

PACKAGE LEAFLET:
INFORMATION FOR THE USER

Paricalcitol Fresenius
5 micrograms/ml

Paricalcitol Fresenius
2 micrograms/ml

solution for injection

Paricalcitol

Read all of this leaflet carefully before you start using this medicine.

- Keep this leaflet. You may need to read it again.

- If you have any further questions, ask your doctor or pharmacist.

- This medicine has been prescribed for you. Do not pass it on to others. It may harm them, even if their symptoms are the same as yours.

- If any of the side effects get serious, or if you notice any side effects not listed in this leaflet, please tell your doctor or pharmacist.

In this leaflet:

1. What Paricalcitol Fresenius is and what it is used for
2. Before you use Paricalcitol Fresenius
3. How to use Paricalcitol Fresenius
4. Possible side effects
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1. WHAT PARICALCITOL FRESENIUS IS
AND WHAT IT IS USED FOR

The active substance in Paricalcitol Fresenius is paricalcitol. Paricalcitol Fresenius is a synthetic (man made) replacement for vitamin D. In healthy people, the active form of vitamin D is naturally produced by the kidneys but in kidney failure, the production of the active vitamin is reduced, which can cause low levels of calcium and high levels of parathyroid hormone in the blood. Paricalcitol Fresenius is used to replace the body's naturally produced active form of vitamin D.

Paricalcitol Fresenius is used for the prevention and treatment of secondary hyperparathyroidism (high levels of parathyroid hormone which can cause bone problems) in patients undergoing haemodialysis as a result of kidney failure. If you have secondary hyperparathyroidism you may find that:

- You feel weak or tired
- You have a decreased appetite
- You feel nauseous or you vomit
- You have bone or muscle pain
- You need to go to the toilet frequently

2. BEFORE YOU USE
PARICALCITOL FRESENIUS

Do not use Paricalcitol Fresenius

- if you are allergic (hypersensitive) to paricalcitol or any of the other ingredients of Paricalcitol Fresenius (see section 6).
- if you have very high levels of calcium or vitamin D in your blood. Your doctor will monitor your blood levels and be able to tell you if these conditions apply to you.

Take special care with
Paricalcitol Fresenius

- Before the treatment begins, it is important to limit the amount of phosphorus in your diet. Examples of foods high in phosphorous include tea, soda, beer, cheese, milk, cream, fish, chicken or beef liver, beans, peas, cereals, nuts, and grains.
- Phosphate-binding medicines, which keep phosphate from being absorbed from your food, may be needed to control phosphorus levels.
- If you are taking calcium-based phosphate binders, the doctor may need to adjust your dose.
- Your doctor will need to do blood tests to monitor your treatment.

Taking other medicines

Please tell your doctor if you are taking or have recently taken any other medicines, including medicines obtained without a prescription.

Some medicines can affect the action of Paricalcitol Fresenius or make side effects more likely. It is particularly important to tell

your doctor if you are taking any of the following medicines:

- to treat fungal infections such as candida or thrush, (i.e., ketoconazole)
- to treat heart or blood pressure (e.g. digoxin and diuretics or water pills).
- that contain magnesium (e.g. some types of indigestion medicines called antacids, such as magnesium trisillicate).
- that contain aluminium (e.g. phosphate-binders, such as aluminium hydroxide).

Ask your doctor, nurse, or pharmacist for advice before taking any medicine.

Using Paricalcitol Fresenius with food
and drink

Paricalcitol Fresenius can be used before, after or during a meal. It is very important to follow the diet recommended by your doctor to get the most benefit from the treatment and to prevent serious side effects. Do not take other supplements/vitamins (e.g., calcium, vitamin D) unless your doctor tells you to do so.

Pregnancy and breast-feeding

If you are pregnant or thinking of becoming pregnant, tell your doctor before taking Paricalcitol Fresenius.

There is no adequate data on the use of Paricalcitol Fresenius in pregnant women.

Potential risk in human use is not known, therefore Paricalcitol Fresenius should not be used unless clearly necessary.

It is not known if paricalcitol passes into human breast milk. Tell your doctor if you are breast-feeding.

Your doctor will decide if this treatment is necessary for you.

Driving and using machines

Paricalcitol Fresenius may make you feel dizzy or confused; your ability to drive or operate machinery may be affected. Do not drive or use machines till you know how this medicine affects you.

Important information about some of the ingredients of Paricalcitol Fresenius

This medicinal product contains 11 vol % ethanol (alcohol), equivalent to 2 ml beer, 1 ml wine per dose.

Harmful for those suffering from alcoholism.

To be taken into account in pregnant or breast-feeding women, children and high-risk groups such as patients with liver disease, or epilepsy.

3. HOW TO USE
PARICALCITOL FRESENIUS

The usual dose is calculated by your doctor. The dosage of Paricalcitol Fresenius varies for each patient.

Your doctor will use the results of your laboratory tests to decide on the correct dose for you. Once Paricalcitol Fresenius is started, the dose may need to be adjusted, depending on how you respond to treatment.

