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MEDICATION GUIDE
PegIntron ®
(Peginterferon alfa-2b)
Including appendix with instructions for using PegIntron ® Powder for Injection
Read this Medication Guide carefully before you start taking PegIntron (**Peg In-tron**) or PegIntron/REBETOL (**REB-eh-tole**) combination therapy. Read the Medication Guide each time you refill your prescription because there may be new information. The information in this Medication Guide does not take the place of talking with your health care provider (doctor, nurse, nurse practitioner, or physician's assistant).
If you are taking PegIntron/REBETOL combination therapy, also read the Medication Guide for REBETOL (ribavirin, USP) Capsules and Oral Solution.
What is the most important information I should know about PegIntron and PegIntron/REBETOL combination therapy?
PegIntron (peginterferon) is a treatment for some people who are infected with hepatitis C virus. However, PegIntron and PegIntron/ REBETOL combination therapy can have serious side effects that may cause death in rare cases. Before you decide to start treatment, you should talk to your health care provider about the possible benefits and side effects of PegIntron or PegIntron/REBETOL combination therapy. If you begin treatment you will need to see your health care provider regularly for medical examinations and lab tests to make sure your treatment is working and to check for side effects.
REBETOL may cause birth defects and/or death of an unborn child. If you are pregnant, you or your male partner must not take PegIntron/REBETOL combination therapy. You must not become pregnant while either you or your partner are being treated with the combination PegIntron/REBETOL therapy, or for 6 months after stopping therapy. Men and women should use birth control while taking the combination therapy and for 6 months afterwards. If you or your partner are being treated and you become pregnant either during treatment or within 6 months of stopping treatment, call your health care provider right away. There is a Ribavirin Pregnancy Registry that collects information about pregnancy outcomes in female patients and female partners of male patients exposed to ribavirin. You or your healthcare provider are encouraged to contact the Registry at 1-800-593-2214.
If you are taking PegIntron or PegIntron/REBETOL therapy you should call your health care provider immediately if you develop any of these symptoms:
New or worsening mental health problems such as thoughts about killing or hurting yourself or others, trouble breathing, chest pain, severe stomach or lower back pain, bloody diarrhea or bloody bowel movements, high fever, bruising, bleeding, or decreased vision.
The most serious possible side effects of PegIntron and PegIntron/REBETOL therapy include:
Problems with Pregnancy. **Combination PegIntron/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 male 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. PegIntron and PegIntron/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 PegIntron or PegIntron/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. PegIntron and PegIntron/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 PegIntron/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. PegIntron may cause lung problems including: trouble breathing, pneumonia, inflammation of lung tissue, and new or worse high blood pressure of the lungs (pulmonary hypertension), which can be severe and may in some cases lead to death. Cases of weakness, loss of coordination, and numbness due to stroke have been reported in patients taking PegIntron, including patients with few or no reported risk factors for stroke.

Eye problems. Changes in vision such as a decrease or loss of vision (blindness) may happen in some patients. You should have an eye exam before you take PegIntron. If you have eye problems or have had them in the past, you may need eye exams while you are taking PegIntron. Tell your healthcare provider or eye doctor right away if you have changes in your vision while taking PegIntron. *For other possible side effects, see "What are the possible side effects of PegIntron and PegIntron/REBETOL combination therpy?" in this Medication Guide.*

What is PegIntron and PegIntron/REBETOL combination therapy?

The PegIntron 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.

PegIntron/REBETOL combination therapy consists of two medications also used to treat hepatitis C infection in adults and children 3 years of age and older. Patients with hepatitis C have the virus in their blood and in their liver. PegIntron reduces the amount of virus in the body and helps the body's immune system fight the virus. REBETOL (ribavirin) is a drug that helps to fight the viral infection but does not work when used by itself to treat chronic hepatitis C.

