you have any of the following conditions or serious medical problems, discuss them**  
125 **with your health care provider before taking PEG-Intron or PEG-Intron/REBETOL**  
126 **therapy:**

- 127 • depression or anxiety
- 128 • sleep problems
- 129 • high blood pressure
- 130 • previous heart attack, or other heart problems
- 131 • liver problems (other than hepatitis C infection)
- 132 • any kind of autoimmune disease (where the body's immune system attacks the body's  
133 own cells), such as psoriasis, systemic lupus erythematosus, rheumatoid arthritis
- 134 • thyroid problems
- 135 • diabetes
- 136 • colitis (inflammation of the bowels)



- 137 • cancer
- 138 • hepatitis B infection
- 139 • HIV infection
- 140 • kidney problems
- 141 • bleeding problems
- 142 • alcoholism
- 143 • drug abuse or addiction
- 144 • body organ transplant and are taking medicine that keeps your body from rejecting your
- 145 transplant (suppresses your immune system).
- 146
- 147

148 **How should I take PEG-Intron or PEG-Intron/REBETOL?**

149 Your health care provider will decide whether you will take PEG-Intron therapy alone or the  
150 combination of PEG-Intron/REBETOL, as well as the correct dose (based on your weight).  
151 PEG-Intron and PEG-Intron/REBETOL are given for one year. Take your prescribed dose of  
152 PEG-Intron once a week, on the same day of each week and at approximately the same time.  
153 Take the medicine for the full year and do not take more than the prescribed dose.  
154 REBETOL Capsules should be taken with food. When you take REBETOL with food, more  
155 of the medicine (70% more on average) is taken up by your body. You should take  
156 REBETOL the same way every day (twice a day with food) to keep the medicine in your  
157 body at a steady level. This will help your health care provider to decide how your treatment  
158 is working and how to change the number of REBETOL capsules you take if you have side  
159 effects from REBETOL. **Be sure to read the Medication Guide for REBETOL**  
160 **(ribavirin, USP) for complete instructions on how to take the REBETOL capsules.**

161

162 You should be completely comfortable with how to prepare PEG-Intron, how to set the dose  
163 you take, and how to inject yourself before you use PEG-Intron for the first time. PEG-  
164 Intron comes in two different forms, a powder in a single-use vial and a Redipen<sup>®</sup> single-use  
165 delivery system. See the attached appendix for detailed instructions for preparing and giving  
166 a dose of PEG-Intron.

167

168 If you miss a dose of the PEG-Intron product, take the missed dose as soon as possible during  
169 the same day or the next day, then continue on your regular dosing schedule. If several days  
170 go by after you miss a dose, check with your health care provider about what to do. Do not  
171 double the next dose or take more than one dose a week without talking to your health care  
172 provider. Call your health care provider right away if you take more than your prescribed  
173 PEG-Intron dose. Your health care provider may wish to examine you more closely, and  
174 take blood for testing.

175

176 If you miss a dose of REBETOL capsules, take the missed dose as soon as possible during  
177 the same day. If an entire day has gone by, check with your health care provider about what  
178 to do. Do not double the next dose.

179

180 You must get regular blood tests to help your health care provider check how the treatment is  
181 working and to check for side effects.

182



183 Tell your health care provider if you are taking or planning to take other prescription or non-  
184 prescription medicines, including vitamin and mineral supplements and herbal medicines.  
185

186 **What should I avoid while taking PEG-Intron or PEG-Intron/REBETOL therapies?**

- 187 • If you are pregnant do not start taking PEG-Intron/REBETOL combination therapy.  
188 • Avoid becoming pregnant while taking PEG-Intron or PEG-Intron/REBETOL.  
189 PEG-Intron and PEG-Intron/REBETOL may harm your unborn child (death or serious birth  
190 defects) or cause you to lose your baby (miscarry). If you or your partner becomes  
191 pregnant during treatment or during the 6 months after treatment with PEG-  
192 Intron/REBETOL combination therapy, immediately report the pregnancy to your  
193 health care provider. You or your health care provider should call (800) 727-7064. By  
194 calling this number, information about you and/or your partner will be added to a pregnancy  
195 registry that will be used to help you and your health care provider make decisions about  
196 your treatment for hepatitis in the future. You, your partner and/or your health care provider  
197 will be asked to provide follow-up information on the outcome of the pregnancy.  
198
- 199 • Do not breast-feed your baby while taking PEG-Intron.