Method of Administration

Paricalcitol Fresenius will be administered intravenously (into the vein via a needle) by your doctor whilst you are having haemodialysis. Paricalcitol Fresenius will not be given to you more than once every other day.

Use of Paricalcitol Fresenius in children

There is no information on using Paricalcitol Fresenius in children under 5 years of age, and there is limited experience in children over 5 years of age.

Your doctor will decide if this treatment is necessary.

If you use more Paricalcitol Fresenius
than you should

Too much Paricalcitol Fresenius may lead to high levels of calcium in the blood that may require treatment. Symptoms which can appear soon after receiving too much Paricalcitol Fresenius include:

- feeling weak and/or drowsy
- headache
- feeling sick or being sick
- dry mouth, constipation
- pain in muscles or bones
- unusual taste in the mouth

Symptoms which can develop over a longer period of receiving too much Paricalcitol Fresenius include:

- loss of appetite
- drowsiness
- weight loss
- sore eyes
- runny nose
- itchy skin
- feeling hot and feverish
- loss of sex drive
- severe abdominal pain
- kidney stones
- Your blood pressure may be affected and awareness of your own heartbeat (palpitations) can occur.

Paricalcitol Fresenius contains Propylene glycol as an ingredient. Cases of poisonous effects related to the high doses of Propylene glycol have only rarely been reported and would not be expected when being given to kidney patients on a kidney machine because Propylene glycol is removed from the blood during dialysis.

However, your doctor will be checking your blood levels and if you experience any of the above seek medical advice immediately.

The following information is intended for healthcare professionals only:

Paricalcitol Fresenius
2 and 5 micrograms/ml
Solution for injection

Preparation of solution for injection

Paricalcitol Fresenius 2 and 5 micrograms/ml solution for injection is intended for single use only.

As with all drugs administered through injection, the diluted solution should be inspected for particles and discoloration, prior to administration.

Compatibility

Propylene glycol interacts with heparin and neutralises its effect. Paricalcitol Fresenius solution for injection contains propylene glycol as an excipient and should be administered through a different injection port than heparin. This medicinal product must not be mixed with other medicinal products.

Storage and shelf life

Parenteral medicinal products should be inspected visually for particulate matter and discoloration prior to administration. The solution is clear and colourless. This medicinal product does not require any special storage conditions. This medicinal product has a shelf life of 2 years.

Posology and Method of Administration

Paricalcitol Fresenius solution for injection is administered via haemodialysis access.

Adults

1) Initial Dose should be calculated based on baseline parathyroid hormone (PTH) levels:
The initial dose of paricalcitol is based on the following formula:
Initial dose (micrograms)
=
$$\frac{\text{baseline intact PTH level in pmol/L}}{8}$$
OR
=
$$\frac{\text{baseline intact PTH level in pg/mL}}{80}$$

4. POSSIBLE SIDE EFFECTS

Like all medicines, Paricalcitol Fresenius can cause side effects, although not everybody gets them. Various allergic reactions have been seen with Paricalcitol Fresenius.

Important: Tell your doctor or nurse immediately if you notice any of the following side effects:

- Shortness of breath
- Difficulty breathing or swallowing
- Wheezing
- A rash, itchy skin, or hives
- Swelling of the face, lips, mouth, tongue or throat.

Tell your doctor or nurse if you notice any of the following side effects:

Common (affects 1 to 10 users in 100):

- headache
- unusual taste in the mouth
- itchy skin
- low levels of parathyroid hormone
- high levels of calcium (feeling sick or being sick, constipated or confused); phosphorous in the blood (probably no symptoms but it can make bones more likely to break)

Uncommon (affects 1 to 10 users in 1,000):

- allergic reactions (such as shortness of breath, wheezing, rash, itching or swelling of the face and lips); itchy blisters
- blood infection; decreased number of red cells (anaemia – feeling weak, shortness of breath, looking pale); decreased number of white cells (more likely to get infections); swollen glands in the neck, armpit and/or groin; increased bleeding time (blood will not clot so quickly)
- heart attack; stroke; chest pain; irregular/fast heartbeat; low blood pressure; high blood pressure;
- coma (a deep state of unconsciousness during which the person cannot respond to the environment)
- unusual tiredness, weakness; dizziness; fainting
- injection site pain
- pneumonia (lung infection); fluid on the lungs; asthma (wheezing, cough, difficulty breathing);
- sore throat; cold; fever; flu-like symptoms; pink eye (itchy/crusty eyelids); increased pressure in the eye; earache; nose bleeds
- nervous twitches; confusion, which is sometimes severe (delirium); agitation (feeling jittery, anxious); nervousness; personality disorders (not feeling like yourself);
- tingling or numbness; decreased touch sensation; problems sleeping; sweating at night; muscular spasms in arms and legs, even during sleep;

- dry mouth; thirsty; nausea; difficulty swallowing; vomiting; loss of appetite; weight loss; heart burn; diarrhoea and stomach ache; constipation: bleeding from the rectum;
- difficulty having an erection; breast cancer; infections in the vagina
- breast pain; back pain; joint/muscular pain; feeling of heaviness caused by general swelling or localised swelling of the ankles, feet and legs (oedema); abnormal way of walking;
- hair loss; excessive hair growth,
- increase of a liver enzyme; high levels of parathyroid hormones; high levels of potassium in the blood; low levels of calcium in the blood.

