

## Package leaflet: Information for the user

**Retacrit 1 000 IU/0.3 ml solution for injection in pre-filled syringe**  
**Retacrit 2 000 IU/0.6 ml solution for injection in pre-filled syringe**  
**Retacrit 3 000 IU/0.9 ml solution for injection in pre-filled syringe**  
**Retacrit 4 000 IU/0.4 ml solution for injection in pre-filled syringe**  
**Retacrit 5 000 IU/0.5 ml solution for injection in pre-filled syringe**  
**Retacrit 6 000 IU/0.6 ml solution for injection in pre-filled syringe**  
**Retacrit 8 000 IU/0.8 ml solution for injection in pre-filled syringe**  
**Retacrit 10 000 IU/1 ml solution for injection in pre-filled syringe**  
**Retacrit 20 000 IU/0.5 ml solution for injection in pre-filled syringe**  
**Retacrit 30 000 IU/0.75 ml solution for injection in pre-filled syringe**  
**Retacrit 40 000 IU/1 ml solution for injection in pre-filled syringe**

Epoetin zeta

**Read all of this leaflet carefully before you start using this medicine because it contains important information for you.**

- Keep this leaflet. You may need to read it again.
- If you have any further questions, ask your doctor, pharmacist or nurse.
- This medicine has been prescribed for you only. Do not pass it on to others. It may harm them, even if their signs of illness are the same as yours.
- If you get any side effects, talk to your doctor, pharmacist or nurse. This includes any possible side effects not listed in this leaflet. See section 4

### **What is in this leaflet:**

1. What Retacrit is and what it is used for
2. What you need to know before you use Retacrit
3. How to use Retacrit
4. Possible side effects
5. How to store Retacrit
6. Contents of the pack and other information

#### **1. What Retacrit is and what it is used for**

Retacrit contains a protein called epoetin zeta that stimulates the bone marrow to produce more red blood cells, which carry haemoglobin (a substance that transports oxygen). Epoetin zeta is a copy of the human protein erythropoietin and acts in the same way.

#### **Retacrit is used**

- in adults, children and adolescents on haemodialysis to treat symptomatic anaemia (low red blood cell counts) associated with chronic renal failure (kidney disease).
- in adult patients on peritoneal dialysis to treat symptomatic anaemia associated with chronic renal failure (kidney disease).
- in adult patients with renal insufficiency not yet on dialysis to treat severe anaemia associated with kidney disease accompanied by clinical symptoms.
- in adult patients receiving chemotherapy for solid tumours, malignant lymphoma (cancer of the lymphatic system) or multiple myeloma (bone marrow cancer) to treat anaemia and reduce the need for a blood transfusion, if the doctor decides there may be a high risk of needing a blood transfusion.
- in moderately anaemic patients who are going to donate blood prior to surgery, so that their own blood can be given to them during or after surgery (autologous pre-donation).
- in moderately anaemic adult patients about to undergo major orthopaedic (bone) surgery (for example hip or knee replacement therapy) to reduce the need for blood transfusions.

## **2. What you need to know before you use Retacrit**

### **Do not use Retacrit**

- if you are allergic to erythropoietins or any of the other ingredients of this medicine (listed in section 6)
- if you have developed Pure Red Cell Aplasia (PRCA; reduced or stopped production of red blood cells) following treatment with any erythropoietin
- if you have high blood pressure, which is not properly controlled with blood pressure-lowering medicines
- if you cannot be given medicines to thin blood for the prevention of blood clots
- if you are donating your own blood before surgery, and:
  - you had a heart attack or stroke in the month before your treatment
  - you have unstable angina pectoris (new or increasing chest pain)
  - you are at risk of blood clots in the veins (deep venous thrombosis) – for example, if you have had clots before.
- if you are due to have major orthopaedic surgery, such as hip or knee replacement, and:
  - you have severe heart disease or severe vascular disorder of the veins or arteries
  - you had a heart attack or stroke recently.

### **Warnings and precautions**

#### **Take special care with Retacrit**

Serious skin reactions including Stevens-Johnson syndrome (SJS) and toxic epidermal necrolysis (TEN) have been reported in association with epoetin treatment.

SJS/TEN can appear initially as reddish target-like spots or circular patches often with central blisters on the trunk. Also, ulcers of mouth, throat, nose, genitals and eyes (red and swollen eyes) can occur. These serious skin rashes are often preceded by fever and/or flu-like symptoms. The rashes may progress to widespread peeling of the skin and life-threatening complications.

If you develop a serious rash or another of these skin symptoms, stop taking Retacrit and contact your doctor or seek medical attention immediately.