It is not known if PegIntron or PegIntron/REBETOL therapies can cure hepatitis C (permanently eliminate the virus) or if it can prevent liver failure or liver cancer that is caused by hepatitis C infection.

It is also not known if PegIntron or PegIntron/REBETOL combination therapy will prevent one infected person from infecting another person with hepatitis C.

Who should not take PegIntron or PegIntron/REBETOL therapy?

Do not take PegIntron or PegIntron/REBETOL therapy if you:

- are pregnant, planning to get pregnant during treatment or during the 6 months after treatment, or breast-feeding
- are a male patient with a female sexual partner who is pregnant or plans to become pregnant at any time while you are being treated with REBETOL or during the 6 months after your treatment has ended
- have hepatitis caused by your immune system attacking your liver (autoimmune hepatitis) or unstable liver disease
- had an allergic reaction to another alpha interferon or are allergic to any of the ingredients in PegIntron or REBETOL Capsules or Oral Solution. If you have any doubts, ask your health care provider
- Do not take PegIntron/REBETOL combination therapy if you have abnormal red blood cells such as is seen in sickle-cell anemia or thalassemia major

If you have any of the following conditions or serious medical problems, discuss them with your health care provider before taking PegIntron or PegIntron/REBETOL therapy:

- depression or anxiety
- sleep problems
- high blood pressure
- previous heart attack, or other heart problems
- liver problems (other than hepatitis C infection)
- any kind of autoimmune disease (where the body's immune system attacks the body's own cells), such as psoriasis, systemic lupus erythematosus, rheumatoid arthritis
- thyroid problems
- diabetes
- colitis (inflammation of the bowels)
- cancer
- hepatitis B infection
- HIV infection
- kidney problems
- bleeding problems
- alcoholism

• drug abuse or addiction

• body organ transplant and are taking medicine that keeps your body from rejecting your transplant (suppresses your immune system)

Tell your healthcare provider about all the medicines you take, including prescription and non-prescription medicines, vitamins, and herbal supplements. PegIntron and certain other medicines may affect each other and cause side effects.
Especially tell your doctor if you take the anti-hepatitis B medicine telbivudine (Tyzeka). See "What are the possible side effects of PegIntron?"
Know the medicines you take. Keep a list of them and show it to your healthcare provider and pharmacist when you get a new medicine.

How should I take PegIntron or PegIntron/REBETOL?

Your health care provider will decide whether you will take PegIntron therapy alone or the combination of PegIntron/REBETOL, as well as the correct dose (for adults the dose of PegIntron is based on weight). For children 3 years of age and older, your healthcare provider will recommend the dose of PegIntron based on body surface area. PegIntron and PegIntron/REBETOL are given for up to one year. Take your prescribed dose of PegIntron ONCE A WEEK, on the same day of each week and at approximately the same time. Take the medicine for the full course of prescribed therapy and do not take more than the prescribed dose. REBETOL should be taken with food. When you take REBETOL with food, more of the medicine (70% more on average) is taken up by your body. You should take REBETOL the same way every day (twice a day with food) to keep the medicine in your body at a steady level. This will help your health care provider to decide how your treatment is working and how to change the dose of REBETOL you take if you have side effects from REBETOL. **Be sure to read the Medication Guide for REBETOL (ribavirin, USP) for complete instructions on how to take the REBETOL capsules and oral solution.**
You should be completely comfortable with how to prepare PegIntron; how to set the dose you take, and how to inject yourself before you use PegIntron for the first time. PegIntron comes in two different forms, a powder in a single-use vial and a REDIPEN ® single-use delivery system. See the attached appendix for detailed instructions for preparing and giving a dose of PegIntron.
If you miss a dose of the PegIntron product, take the missed dose as soon as possible during the same day or the next day, then continue on your regular dosing schedule. If several days go by after you miss a dose, check with your health care provider about what to do. Do not double the next dose or take more than one dose a week without talking to your health care provider. Call your health care provider right away if you take more than your prescribed PegIntron dose. Your health care provider may wish to examine you more closely, and take blood for testing.
If you miss a dose of REBETOL, take the missed dose as soon as possible during the same day. If an entire day has gone by, check with your health care provider about what to do. Do not double the next dose.
You must get regular blood tests to help your health care provider check how the treatment is working and to check for side effects. Tell your health care provider if you are taking or planning to take other prescription or non-prescription medicines, including vitamin and mineral supplements and herbal medicines.