201 **What are the possible side effects of PEG-Intron and PEG-Intron/REBETOL**  
202 **combination therapy?**

203  
204 **Possible, serious side effects include:**

205 **Mental health problems including suicide, blood problems, heart problems, body organ**  
206 **problems.** See "What is the most important information I should know about PEG-Intron  
207 and PEG-Intron/REBETOL combination therapy?"  
208

209 **Other body organ problems.** A few patients have lung problems (such as pneumonia or  
210 inflammation of the lung tissue), inflammation of the kidney, and eye disorders.  
211

212 **New or worsening autoimmune disease.** Some patients taking PEG-Intron or PEG-  
213 Intron/REBETOL develop autoimmune diseases (a condition where the body's immune cells  
214 attack other cells or organs in the body), including rheumatoid arthritis, systemic lupus  
215 erythematosus, and psoriasis. In some patients who already have an autoimmune disease, the  
216 disease worsens on PEG-Intron and PEG-Intron/REBETOL combination therapy.  
217

218 **Common but less serious side effects include:**

219  
220 **Flu-like symptoms.** Most patients who take PEG-Intron or PEG-Intron/REBETOL therapy  
221 have "flu-like" symptoms (headache, muscle aches, tiredness and fever). Some of these  
222 symptoms (fever, headache) usually lessen after the first few weeks of therapy. You can  
223 reduce some of these symptoms by injecting your PEG-Intron dose at bedtime. Over-the-  
224 counter pain and fever reducers, such as acetaminophen or ibuprofen, can be used to prevent  
225 or reduce the fever and headache.  
226

227 **Extreme fatigue (tiredness).** Many patients become extremely tired while on PEG-Intron or  
228 PEG-Intron/REBETOL combination therapy.



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**Appetite problems.** Nausea, loss of appetite, and weight loss, occur commonly.

**Thyroid problems.** Some patients develop changes in the function of their thyroid. Symptoms of thyroid changes include the inability to concentrate, feeling cold or hot all the time, a change in your weight, and changes to your skin.

**Blood sugar problems.** Some patients develop problems with the way their body controls their blood sugar, and may develop high blood sugar or diabetes.

**Skin reactions.** Redness, swelling, and itching are common at the site of injection. If after several days these symptoms do not disappear contact your health care provider. You may get a rash during therapy. If this occurs, your health care provider may recommend medicine to treat the rash.

**Hair thinning.** Hair thinning is common during PEG-Intron and PEG-Intron/REBETOL treatment. Hair loss stops and hair growth returns after therapy is stopped.

These are not all of the side effects of PEG-Intron or PEG-Intron/REBETOL combination therapy. Your health care provider or pharmacist can give you a more complete list.

**General advice about prescription medicines:**

Medicines are sometimes prescribed for purposes other than those listed in a Medication Guide. If you have any concerns about PEG-Intron, ask your health care provider. Your health care provider or pharmacist can give you information about PEG-Intron that was written for health care professionals. Do not use PEG-Intron for a condition for which it was not prescribed. Do not share this medication with other people.

**If you are taking PEG-Intron/REBETOL combination therapy, also read the Medication Guide for REBETOL (ribavirin, USP) Capsules.**

*This Medication Guide has been approved by the U.S. Food and Drug Administration.*

Manufactured by: Schering Corporation, Kenilworth, NJ 07033 USA

**DATE**

**How do I prepare and inject the PEG-Intron Dose?**

Before you inject PEG-Intron, the powder must be mixed with 0.7 mL of the supplied DILUENT for PEG-Intron, Sterile Water for Injection (diluent). You should carefully follow the directions given to you by your health care provider.

The vial of mixed PEG-Intron should be used immediately. DO NOT prepare more than one vial at a time. If you don't use the vial of the prepared solution right away, it must be stored in a refrigerator and used within 24 hours.

**Storing PEG-Intron**



275 PEG-Intron Powder should be stored at room temperature (25 °C, 77°F); avoid exposure to  
276 heat. After mixing, the PEG-Intron solution should be used immediately but may be stored  
277 in the refrigerator up to 24 hours. The solution contains no preservatives. DO NOT  
278 FREEZE.

279 **Preparing the PEG-Intron solution**

280

281 1. Find a clean, well-lit, non-slip flat working surface and assemble all of the supplies you  
282 will need for an injection. All of the supplies you will need for an injection are in the  
283 PEG-Intron Powder for Injection package. The package contains:

284

▪ a vial of PEG-Intron powder

285

286 ▪ a 1.25 mL vial of DILUENT

287

288 ▪ 2 disposable syringes, and

289

290 ▪ alcohol swabs

291

292 2. Check the date printed on the PEG-Intron carton to make sure that the expiration date  
293 has not passed. Remove one vial and look at the contents. The PEG-Intron in the vial  
294 should appear as a white to off-white tablet-like solid, that is whole/in pieces or as a  
295 loose powder.