Talk to your doctor before using Retacrit if you know you are suffering, or have suffered, from any of the following:

- epileptic seizures
- liver disease
- cancer
- anaemia from other causes
- heart disease (such as angina)
- disorders of blood circulation resulting in pins and needles or cold hands or feet or muscle cramps in the legs
- blood clots/blood clotting disorders
- kidney disease.

#### Special warnings

#### ***During treatment with Retacrit***

Your doctor will check that your haemoglobin does not exceed a certain level, as high haemoglobin concentrations could put you at risk of having a problem of the heart or the blood vessels and could increase risk of myocardial infarction, stroke and death.

Your doctor should try to keep your haemoglobin levels between 10 and 12 g/dL.

The haemoglobin values should not exceed a value of 12 g/dl

Your doctor will monitor your blood pressure regularly while you are using Retacrit. If you experience headaches, particularly sudden, stabbing migraine-like headaches or start to feel confused or have fits, tell your doctor or nursing staff immediately. These may be the warning signs of a sudden rise in blood pressure, which requires urgent treatment.

There may be a rise in the level of platelets (cells that help blood clotting) during treatment with this medicine. This should improve during the course of the treatment. It is recommended that the platelet count is regularly checked during the first 8 weeks of therapy.

Remember to tell your doctor that you are receiving Retacrit if you have to visit the hospital or family doctor for any treatment including a blood test, as Retacrit may affect the results.

**Take special care with other products that stimulate red blood cell production:**

Retacrit is one of a group of products that stimulate the production of red blood cells, like the human protein erythropoietin does. Your healthcare professional will always record the exact product you are using.

Kidney disease patients

Pure Red Cell Aplasia (PRCA) has been reported very rarely after months to years of subcutaneous treatment with other products containing erythropoietins and may not be ruled out with Retacrit. PRCA means the inability to produce enough red blood cells in the bone marrow. If this occurs it can result in severe anaemia, the symptoms of which are unusual tiredness, feeling dizzy or breathlessness. PRCA may be caused by the production of antibodies against the erythropoietin product and, consequently, to your own erythropoietin.

You should discuss this information with your doctor. If PRCA, a very rare condition, occurs, the Retacrit therapy will be stopped and your doctor will determine the best course of action to treat the anaemia. Although this complication is very rare, you should be aware that if you develop it, you would need to have regular blood transfusions, possibly lifelong, to treat your anaemia and the Retacrit therapy would have to be discontinued. Tell your doctor immediately if you suddenly feel very tired or dizzy or suffer from shortness of breath. Your doctor can decide whether Retacrit is not working properly for you and will end the treatment, if necessary.

Chronic renal failure patients on erythropoietin should have their haemoglobin (the part of a red blood cell that carries oxygen) levels measured on a regular basis until a stable level is achieved, and periodically thereafter to minimise the risk of an increase in blood pressure.

If you are a patient with chronic renal failure, and particularly if you do not respond properly to Retacrit, your doctor will check your dose of Retacrit because repeatedly increasing your dose of Retacrit if you are not responding to treatment may increase the risk of having a problem of the heart or the blood vessels and could increase risk of myocardial infarction, stroke and death.

Increases in blood potassium have happened in isolated cases. In chronic renal failure patients, correction for anaemia may lead to increased appetite, and potassium and protein intake. If you are receiving dialysis treatment when you begin treatment with Retacrit, your dialysis regimen may need to be adjusted to maintain urea, creatinine and potassium levels in the desired range. Your doctor will decide this.

Serum electrolytes (substances in your blood) should be monitored in chronic renal failure patients. If an elevated (or rising) serum potassium level is detected, your doctor may consider stopping the treatment with Retacrit until the level is back to normal.

An increase in the dose of a particular blood-thinning medicine (heparin) during haemodialysis is often needed during the course of therapy with Retacrit to minimize the risk of blood clotting. Blockage of the dialysis system is possible if heparinisation is not optimum.

### Cancer patients

Cancer patients are more likely to suffer from blood clots if receiving erythropoietin medicines, like Retacrit (see section 4). Therefore, you should discuss the benefits of Retacrit with your doctor, particularly if you are obese or have a history of blood clots/blood clotting disorders.

Cancer patients on erythropoietin should have haemoglobin (the part of a red blood cell that carries oxygen) levels measured on a regular basis until a stable level is achieved, and periodically thereafter.

If you are a cancer patient, you should be aware that Retacrit may act as a blood cell growth factor and in some circumstances may have a negative impact on your cancer. Depending on your individual situation a blood transfusion may be preferable. Please discuss this with your doctor.