What should I avoid while taking PegIntron or PegIntron/REBETOL therapies?

• If you are pregnant do not start taking PegIntron/REBETOL combination therapy.

• Avoid becoming pregnant while taking PegIntron or PegIntron/REBETOL.

PegIntron and PegIntron/REBETOL may harm your unborn child (death or serious birth defects) or cause you to lose your baby (miscarry). **If you or your partner become pregnant during treatment or during the 6 months after treatment with PegIntron/ REBETOL combination therapy, immediately report the pregnancy to your health care provider. You or your health care provider should call 1-800-593-2214.** By calling this number, information about you and/or your partner will be added to a pregnancy registry that will be used to help you and your health care provider make decisions about your treatment for hepatitis in the future. You, your partner and/or your health care provider will be asked to provide follow-up information on the outcome of the pregnancy.
• Do not breast-feed your baby while taking PegIntron.

What are the possible side effects of PegIntron and PegIntron/REBETOL combination therapy?

PegIntron may cause serious side effects including:

• See "What is the most important information I should know about PegIntron and PegIntron/REBETOL combination therapy?".

• **Other body organ problems**. A few patients have inflammation of the kidney.

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

- **Growth problems in children.** Weight loss and slowed growth are common in children during treatment with PegIntron/ REBETOL. Catch-up weight gain and some catch-up in growth happen after treatment stops, but some children may not reach the height that they were expected to have before treatment.

- **Nerve problems.** People who take PegIntron or other alpha interferon products with telbivudine (Tyzeka) can have nerve problems such as continuing numbness, tingling, or burning sensation in the arms or legs (peripheral neuropathy). Call your healthcare provider if you have any of these symptoms.

Common but less serious side effects include:
- **Flu-like symptoms.** Most patients who take PegIntron or PegIntron/REBETOL therapy have "flu-like" symptoms (headache, muscle aches, tiredness and fever). Some of these symptoms (fever, headache) usually lessen after the first few weeks of therapy. You can reduce some of these symptoms by injecting your PegIntron dose at bedtime. Over-the-counter pain and fever reducers, such as acetaminophen or ibuprofen, can be used to prevent or reduce the fever and headache.

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

- **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 PegIntron and PegIntron/REBETOL treatment. Hair loss stops and hair growth returns after therapy is stopped.

These are not all of the side effects of PegIntron or PegIntron/REBETOL combination therapy. Your health care provider or pharmacist can give you a more complete list.
Call your doctor for medical advice about side effects. You may report side effects to FDA at 1–800–FDA–1088.
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 PegIntron, ask your health care provider. Your health care provider or pharmacist can give you information about PegIntron that was written for health care professionals. Do not use PegIntron for a condition for which it was not prescribed. Do not share this medication with other people.
If you are taking PegIntron/REBETOL combination therapy, also read the Medication Guide for REBETOL (ribavirin, USP) Capsules and Oral Solution.
This Medication Guide has been approved by the U.S. Food and Drug Administration.
Revised August 2009
How do I prepare and inject the PegIntron Dose?
Before you inject PegIntron, the powder must be mixed with **0.7 mL** of the supplied DILUENT for PegIntron, Sterile Water for Injection (diluent). This product can also be administered by a parent or care-taker as instructed by your healthcare provider. You should carefully follow the directions given to you by your health care provider.
The vial of mixed PegIntron 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 PegIntron
PegIntron Powder should be stored at room temperature (25 ° C, 77°F); avoid exposure to heat. After mixing, the PegIntron solution should be used immediately but may be stored in the refrigerator up to 24 hours. The solution contains no preservatives. DO NOT FREEZE.
Preparing the PegIntron solution:
1. Find a clean, well-lit, non-slip flat working surface and assemble all of the supplies you will need for an injection. All of the supplies you will need for an injection are in the PegIntron Powder for Injection package. The package contains:

- a vial of PegIntron powder
- a 1.25 mL vial of DILUENT
- 2 disposable syringes, and
- alcohol swabs

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

   If you have already mixed the PegIntron solution and it has been stored properly in the refrigerator, take it out of the refrigerator and allow the solution to come to room temperature.

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

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

   The syringes and needles are for single use only.

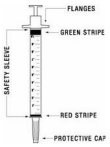

Figure A

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 PegIntron 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 the 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

Figure E

Figure F

7. Insert the needle through the center of the rubber stopper of the PegIntron vial, and place the needle tip against the glass wall of the vial (**Figure G**). SLOWLY inject the 0.7 mL DILUENT so that the stream of DILUENT runs down the side of the vial. To prevent bubbles from forming, DO NOT AIM THE STREAM of diluent directly on the tablet-like SOLID or POWDER in the bottom of the vial. Remove the needle from the vial.

   Firmly grasp the safety sleeve and pull it over the exposed needle until you hear a click. The green stripe on the safety sleeve will completely cover the red stripe on the needle. (See **Figure O** in the section: "Injecting the PegIntron dose.") Discard the syringe and needle in the puncture-proof container.

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

Figure G

Figure H

9. After the solution has settled and is completely dissolved it should be clear, colorless and without particles, but there may be a ring of foam or bubbles on the surface, this is normal. Do not use it if you see particles or the color is not correct**.**

10. After the PegIntron powder is dissolved but before you withdraw your dose, clean the rubber stopper again with an alcohol swab.

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

Figure J

Figure K

Figure L

12. Turn the PegIntron vial upside down. Be sure the tip of the needle is in the PegIntron solution. While holding the vial and syringe with one hand slowly pull the plunger back to withdraw the exact amount of PegIntron into the syringe your health care provider told you to use (**Figure M**).

Figure M

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

Figure N

Injecting the PegIntron Dose

Selecting the Site for Injection.

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.

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

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

15. With one hand, pinch a 2-inch fold of loose skin. With your other hand, pick up the syringe and hold it like a pencil. Position the bevel of the needle facing up and insert the needle approximately ¼ inch into the pinched skin at approximately a 45 to 90 degree angle with a quick dart-like thrust. After the needle is in, remove the hand that you used to pinch your skin and use it

to hold the syringe barrel. Pull the plunger of the syringe back very slightly. If blood comes into the syringe, the needle has entered a blood vessel. **Do not inject.** Withdraw the needle and discard the syringe as outlined in step 17. Repeat the above steps with a new vial to prepare a new syringe and inject the medicine at a new site. If no blood is present in the syringe, inject the medicine by gently pressing the plunger all the way down the syringe barrel.

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

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

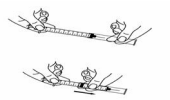

Figure O

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

How do I dispose of the used syringes and needles?
Discard used safety lock syringes and needles in a Sharp's container or other puncture-proof container like a coffee can. DO NOT USE glass or clear plastic containers. Your health care provider or nurse will tell you how to dispose of a full container. Always keep the container out of reach of children.
Manufactured by Schering Corporation, a subsidiary of Schering-Plough Corporation, Kenilworth, NJ 07033 USA.