296

297 If you have already mixed the PEG-Intron solution and it has been stored properly in the  
298 refrigerator, take it out of the refrigerator and allow the solution to come to room  
299 temperature.

300

301 3. Wash your hands thoroughly with soap and water, rinse and towel dry. It is important to  
302 keep your work area, your hands and injection site clean to minimize the risk of  
303 infection.

304

305 The disposable syringes have needles that are already attached and cannot be removed.  
306 Each syringe has a clear plastic safety sleeve that is pulled over the needle for disposal  
307 after use. The safety sleeve should remain tight against the flange while using the  
308 syringe and moved over the needle only when ready for disposal. **Figure A.**

309

The syringes and needles are for single use only.

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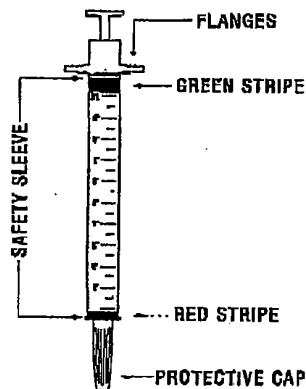


Figure A

4. Remove the protective wrapper from ONE of the syringes provided and use for the following steps 5-7. Make sure that the syringe safety sleeve is sitting against the flange. (see Figure A).

5. Remove the protective plastic cap from the tops of both the supplied DILUENT and the PEG-Intron vials. Clean the rubber stopper on the top of both vials with an alcohol swab.

6. Carefully remove the protective cap straight off of the needle to avoid damaging the needle point. Fill the syringe with air by pulling the plunger to 0.7 mL (Figure B). Hold the DILUENT vial upright. Do not touch the cleaned top of the vial with your hands. (Figure C). Insert the needle through the center of the rubber stopper of the DILUENT vial, and inject the air from the syringe into the vial (Figure D). Turn the vial upside down and make sure the tip of the needle is in the liquid. Withdraw only 0.7 mL of DILUENT by pulling the plunger back to 0.7 mL mark on the side of the syringe. (Figure E). . Remove the needle from the vial (Figure F). **Discard the remaining DILUENT.**

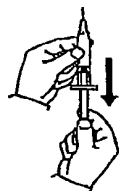


Figure B

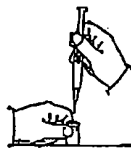


Figure C

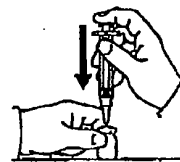


Figure D

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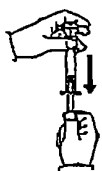


Figure E



Figure F

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348 7. Insert the needle through the center of the rubber stopper of the PEG-Intron vial, and  
349 place the needle tip against the glass wall of the vial (Figure G). SLOWLY inject the 0.7  
350 mL DILUENT so that the stream of DILUENT runs down the side of the vial. To prevent  
351 bubbles from forming, DO NOT AIM THE STREAM of diluent directly on the tablet-like  
352 SOLID or POWDER in the bottom of the vial. Remove the needle from the vial.  
353 Firmly grasp the safety sleeve and pull it over the exposed needle until you hear a click. The  
354 green stripe on the safety sleeve will completely cover the red stripe on the needle. (See  
355 Figure O in the section: "Injecting the PEG-Intron dose.") Discard the syringe and needle in  
356 the puncture proof container.  
357

358

359 8. GENTLY swirl the vial in a gentle circular motion (Figure H), until the PEG-Intron is  
360 completely dissolved. DO NOT SHAKE the vial. If any powder remains undissolved in  
361 the vial, gently turn the vial upside down until all of the powder is dissolved. It is not  
362 unusual for the solution to appear cloudy or bubbly for a few minutes. If air bubbles do  
363 form, wait until the solution has settled and all bubbles have risen to the top before  
364 withdrawing your dose from the vial.  
365

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Figure G

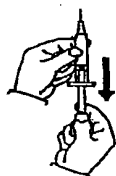


Figure H

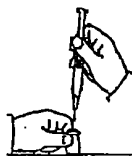
376 9. After the solution has settled and is completely dissolved it should be clear, colorless and  
377 without particles, but there may be a ring of foam or bubbles on the surface, this is normal.  
378 Do not use it if you see particles or the color is not correct.  
379 10. After the PEG-Intron powder is dissolved but before you withdraw your dose, clean the  
380 rubber stopper again with an alcohol swab.  
381