### **Other medicines and Retacrit**

Tell your doctor or pharmacist if you are taking or have recently taken or might take any other medicines.

In particular, if you are taking a medicine containing the active substance ciclosporin to suppress your immune system after a kidney transplant, your doctor may order special blood tests to measure ciclosporin levels while you are taking Retacrit.

Iron supplements and other blood stimulants may increase the effectiveness of Retacrit. Your doctor will decide if it is right for you to take them.

### **Pregnancy, breast-feeding and fertility**

If you are pregnant or breast-feeding, think you may be pregnant or are planning to have a baby, ask your doctor or pharmacist for advice before taking this medicine.

If you are pregnant or breast-feeding, Retacrit should be used only if the potential benefit outweighs the potential risk to the foetus.

No data on the effects of epoetin zeta on fertility are available.

Ask your doctor for advice before taking any medicine.

### **Driving and using machines**

Retacrit has no or negligible effect on the ability to drive and use machines.

### **Retacrit contains phenylalanine**

This medicine contains phenylalanine and may be harmful for people with phenylketonuria (genetic enzyme deficiency that increases excretion of a chemical (phenylketone) in urine and may cause nervous system disorders).

### **Retacrit contains sodium**

This medicine contains less than 1 mmol sodium (23 mg) per dose, i.e. essentially 'sodium-free'.

## **3. How to use Retacrit**

Retacrit therapy is usually started under medical supervision. The injections can then be given by a doctor, trained nurse or other health care professional.

In case Retacrit is injected under the skin (subcutaneously) you can also inject the solution yourself once you have been shown how. Always use this medicine exactly as your doctor has told you. Check with your doctor if you are not sure.

## **Dose information**

The dose you receive is based on your body weight in kilograms.

Your doctor will conduct investigations, for example blood tests, to help decide if it is necessary for you to have Retacrit. He/she will work out the correct dose of Retacrit for you to use, how long the treatment should continue and by what route the medicine will be given. These decisions will be influenced by what is causing your anaemia. Your doctor will use the lowest effective dose to control the symptoms of your anaemia. If you do not respond adequately to Retacrit, your doctor will check your dose and will inform you if you need to change doses of Retacrit.

You may be given iron supplements before and during Retacrit treatment to make it more effective.

### Use in kidney disease patients

Retacrit should be administered either under the skin (subcutaneously) or as an injection either into a vein or a tube that goes into a vein.

### Use in adult patients receiving haemodialysis

Your doctor will maintain your haemoglobin concentration between 10 and 12 g/dl (6.2 - 7.5 mmol/l).

Retacrit may be given during the dialysis session or after you have received a dialysis session.

The recommended starting dose of Retacrit is 50 IU/kg (International Units per kilogram). This is given 3 times a week. If the solution is given into a vein, it should be injected over 1-5 minutes.

Depending on how your anaemia responds to treatment, the dose may be adjusted approximately every 4 weeks until your condition is controlled.

Your doctor will order regular blood tests to ensure that your medicine is continuing to work properly. When your condition has been brought under control, you will receive regular doses of Retacrit, 2 or 3 times a week. These doses may not be as high as those received initially.

### Use in children and adolescents up to 18 years receiving haemodialysis

In children the doctor will maintain the haemoglobin concentration between 9.5 and 11 g/dl

Retacrit should be given after the patient has received a dialysis session.

The dose for children and adolescents is based on body weight in kilograms. The recommended starting dose is 50 IU/kg. This is given three times a week, injected into a vein (over 1-5 minutes).

Depending on how the anaemia responds, the dose may be adjusted approximately every 4 weeks until the condition is controlled. Your doctor will order regular blood tests to see that this is being achieved.

### Use in adult patients receiving peritoneal dialysis

Your doctor will maintain your haemoglobin concentration between 10 and 12 g/dl.

The recommended starting dose is 50 IU/kg. This is given twice a week.

Depending on how your anaemia responds, the dose may be adjusted approximately every 4 weeks until your condition is controlled.

Your doctor will order regular blood tests to ensure that your medicine is continuing to work properly.

### Use in adult patients with kidney disease but not receiving dialysis

The recommended starting dose is 50 IU/kg. This is given 3 times a week.

The starting dose may be adjusted by your doctor until your condition is controlled. After your condition has been brought under control, you will receive regular doses of Retacrit (3 times a week, or, if you have your injections under the skin, it may also be given once weekly or once every 2 weeks). The maximum dosage should not exceed 150 IU/kg 3 times per week, 240 IU/kg (up to a maximum of 20 000 IU) once weekly or 480 IU/kg (up to a maximum of 40 000 IU) once every 2 weeks.