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MEDICATION GUIDE
PegIntron™ REDIPEN® Single-dose Delivery System
(Peginterferon alfa-2b)
Including appendix with instructions for using PegIntron™ REDIPEN® Single-dose Delivery System
Read this Medication Guide carefully before you start taking PegIntron® (**Peg In-tron**) or PegIntron/REBETOL® (**REB-eh-tole**) combination therapy. Read the Medication Guide each time you refill your prescription because there may be new information.
The information in this Medication Guide does not take the place of talking with your health care provider (doctor, nurse, nurse practitioner, or physician's assistant).
If you are taking PegIntron/REBETOL combination therapy, also read the Medication Guide for REBETOL (ribavirin USP) Capsules and Oral Solution.
What is the most important information I should know about PegIntron and PegIntron/REBETOL combination therapy?
PegIntron (peginterferon) is a treatment for some people who are infected with hepatitis C virus. However, PegIntron and PegIntron/ REBETOL combination therapy can have serious side effects that may cause death in rare cases. Before you decide to start treatment, you should talk to your health care provider about the possible benefits and side effects of PegIntron or PegIntron/REBETOL combination therapy. If you begin treatment you will need to see your health care provider regularly for medical examinations and lab tests to make sure your treatment is working and to check for side effects.
REBETOL may cause birth defects and/or death of an unborn child. If you are pregnant, you or your male partner must not take PegIntron/REBETOL combination therapy. You must not become pregnant while either you or your partner are being treated with the combination PegIntron/REBETOL therapy, or for 6 months after stopping therapy. Men and women should use birth control while taking the combination therapy and for 6 months afterwards. If you or your partner are being treated and you become pregnant, either during treatment or within 6 months of stopping treatment, call your health care provider right away. There is a Ribavirin Pregnancy Registry that collects information about pregnancy outcomes of female patients and female partners of male patients exposed to ribavirin. You or your healthcare provider are encouraged to contact the Registry at 1-800-593-2214.
If you are taking PegIntron or PegIntron/REBETOL therapy you should call your health care provider immediately if you develop any of these symptoms:
New or worsening mental health problems such as thoughts about killing or hurting yourself or others, trouble breathing, chest pain, severe stomach or lower back pain, bloody diarrhea or bloody bowel movements, high fever, bruising, bleeding, or decreased vision.

The most serious possible side effects of PegIntron and PegIntron/REBETOL therapy include:

Problems with Pregnancy. **Combination PegIntron/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 male 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. PegIntron and PegIntron/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 PegIntron or PegIntron/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. PegIntron and PegIntron/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 PegIntron/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. PegIntron may cause lung problems including: trouble breathing, pneumonia, inflammation of lung tissue, and new or worse high blood pressure of the lungs (pulmonary hypertension), which can be severe and may in some cases lead to death. Cases of weakness, loss of coordination, and numbness due to stroke have been reported in patients taking PegIntron, including patients with few or no reported risk factors for stroke.

Eye problems. Changes in vision such as a decrease or loss of vision (blindness) may happen in some patients. You should have an eye exam before you take PegIntron. If you have eye problems or have had them in the past, you may need eye exams while you are taking PegIntron. Tell your healthcare provider or eye doctor right away if you have changes in your vision while taking PegIntron.

For other possible side effects, see "What are the possible side effects of PegIntron and PegIntron/REBETOL combination therapy?" in this Medication Guide.

What is PegIntron and PegIntron/REBETOL combination therapy?

The PegIntron 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.

PegIntron/REBETOL combination therapy consists of two medications also used to treat hepatitis C infection in adults and children 3 years of age and older. Patients with hepatitis C have the virus in their blood and in their liver. PegIntron reduces the amount of virus in the body and helps the body's immune system fight the virus. REBETOL (ribavirin) is a drug that helps to fight the viral infection, but does not work when used by itself to treat chronic hepatitis C.

It is not known if PegIntron or PegIntron/REBETOL therapies can cure hepatitis C (permanently eliminate the virus), or if it can prevent liver failure or liver cancer that is caused by hepatitis C infection.

It is also not known if PegIntron or PegIntron/REBETOL combination therapy will prevent one infected person from infecting another person with hepatitis C.