Unknown Frequency:

- swelling of the face, lips, mouth, tongue or throat which may cause difficulty in swallowing or breathing; itchy skin (hives). Stomach bleeding. Get medical help immediately. You may not be able to tell if you have some of the side effects listed above unless you are told so by your doctor.

If any of the side effects gets serious, or if you notice any side effects not listed in this leaflet, please tell your doctor.

5. HOW TO STORE PARICALCITOL FRESENIUS

Keep Paricalcitol Fresenius out of the reach and sight of children.

Do not use Paricalcitol Fresenius after the expiry date which is stated on the carton and the ampoule or vial after EXP. The expiry date refers to the last day of that month.

Paricalcitol Fresenius should be clear and colorless.

Do not use if the solution is discolored or has particles.

This medicinal product does not require any special storage conditions.

Medicines should not be disposed of via wastewater or household waste. Ask your pharmacist how to dispose of medicines no longer required.

These measures will help to protect the environment.

6. FURTHER INFORMATION

What Paricalcitol Fresenius contains

- The active substance is paricalcitol. Each ml of solution contains 5 micrograms of paricalcitol. Each ml of solution contains 2 micrograms of paricalcitol.
- The other ingredients are: ethanol, propylene glycol and water for injection.

What Paricalcitol Fresenius looks like and contents of the pack

Paricalcitol Fresenius solution for injection is a clear and colourless solution, free from visible particles.

Paricalcitol Fresenius 5 micrograms/ml solution for injection

Available in:

1 ml ampoule containing 5 micrograms/ml

2 ml ampoule containing a total of 10 micrograms

or

1 ml vial containing 5 micrograms/ml

2 ml vials containing a total of 10 micrograms

Paricalcitol Fresenius 2 micrograms/ml solution for injection

Available in 1ml ampoules containing 2 micrograms/ml

or

Available in 1ml vial containing 2 micrograms/ml

Marketing Authorization Holder and Manufacturer

Marketing Authorisation Holder:
Fresenius Medical Care Nephrologica Deutschland GmbH
Else-Kröner-Straße 1
61352 Bad Homburg v.d.H., Germany

Manufacturer:
Fresenius Medical Care Deutschland GmbH
Else-Kröner-Straße 1
61352 Bad Homburg v.d.H., Germany

This medicinal product is authorized in the Member States of the EEA under the following names:

Portugal	Paricalcitol Fresenius
Austria	Paricalcitol Fresenius 2 Mikrogramm/ml Injektionslösung
	Paricalcitol Fresenius 5 Mikrogramm/ml Injektionslösung
Bulgaria	Paricalcitol Fresenius
Cyprus	Paricalcitol Fresenius
Czech	Paricalcitol Fresenius 2 µg/ml
	Paricalcitol Fresenius 5 µg/ml
Denmark	Paricalcitol Fresenius
Spain	Paricalcitol Fresenius
Finland	Paricalcitol Fresenius
Greece	Paricalcitol Fresenius
Hungary	Paricalcitol Fresenius
Ireland	Paricalcitol Fresenius 2 micrograms/ml solution for injection
	Paricalcitol Fresenius 5 micrograms/ml solution for injection
Norway	Paricalcitol Fresenius
Poland	Paricalcitol Fresenius
Romania	Paricalcitol Fresenius
Slovakia	Paricalcitol Fresenius
Slovenia	Paricalcitol Fresenius

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and administered as an intravenous (IV) bolus dose no more frequently then every other day at any time during dialysis. The maximum dose safely administered in clinical studies was as high as 40 micrograms.

2) Titration Dose:
The currently accepted target range for PTH levels in end-stage renal failure subjects undergoing dialysis is no more than 1.5 to 3 times the non-uremic upper limit of normal, 15.9 to 31.8 pmol/l (150-300 pg/ml), for intact PTH.

Close monitoring and individual dose titration are necessary to reach appropriate physiological endpoints. If hypercalcaemia or a persistently elevated corrected Ca x P product greater than 5.2 mmol²/l² (65 mg²/dl²) is noted, the dosage should be reduced or interrupted until these parameters are normalised. Then, paricalcitol administration should be reinitiated at a lower dose. Doses may need to be decreased as the PTH levels decrease in response to therapy.

The following table is a suggested approach for dose titration:
Suggested Dosing Guidelines (Dose adjustments at 2 to 4 week intervals)

iPTH Level Relative to Baseline	Paricalcitol Dose Adjustment
Same or increased	Increase by 2 to 4 micrograms
Decreased by < 30%	
Decreased by > 30%, < 60%	Maintain
Decreased by > 60%	Decrease by 2 to 4 micrograms
IPTH < 15.9 pmol/L (150 pg/mL)	