Your doctor will order regular blood tests to ensure that your medicine is continuing to work properly.

If you are on a more extended dosing interval (greater than once weekly), you may not maintain adequate haemoglobin levels and you may require an increase in Retacrit dose or frequency of administration.

### Use in adult patients receiving chemotherapy

Your doctor may initiate treatment with Retacrit if your haemoglobin level is 10 g/dl or less. After initiation of therapy, your doctor will maintain your haemoglobin level between 10 and 12 g/dl

The recommended starting dose is 150 IU/kg. This is given 3 times a week by injection under the skin. Alternatively, your doctor may recommend a starting dose of 450 IU/kg once a week. The starting dose may be adjusted by your doctor depending on how your anaemia responds to treatment; you will usually receive Retacrit until 1 month after the end of chemotherapy.

### Use in adult patients in an autologous predonation programme

The recommended starting dose is 600 IU/kg. This is given 2 times a week by injection into a vein. You will receive Retacrit during the 3 weeks before your surgery. You will also take iron supplements before and during Retacrit treatment to increase the effectiveness of Retacrit.

### Use in adult patients scheduled for major orthopaedic (bone) surgery

A dose of 600 IU/kg is given by injection under the skin once weekly for 3 weeks before surgery and on the day of surgery. In cases where there is a need to shorten the period before the operation is carried out, a dose of 300 IU/kg is given on each of the 10 days before surgery, on the day of surgery and for 4 days immediately afterwards. If blood tests in the period before the operation show your haemoglobin level to be too high, the treatment will be stopped.

It is also important that levels of iron in your blood are normal throughout Retacrit treatment. Where appropriate you will receive oral doses of iron each day, ideally starting before Retacrit treatment.

### **Information on administration**

The pre-filled syringe is ready for use. Each syringe should be used for a single injection only. Retacrit must not be shaken or mixed with any other liquid.

If Retacrit is injected under the skin, the amount injected in any one place should not exceed 1 ml. Good injection sites are the top of the thigh and around the tummy (abdomen) but away from the navel. Vary the site from day to day.

Always follow these instructions when using Retacrit:

1. Take one sealed syringe blister and leave it to stand for a few minutes until it reaches room temperature prior to using it. This usually takes between 15 and 30 minutes.
2. Remove the syringe from the blister and check that the solution is clear, colourless and practically

- free from visible particles.
3. Remove the protective cap from the injection needle and expel air from the syringe and injection needle by holding the syringe vertically and gently pressing the plunger upwards.
  4. Inject the solution as you have been shown by your doctor. You should check with your doctor or pharmacist if you are not sure.

Do not use Retacrit if:

- the blister sealing is broken or the blister is damaged in any way
- the liquid is coloured or you can see particles floating in it
- any liquid has leaked out of the pre-filled syringe or condensation is visible within the sealed blister
- you know or think it may have been accidentally frozen

#### Changing from injecting into a vein to injecting under the skin (from intravenous into subcutaneous injection)

Once your condition is controlled you will receive regular doses of Retacrit. Your doctor may decide that it is better for you to receive Retacrit by injection under the skin (subcutaneous) rather than into a vein (intravenous).

The dose should remain the same while the change is being made. Afterwards, your doctor may order blood tests to see if any adjustment in dose is required.

#### Injecting Retacrit under the skin yourself

When treatment starts, Retacrit is usually injected by medical or nursing staff. Later, your doctor may suggest that you or your caregiver learn how to inject it under the skin (*subcutaneously*) yourself.

- Do not attempt to inject yourself unless you have been trained to do so by your doctor or nurse.
- Always use Retacrit exactly as instructed by your doctor or nurse.
- Only use this medicine if it has been stored correctly (see section 5).
- Before use, leave the syringe to stand until it reaches room temperature. This usually takes between 15 and 30 minutes.

Only use one dose of Retacrit from each syringe.

If this medicine is injected under the skin (subcutaneously), the amount injected is not normally more than 1 ml in a single injection.

Retacrit is given alone and not mixed with other liquids for injection.

Do not shake the syringes. Prolonged vigorous shaking may damage the product. If the product has been shaken vigorously, don't use it.