Who should not take PegIntron or PegIntron/REBETOL therapy?

Do not take PegIntron or PegIntron/REBETOL therapy if you:

- are pregnant, planning to get pregnant during treatment or during the 6 months after treatment, or breastfeeding.
- are a male patient with a female sexual partner who is pregnant, or plans to become pregnant at any time while you are being treated with REBETOL, or during the 6 months after your treatment has ended.
- have hepatitis caused by your immune system attacking your liver (autoimmune hepatitis) or unstable liver disease
- had an allergic reaction to another alpha interferon or are allergic to any of the ingredients in PegIntron or REBETOL Capsules or Oral Solution. If you have any doubts, ask your health care provider.
- Do not take PegIntron/REBETOL combination therapy if you have abnormal red blood cells such as is seen in sickle-cell anemia or thalassemia major.

If you have any of the following conditions or serious medical problems, discuss them with your health care provider before taking PegIntron or PegIntron/REBETOL therapy:

- depression or anxiety
- sleep problems
- high blood pressure
- previous heart attack, or other heart problems
- liver problems (other than hepatitis C infection)
- any kind of autoimmune disease (where the body's immune system attacks the body's own cells), such as psoriasis, systemic lupus erythematosus, rheumatoid arthritis
- thyroid problems
- diabetes
- colitis (inflammation of the bowels)
- cancer
- hepatitis B infection
- HIV infection
- kidney problems
- bleeding problems
- alcoholism
- drug abuse or addiction
- body organ transplant and are taking medicine that keeps your body from rejecting your transplant (suppresses your immune system)

Tell your healthcare provider about all the medicines you take, including prescription and non-prescription medicines, vitamins, and herbal supplements. PegIntron and certain other medicines may affect each other and cause side effects.
Especially tell your doctor if you take the anti-hepatitis B medicine telbivudine (Tyzeka). See "What are the possible side effects of PegIntron?"
Know the medicines you take. Keep a list of them and show it to your healthcare provider and pharmacist when you get a new medicine.

How should I take PegIntron or PegIntron/REBETOL?

Your health care provider will decide whether you will take PegIntron therapy alone or the combination of PegIntron/REBETOL, as well as the correct dose (for adults the dose of PegIntron is based on weight). For children 3 years of age and older, your healthcare provider will recommend the dose of PegIntron based on body surface area. PegIntron and PegIntron/REBETOL are given for up to 1 year. Take your prescribed dose of PegIntron ONCE A WEEK, on the same day of each week and at approximately the same time. Take the medicine for the full course of prescribed therapy and do not take more than the prescribed dose. REBETOL should be taken with food. When you take REBETOL with food, more of the medicine (70% more on average) is taken up by your body. You should take REBETOL the same way every day (twice a day with food) to keep the medicine in your body at a steady level. This will help your health care provider to decide how your treatment is working and how to change the dose of REBETOL you take if you have side effects from REBETOL. **Be sure to read the Medication Guide for REBETOL (ribavirin USP) for complete instructions on how to take the REBETOL capsules and oral solution.**
You should be completely comfortable with how to prepare PegIntron, how to set the dose you take, and how to inject yourself before you use PegIntron for the first time. PegIntron comes in two different forms, a powder in a single-use vial and a REDIPEN® single-use delivery system. See the attached appendix for detailed instructions for preparing and giving a dose of PegIntron.
If you miss a dose of the PegIntron product, take the missed dose as soon as possible during the same day or the next day, then continue on your regular dosing schedule. If several days go by after you miss a dose, check with your health care provider about what to do. Do not double the next dose or take more than one dose a week without talking to your health care provider. Call your health care provider right away if you take more than your prescribed PegIntron dose. Your health care provider may wish to examine you more closely, and take blood for testing.