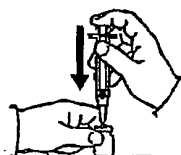
386 11. Unwrap the second syringe provided. You will use it to give yourself the injection.  
387 Carefully remove the protective cap from the needle and fill the syringe with air by pulling  
388 the plunger to the number on the side of the syringe (mL) that corresponds to your prescribed  
389 dose (Figure J). Hold the PEG-Intron vial upright. DO NOT touch the cleaned top of the  
390 vial with your hands (Figure K). Insert the needle into the vial containing the PEG-Intron  
391 solution and inject the air into the center of the vial. (Figure L).  
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395 Figure J

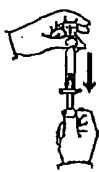


396  
397 Figure K



398 Figure L

398 12. Turn the PEG-Intron vial upside down. Be sure the tip of needle is in the PEG-Intron  
399 solution. While holding the vial and syringe with one hand slowly pull the plunger back to  
400 withdraw the exact amount of PEG-Intron into the syringe your health care provider told you  
401 to use (Figure M).  
402  
403



404  
405 Figure M

406  
407  
408 13. Remove the needle from the vial (Figure N) and check for air bubbles in the syringe. If  
409 you see any bubbles, hold the syringe with the needle pointing up and gently tap the syringe  
410 gently until the bubbles rise. Then push the plunger in slowly until the bubbles disappear.  
411



412 Figure N

413



414

415 **Injecting the PEG-Intron Dose**

416 Selecting the Site for Injection.

417 The best sites for giving yourself an injection are those areas with a layer of fat between the  
418 skin and muscle, like your thigh, the outer surface of your upper arm, and abdomen. Do not  
419 inject yourself in the area near your navel or waistline. If you are very thin, you should only  
420 use the thigh or outer surface of the arm for injection.

421

422 You should use a different site each time you inject PEG-Intron to avoid soreness at any one  
423 site. Do not inject PEG-Intron solution into an area where the skin is irritated, red, bruised,  
424 infected or has scars, stretch marks or lumps.

425

426 14. Clean the skin where the injection is to be given with an alcohol swab, and wait for the  
427 area to dry. Remove the protective cap from the needle. Make sure the safety sleeve of the  
428 syringe is pushed firmly against the syringe flange so that the needle is fully exposed (see  
429 Figure A).

430

431 15. With one hand, pinch a 2-inch fold of loose skin. With your other hand, pick up the  
432 syringe and hold it like a pencil. Position the bevel of the needle facing up and insert the  
433 needle approximately ¼ inch into the pinched skin at approximately a 45 to 90 degree angle  
434 with a quick dart-like thrust. After the needle is in, remove the hand that you used to pinch  
435 your skin and use it to hold the syringe barrel. Pull the plunger of the syringe back very  
436 slightly. If blood comes into the syringe, the needle has entered a blood vessel. **Do not**  
437 **inject**. Withdraw the needle and discard the syringe as outlined in step 17. Repeat the above  
438 steps with a new vial to prepare a new syringe and inject the medicine at a new site. If no  
439 blood is present in the syringe, inject the medicine by gently pressing the plunger all the way  
440 down the syringe barrel.

441

442 16. Hold an alcohol swab near the needle and pull the needle straight out of the skin. Press  
443 the alcohol swab over the injection site for several seconds. Do not massage the injection  
444 site. If there is bleeding, cover it with a bandage.

445

446 17. After injecting your dose, firmly grasp the safety sleeve and pull it over the exposed  
447 needle until you hear a click, and the green stripe on the safety sleeve covers the red stripe on  
448 the needle (Figure O). Discard the syringe and needle in the Sharp's container supplied to  
449 you.

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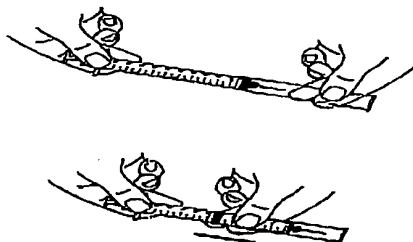


Figure O



460 18. After 2 hours, check the injection site for redness, swelling, or tenderness. If you have a  
461 skin reaction and it doesn't clear up in a few days, contact your health care provider or nurse.  
462

463 **How do I dispose of the used syringes and needles?**

464 Discard used safety lock syringes and needles in a Sharp's container or other puncture proof  
465 container like a coffee can. **DO NOT USE** glass or clear plastic containers. Your health care  
466 provider or nurse will tell you how to dispose a full container. Always keep the container out  
467 of reach of children.  
468  
469  
470