#### How to inject yourself using a pre-filled syringe

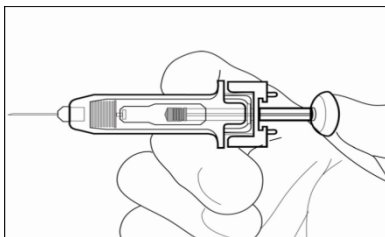
- Take a syringe out of the refrigerator. The liquid needs to come to room temperature. Do not remove the syringe's needle cover while allowing it to reach room temperature.
- Check the syringe, to make sure it is the right dose, has not passed its expiry date, is not damaged, and the liquid is clear and not frozen.
- Choose an injection site. Good sites are the top of the thigh and around the tummy (abdomen) but away from the navel. Vary the site from day to day.
- Wash your hands. Use an antiseptic swab on the injection site, to disinfect it.
- Hold the pre-filled syringe by the body of the syringe with the covered needle pointing upward.
- Do not hold by the plunger head, plunger or needle cover.
- Do not pull back on the plunger at any time.

- Do not remove the needle cover from the pre-filled syringe until you are ready to inject your medicine.
- Take the cover off the syringe by holding the barrel and pulling the cover off carefully without twisting it. Don't push the plunger, touch the needle or shake the syringe.
- Pinch a fold of skin between your thumb and index finger. Don't squeeze it.
- Push the needle in fully. Your doctor or nurse may have shown you how to do this.
- Push the plunger with your thumb as far as it will go to inject the entire amount of liquid. Push it slowly and evenly, keeping the skin fold pinched.
- When the plunger is pushed as far as it will go, take out the needle and let go of the skin.
- When the needle is pulled out of your skin, there may be a little bleeding at the injection site. This is normal. You can press an antiseptic swab over the injection site for a few seconds after the injection.
- Dispose of your used syringe in a sharps container. Do not try to replace the needle cover.
- Never put used syringes into your normal household waste bin.

#### How to inject yourself using a pre-filled syringe

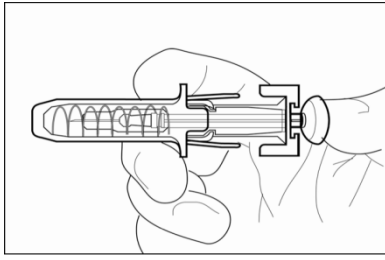
Your pre-filled syringe has a passive needle guard device attached to it in order to protect you from needle stick injury.

- Take a syringe out of the refrigerator. The liquid needs to come to room temperature. Do not remove the syringe's needle cover while allowing it to reach room temperature.
- Check the syringe, to make sure it is the right dose, has not passed its expiry date, is not damaged, and the liquid is clear and not frozen.
- Choose an injection site. Good sites are the top of the thigh and around the tummy (abdomen) but away from the navel. Vary the site from day to day.
- Wash your hands. Use an antiseptic swab on the injection site, to disinfect it.
- Hold the pre-filled syringe by the body of the syringe with the covered needle pointing upward.
- Do not hold by the plunger head, plunger or needle cover.
- Do not pull back on the plunger at any time.
- Do not remove the needle cover from the pre-filled syringe until you are ready to inject your medicine.
- Take the cover off the syringe by holding the barrel and pulling the cover off carefully without twisting it. Don't push the plunger, touch the needle or shake the syringe.
- Pinch a fold of skin between your thumb and index finger. Don't squeeze it.
- Push the needle in fully. Your doctor or nurse may have shown you how to do this.
- Depress the plunger while grasping the finger flange until the entire dose has been given. The needle guard will NOT activate unless the ENTIRE dose has been given.



- When the plunger is pushed as far as it will go, take out the needle and let go of the skin.
- Let go of the plunger and allow the syringe to move up until the entire needle is guarded and locks into place.





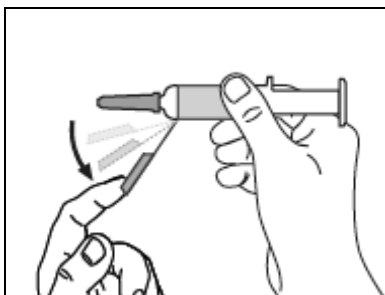
- When the needle is pulled out of your skin, there may be a little bleeding at the injection site. This is normal. You can press an antiseptic swab over the injection site for a few seconds after the injection.
- Dispose of your used syringe in a sharps container. Do not try to replace the needle cover.
- Never put used syringes into your normal household waste bin.

#### How to inject yourself using a pre-filled syringe

Your syringe has a needle-trap attached to it which is designed to specifically help prevent accidental needle stick injuries following the proper administration of injectable medicines. It consists of a plastic needle “catcher” which is firmly attached to the syringe label. Together, these two components comprise the needle-trap (safety) feature.