If you miss a dose of REBETOL, take the missed dose as soon as possible during the same day. If an entire day has gone by, check with your health care provider about what to do. Do not double the next dose.
You must get regular blood tests to help your health care provider check how the treatment is working and to check for side effects.
Tell your health care provider if you are taking or planning to take other prescription or non-prescription medicines, including vitamin and mineral supplements and herbal medicines.

What should I avoid while taking PegIntron or PegIntron/REBETOL therapies?

- If you are pregnant do not start taking PegIntron/REBETOL combination therapy.

- Avoid becoming pregnant while taking PegIntron or PegIntron/REBETOL.

PegIntron and PegIntron/REBETOL may harm your unborn child (death or serious birth defects) or cause you to lose your baby (miscarry). **If you or your partner become pregnant during treatment or during the 6 months after treatment with PegIntron/ REBETOL combination therapy, immediately report the pregnancy to your health care provider. You or your health care provider should call 1-800-593-2214.** By calling this number, information about you and/or your partner will be added to a pregnancy registry that will be used to help you and your health care provider make decisions about your treatment for hepatitis in the future. You, your partner, and/or your health care provider will be asked to provide follow-up information on the outcome of the pregnancy.

- Do not breastfeed your baby while taking PegIntron.

What are the possible side effects of PegIntron and PegIntron/REBETOL combination therapy?

PegIntron may cause serious side effects including:

See "What is the most important information I should know about PegIntron and PegIntron/REBETOL combination therapy?"

Other body organ problems. A few patients have inflammation of the kidney.

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

Growth problems in children. Weight loss and slowed growth are common in children during treatment with PegIntron/REBETOL. Catch-up weight gain and some catch-up in growth happen after treatment stops, but some children may not reach the height that they were expected to have before treatment.

Nerve problems. People who take PegIntron or other alpha interferon products with telbivudine (Tyzeka) can have nerve problems such as continuing numbness, tingling, or burning sensation in the arms or legs (peripheral neuropathy). Call your healthcare provider if you have any of these symptoms.

Common but less serious side effects include:

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

Extreme fatigue (tiredness). Many patients become extremely tired while on PegIntron or PegIntron/REBETOL combination therapy.

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 PegIntron and PegIntron/REBETOL treatment. Hair loss stops and hair growth returns after therapy is stopped.

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

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

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 PegIntron, ask your health care provider. Your health care provider or pharmacist can give you information about PegIntron that was written for health care professionals. Do not use PegIntron for a condition for which it was not prescribed. Do not share this medication with other people.

If you are taking PegIntron/REBETOL combination therapy, also read the Medication Guide for REBETOL (ribavirin USP) Capsules and Oral Solution.

This Medication Guide has been approved by the U.S. Food and Drug Administration.
Revised: August 2009

How do I prepare and inject the PegIntron REDIPEN dose?

The PegIntron 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 PegIntron REDIPEN system. If you have problems with the REDIPEN system or the PegIntron solution, you should contact your health care provider or pharmacist.

The following instructions explain how to prepare and inject yourself with the PegIntron REDIPEN system. This product can also be administered by a parent or caretaker as instructed by your healthcare provider. 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 PegIntron REDIPEN . Do not attempt to inject yourself unless you are sure you understand the procedure and requirements for self-injection.

How to Use the PegIntron® REDIPEN® Single-dose Delivery System.

Storing PegIntron

PegIntron REDIPEN should be stored in the refrigerator at 2°C to 8°C (36°F to 46°F); avoid exposure to heat. After mixing, the PegIntron solution should be used immediately but may be stored in the refrigerator up to 24 hours at 2°C to 8°C (36°F – 46°F). The solution contains no preservatives. DO NOT FREEZE.

Preparation

1. Find a clean, well-lit, non-slip flat working surface and assemble all of the supplies you will need for an injection. All of the supplies you will need are in the PegIntron REDIPEN package. The package contains:

- a PegIntron REDIPEN single-dose delivery system
- one disposable needle
- two alcohol swabs, and
- dosing tray (the dosing tray is the bottom half of the REDIPEN package).