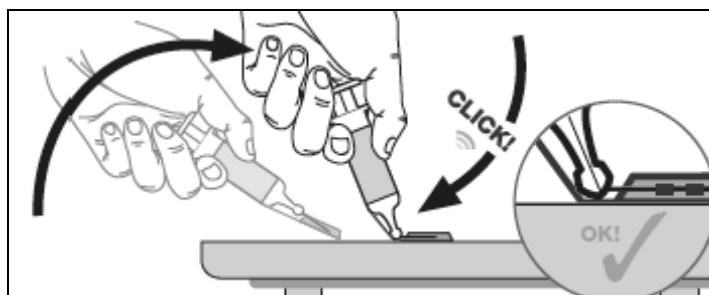
The needle-trap requires specific actions by the user to “activate” it, which will render the needle harmless after the injection is administered.

- Take a syringe out of the refrigerator. The liquid needs to come to room temperature. Do not remove the syringe’s needle cover while allowing it to reach room temperature.
- Check the syringe, to make sure it is the right dose, has not passed its expiry date, is not damaged, and the liquid is clear and not frozen.
- Choose an injection site. Good sites are the top of the thigh and around the tummy (abdomen) but away from the navel. Vary the site from day to day.
- Wash your hands. Use an antiseptic swab on the injection site, to disinfect it.
- Hold the pre-filled syringe by the body of the syringe with the covered needle pointing upward.
- Do not hold by the plunger head, plunger or needle cover.
- Do not pull back on the plunger at any time.
- Grasp the tip of the plastic needle catcher and bend it away from needle cover.



- Do not remove the needle cover from the pre-filled syringe until you are ready to inject your medicine.
- Take the cover off the syringe by holding the barrel and pulling the cover off carefully without twisting it. Don’t push the plunger, touch the needle or shake the syringe.
- Pinch a fold of skin between your thumb and index finger. Don’t squeeze it.
- Push the needle in fully. Your doctor or nurse may have shown you how to do this.
- Push the plunger with your thumb as far as it will go to inject the entire amount of liquid. Push it slowly and evenly, keeping the skin fold pinched.
- When the plunger is pushed as far as it will go, take out the needle and let go of the skin.
- Place the plastic catcher of the needle-trap against a hard, stable surface and with one hand pivot the syringe barrel upward against the needle forcing the needle into the catcher where it locks in

place (an audible 'click' is heard when the needle is locked in the catcher). Continue bending the needle until the syringe exceeds a 45 degree angle with the flat surface to render it permanently unusable.



- When the needle is pulled out of your skin, there may be a little bleeding at the injection site. This is normal. You can press an antiseptic swab over the injection site for a few seconds after the injection.
- Dispose of your used syringe in a sharps container. Do not try to replace the needle cover.
- Never put used syringes into your normal household waste bin.

#### **If you use more Retacrit than you should**

Retacrit has a wide safety margin and side effects due to an overdose of using Retacrit are unlikely. You should inform the doctor or nurse immediately if you think too much Retacrit has been injected.

#### **If you forget to use Retacrit**

Do not use a double dose to make up for a forgotten dose.

#### **If you stop using Retacrit**

Do not stop the treatment without consultation with your doctor.

If you have any further questions on the use of this medicine, ask your doctor.

### **4. Possible side effects**

Serious skin rashes including Stevens-Johnson syndrome and toxic epidermal necrolysis have been reported in association with epoetin treatment. These can appear as reddish target-like macules or circular patches often with central blisters on the trunk, skin peeling, ulcers of mouth, throat, nose, genitals and eyes can be preceded by fever and flu-like symptoms and contact your doctor or seek medical attention immediately. See also section 2.

Like all medicines, this medicine can cause side effects, although not everybody gets them.

If you experience headaches, particularly sudden, stabbing migraine-like headaches or feel confused or have fits, tell your doctor immediately. These may be the warning signs of a sudden rise in blood pressure which requires urgent treatment.

Tell your doctor or nurse immediately if you notice any of the effects in this list.

#### Very common side effects

These may affect more than 1 in 10 people using Retacrit.

- Flu-like symptoms, headache, joint pain, feeling of weakness, tiredness and dizziness.
- Respiratory tract congestion, such as stuffy nose and sore throat, has been reported in patients with kidney disease not yet on dialysis.

#### Common side effects

These may affect up to 1 in 10 people using Retacrit.