2. Take the PegIntron REDIPEN out of the refrigerator and allow the medicine to come to room temperature. Before removing the REDIPEN from the carton, check the expiration date printed on the PegIntron REDIPEN carton to make sure that the expiration date has not passed. Do not use if the expiration date has passed.

3. After taking the PegIntron REDIPEN out of the carton, look in the window of the REDIPEN and make sure the PegIntron in the cartridge holder window is a white to off white tablet that is whole, or in pieces, or powdered.

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

1. Mix the Drug

Key points:

Before you mix the PegIntron, make sure it is at room temperature. It is important that you keep the PegIntron REDIPEN UPRIGHT (dosing button down) as shown in Figure 1.

a. Hold the PegIntron REDIPEN **UPRIGHT (Figure 1a)** in the dosing tray on a hard, flat, non-slip surface with the dosing button **down.** You may want to hold the REDIPEN using the grip.

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

Figure 1a

Figure 1b

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

d. Gently turn the PegIntron REDIPEN upside down twice (Figure 2). To avoid excessive foaming, DO NOT SHAKE.

Figure 2

e. Keep the PegIntron REDIPEN **UPRIGHT**, with the dosing button down. Then, look through the REDIPEN window to see that the mixed PegIntron solution is completely dissolved. The solution should be clear and colorless **before use**. Before attaching the needle, it is normal to see some small bubbles in the REDIPEN window, near the top of the solution. Do not use the solution if it is discolored, or not clear, or if particulates are present.

f. **Place the PegIntron REDIPEN back into the dosing tray provided in the packaging (Figure 3). The dosing button will be on the bottom.**

Figure 3

2. Attach the Needle

a. Wipe the rubber membrane of the PegIntron 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 PegIntron REDIPEN UPRIGHT in the dosing tray, FIRMLY push the injection needle straight into the REDIPEN rubber membrane, and screw it firmly in place, in a clockwise direction (Figure 4). Remember to leave the needle caps in place when you attach the needle to the REDIPEN. Pushing the needle through the rubber membrane "primes" the needle and allows the extra liquid and air in the pen to be removed.

Figure 4

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.

3. Dialing the Dose

a. **Remove the PegIntron REDIPEN from the dosing tray (Figure 5a).**
Holding the PegIntron 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 PegIntron dose.

Figure 5a

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

c. Carefully lay the PegIntron 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 PegIntron dose.

4. Injecting the PegIntron 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.

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

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

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

Figure 6a Figure 6b

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

Figure 6c

d. Hold the PegIntron REDIPEN with your fingers wrapped around the pen body barrel and your thumb on the dosing button (Figure 7).

- With your other hand, pinch the skin in the area you have cleaned for injection.
- Insert the needle into the pinched skin at an angle of 45° to 90°.
- Press the dosing button down slowly and firmly until you can't push it any further.
- Keep your thumb pressed down on the dosing button for an additional 5 seconds to ensure that you get the complete dose.
- Remove the needle from your skin.

Figure 7

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

How do I dispose of the REDIPEN?

Discard the REDIPEN and needle and any solution remaining in the REDIPEN in a Sharp's container or other puncture-resistant container like a metal coffee can. DO NOT use glass or clear plastic containers. Ask your health care provider how to dispose of a full container. Always keep the container out of reach of children.

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

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Rev 8/09

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PRINCIPAL DISPLAY PANEL - 50 mcg Redipen - Carton

NDC 0085-**1323**-01

Peginterferon alfa-**2b**

PegIntron®

REDIPEN®

SINGLE-DOSE DELIVERY SYSTEM

Powder for Injection and Diluent (Sterile Water for Injection USP)

50 mcg/0.5 mL

For Subcutaneous Use

ATTENTION PHARMACIST:

1. **Each patient is required to receive the enclosed Medication Guide.**

2. **Remove physician insert before dispensing this package to patients.**

Rx Only