- Increased blood pressure. Raised blood pressure may require treatment with drugs (or adjustment to any medicines you already take for high blood pressure). Your doctor may monitor your blood pressure regularly while you are using Retacrit, particularly at the start of therapy.
- Chest pain, breathlessness, painful swelling in the leg which may be symptoms of blood clots (pulmonary embolism, deep vein thrombosis).
- Stroke (insufficient blood supply to the brain, which may lead to inability to move one or more limbs on one side of the body, inability to understand or formulate speech, or an inability to see one side of the visual field).
- Skin rash and swelling around the eyes (oedema), which may result from an allergic reaction.
- Blood clot in an artificial kidney.

#### Uncommon side effects

These may affect up to 1 in 100 people using Retacrit.

- Cerebral haemorrhages.

#### Rare side effects

These may affect up to 1 in 1 000 people using Retacrit.

- Hypersensitivity reactions.

#### Very rare side effects

These may affect up to 1 in 10 000 people using Retacrit.

- Increased levels of small blood cells (called platelets), which are normally involved in the formation of a blood clot may occur. Your doctor will check on this.

#### Side effects with unknown frequency

The frequency of these side effects cannot be estimated from the available data.

- Swelling, mainly in the region of the eyelids and the lips (Quincke's oedema) and shock-like allergic reactions with symptoms of tingling, reddening, itching, hot flush and accelerated pulse.
- Vascular and thrombotic events (blood clotting) in blood vessels such as disturbance of blood perfusion in the brain, retinal thrombosis, disturbed blood perfusion of the heart, heart attack, arterial thrombosis, dilatation of the wall of a blood vessel (aneurysm).
- Pure red cell aplasia (PRCA). PRCA has been reported in patients after months to years of subcutaneous (injection under the skin) erythropoietin treatment. PRCA means the inability to produce enough red blood cells in the bone (see section "Warnings and precautions").
- Itching (pruritus).

#### Other side effects:

##### *Kidney patients*

- raised blood pressure which may require treatment with medicinal products or adjustment of the dosage of medicinal products you already take for high blood pressure. Your doctor may monitor your blood pressure regularly while you are using Retacrit, particularly at the start of therapy.
- Occlusion in the connection between artery and vein (shunt thrombosis) may occur especially if you have low blood pressure or if your arteriovenous fistula has complications. Your doctor may check your shunt and prescribe a medicinal product to prevent thrombosis.

##### *Cancer patients*

- blood clotting (thrombotic vascular events) (see section "Warnings and precautions").
- increase of blood pressure. Therefore your haemoglobin-levels and your blood pressure should be controlled.

If you get any side effects talk to your doctor, pharmacist or nurse. This includes any possible side effects not listed in this leaflet.

### **Reporting of side effects**

If you get any side effects, talk to your doctor. This includes any possible side effects not listed in this leaflet. You can also report side effects directly via

#### **Ireland**

HPRA Pharmacovigilance  
Earlsfort Terrace  
IRL - Dublin 2  
Tel: +353 1 6764971  
Fax: +353 1 6762517  
Website: [www.hpra.ie](http://www.hpra.ie)  
e-mail: [medsafety@hpra.ie](mailto:medsafety@hpra.ie)

#### **Malta**

ADR Reporting  
Website: [www.medicinesauthority.gov.mt/adrportal](http://www.medicinesauthority.gov.mt/adrportal)

#### **United Kingdom**

Yellow Card Scheme  
Website: [www.mhra.gov.uk/yellowcard](http://www.mhra.gov.uk/yellowcard)

By reporting side effects you can help provide more information on the safety of this medicine.

## **5. How to store Retacrit**

Keep this medicine out of the sight and reach of children.

Do not use this medicine after the expiry date which is stated on the label and the carton. The expiry date refers to the last day of that month.

Store in a refrigerator (2°C - 8°C). Do not freeze.

Keep the pre-filled syringe in the outer carton in order to protect from light.

The syringe can be removed from the refrigerator and left at room temperature for a single period of maximum 3 days (but not above 25°C).

Do not throw away any medicines via wastewater or household waste. Ask your pharmacist about how to throw away medicines that you no longer use. These measures will help to protect the environment.

## **6. Content of the pack and other information**

### **What Retacrit contains**

- The active substance is epoetin zeta (produced by recombinant DNA technology in Chinese Hamster Ovary (CHO) cell line).

#### *Retacrit 1 000 IU/0.3 ml solution for injection in pre-filled syringe*

1 pre-filled syringe with 0.3 ml solution for injection contains 1 000 international units (IU) epoetin zeta (recombinant human erythropoietin). The solution contains 3 333 IU Epoetin zeta per ml.

Retacrit 2 000 IU/0.6 ml solution for injection in pre-filled syringe

1 pre-filled syringe with 0.6 ml solution for injection contains 2 000 international units (IU) epoetin zeta (recombinant human erythropoietin). The solution contains 3 333 IU Epoetin zeta per ml.

Retacrit 3 000 IU/0.9 ml solution for injection in pre-filled syringe

1 pre-filled syringe with 0.9 ml solution for injection contains 3 000 international units (IU) epoetin zeta (recombinant human erythropoietin). The solution contains 3 333 IU Epoetin zeta per ml.

Retacrit 4 000 IU/0.4 ml solution for injection in pre-filled syringe

1 pre-filled syringe with 0.4 ml solution for injection contains 4 000 international units (IU) epoetin zeta (recombinant human erythropoietin). The solution contains 10 000 IU Epoetin zeta per ml.

Retacrit 5 000 IU/0.5 ml solution for injection in pre-filled syringe

1 pre-filled syringe with 0.5 ml solution for injection contains 5 000 international units (IU) epoetin zeta (recombinant human erythropoietin). The solution contains 10 000 IU Epoetin zeta per ml.

Retacrit 6 000 IU/0.6 ml solution for injection in pre-filled syringe

1 pre-filled syringe with 0.6 ml solution for injection contains 6 000 international units (IU) epoetin zeta (recombinant human erythropoietin). The solution contains 10 000 IU Epoetin zeta per ml.

Retacrit 8 000 IU/0.8 ml solution for injection in pre-filled syringe

1 pre-filled syringe with 0.8 ml solution for injection contains 8 000 international units (IU) epoetin zeta (recombinant human erythropoietin). The solution contains 10 000 IU Epoetin zeta per ml.

Retacrit 10 000 IU/1 ml solution for injection in pre-filled syringe

1 pre-filled syringe with 1 ml solution for injection contains 10 000 international units (IU) epoetin zeta (recombinant human erythropoietin). The solution contains 10 000 IU Epoetin zeta per ml.

Retacrit 20 000 IU/0.5 ml solution for injection in pre-filled syringe

1 pre-filled syringe with 0.5 ml solution for injection contains 20 000 international units (IU) epoetin zeta (recombinant human erythropoietin). The solution contains 40 000 IU Epoetin zeta per ml.

Retacrit 30 000 IU/0.75 ml solution for injection in pre-filled syringe

1 pre-filled syringe with 0.75 ml solution for injection contains 30 000 international units (IU) epoetin zeta (recombinant human erythropoietin). The solution contains 40 000 IU Epoetin zeta per ml.

Retacrit 40 000 IU/1 ml solution for injection in pre-filled syringe

1 pre-filled syringe with 1 ml solution for injection contains 40 000 international units (IU) epoetin zeta (recombinant human erythropoietin). The solution contains 40 000 IU Epoetin zeta per ml.

The other ingredients are disodium phosphate dihydrate, sodium dihydrogen phosphate dihydrate, sodium chloride, calcium chloride dihydrate, polysorbate 20, glycine, leucine, isoleucine, threonine, glutamic acid, phenylalanine, water for injections, sodium hydroxide (pH adjuster), hydrochloric acid (pH adjuster).

### **What Retacrit looks like and contents of the pack**

Retacrit is presented as a clear and colourless solution for injection in a pre-filled syringe with a fixed injection needle.

The prefilled syringes contain between 0.3 and 1 ml solution, depending on the content of epoetin zeta (see “What Retacrit contains”).

One pack contains 1, 4 or 6 pre-filled syringes with or without a needle guard or needle-trap device. Multipacks contain 4 (4 x 1) or 6 (6 x 1) pre-filled syringes.

### **Marketing Authorisation Holder**

Hospira UK Limited  
Horizon  
Honey Lane  
Hurley  
Maidenhead  
SL6 6RJ  
UK

### **Manufacturer**

STADA Arzneimittel AG  
Stadastrasse 2-18  
D-61118 Bad Vilbel  
Germany

HOSPIRA Enterprises B.V.  
Randstad 22-11  
1316 BN Almere  
The Netherlands

Hospira Zagreb d.o.o.  
Prudnička cesta 60  
10291 Prigorje Brdovečko  
Croatia

For any information about this medicine, please contact the local representative of the Marketing Authorisation Holder:

### **Malta**

Hospira UK Limited  
Tel: + 44 (0) 1628 515500

### **Ireland**

Hospital Ireland Sales Limited

Tel: 1800 633 363 (toll free)

**United Kingdom**

Hospira UK Limited

Tel: + 44 (0) 1628 515500

**This leaflet was last revised in September 2017 Ref: bRT 3\_0**

Detailed information on this medicine is available on the European Medicines Agency web site:  
<http://www.ema.europa.eu>.





