

## Package leaflet: Information for the patient

**Envarsus 0.75 mg prolonged-release tablets**

**Envarsus 1 mg prolonged-release tablets**

**Envarsus 4 mg prolonged-release tablets**

tacrolimus

**Read all of this leaflet carefully before you start taking 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 or pharmacist.
- 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 or pharmacist. This includes any possible side effects not listed in this leaflet. See section 4.

### What is in this leaflet

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

#### 1. What Envarsus is and what it is used for

Envarsus contains the active substance tacrolimus. It is an immunosuppressant. Following your kidney or liver transplant, your body's immune system will try to reject the new organ.

Envarsus is used to control your body's immune response, enabling your body to accept the transplanted organ.

You may also be given Envarsus for an ongoing rejection of your transplanted liver, kidney, heart or other organ when any previous treatment you were taking was unable to control this immune response after your transplantation.

Envarsus is used in adults.

#### 2. What you need to know before you take Envarsus

##### Do not take Envarsus:

- if you are allergic to tacrolimus or any of the other ingredients of this medicine (listed in section 6).
- if you are allergic to sirolimus or to any macrolide-antibiotic (e.g. erythromycin, clarithromycin, josamycin).

##### Warnings and precautions

Envarsus contains the active substance tacrolimus presented in a prolonged release formulation. Envarsus is taken once daily and is **not** interchangeable with other existing medicines containing tacrolimus (immediate release or prolonged release) on an equal dose by dose basis.

Talk to your doctor before taking Envarsus:

- if you have, or have had, liver problems.
- if you have diarrhoea for more than one day.
- if you are taking any medicines mentioned below under “Other medicines and Envarsus”.
- if you have an alteration of the electrical activity of your heart called “QT prolongation”.

Tell your doctor immediately if during treatment you suffer from:

- problems with your vision such as blurred vision, changes in colour vision, difficulty in seeing detail or if your field of vision becomes restricted.
- if you feel strong abdominal pain accompanied or not with other symptoms, such as chills, fever, nausea or vomiting
- an infection, leading to problems with your kidney or neurological symptoms
- headache, altered mental status, seizures and visual disturbances
- weakness, change in skin or eye colour, easy bruising, infection, cough, anaemia

Your doctor may need to adjust your dose of Envarsus or will decide to stop treatment with tacrolimus.

You should keep in regular contact with your doctor. From time to time, your doctor may need to do blood, urine, heart, or eye tests, to set the right dose of Envarsus.

You should limit your exposure to the sun and UV (ultraviolet) light whilst taking Envarsus. This is because immunosuppressants could increase the risk of skin cancer. Wear appropriate protective clothing and use a sunscreen with a high sun protection factor.

### **Children and adolescents**

The use of Envarsus is not recommended in children and adolescents under 18 years.

### **Other medicines and Envarsus**

Tell your doctor or pharmacist if you are taking, have recently taken, or might take any other medicines, including medicines obtained without a prescription and herbal preparations.

It is not recommended that Envarsus is taken with ciclosporin (another medicine used for the prevention of transplant organ rejection).

Tell your doctor if you have hepatitis C. Your liver function may change with treatment of hepatitis C and this may affect the levels of tacrolimus in your blood. Your doctor may need to closely monitor tacrolimus blood levels and make adjustments to the dose after you start treatment for hepatitis C.

Envarsus blood levels can be affected by other medicines you take, and blood levels of other medicines can be affected by taking Envarsus, which may require interruption, an increase or a decrease in Envarsus dose. In particular, you should tell your doctor if you are taking or have recently taken medicines like:

- antifungal medicines and antibiotics, particularly so-called macrolide antibiotics, used to treat infections (e.g. ketoconazole, fluconazole, itraconazole, voriconazole, clotrimazole, and isavuconazole, erythromycin, clarithromycin, josamycin, isoniazid and rifampicin)  
  letermovir, used to prevent illness caused by CMV (human cytomegalovirus)
- HIV protease inhibitors (e.g. ritonavir, nelfinavir, saquinavir), the booster medicine cobicistat, and combination tablets, used to treat HIV infection
- HCV protease inhibitors (e.g. telaprevir, boceprevir, and the combination ombitasvir/paritaprevir/ritonavir with or without dasabuvir), used to treat hepatitis C
- nilotinib and imatinib (used to treat certain cancers)
- mycophenolic acid, used to suppress the immune system to prevent transplant rejection
- medicines for stomach ulcer and acid reflux (e.g. omeprazole, lansoprazole or cimetidine)
- antiemetics, used to treat nausea and vomiting (e.g. metoclopramide)
- cisapride or the antacid magnesium-aluminium-hydroxide, used to treat heartburn

- the contraceptive pill or other hormone treatments with ethinylestradiol, hormone treatments with danazol
- medicines used to treat high blood pressure or heart problems (e.g. nifedipine, nicardipine, diltiazem and verapamil)
- anti-arrhythmic substances (e.g. amiodarone) used to control arrhythmia (uneven beating of the heart)
- medicines known as “statins”, used to treat elevated cholesterol and triglycerides
- phenytoin or phenobarbital, used to treat epilepsy
- prednisolone and methylprednisolone, belonging to the class of corticosteroids and used to treat inflammations or suppress the immune system (e.g. in transplant rejection)
- carbamazepine, used to prevent and control seizures
- metamizole, used to treat pain and high fever
- nefazodone, used to treat depression
- herbal preparations containing St. John’s Wort (*Hypericum perforatum*)

Tell your doctor if you are taking or need to take ibuprofen (used to treat fever, inflammation and pain), amphotericin B (used to treat fungal infections), antibiotics (used to treat bacterial infections, e.g. aminoglycosides, vancomycin or clotrimazole) or antivirals (used to treat viral infections, e.g. aciclovir). These may worsen kidney or nervous system problems when taken together with Envarsus.

While you take Envarsus your doctor also needs to know if you are taking potassium supplements or certain diuretics used for heart failure, hypertension and kidney disease (e.g. amiloride, triamterene, or spironolactone), nonsteroidal anti-inflammatory substances (NSAIDs, e.g. ibuprofen) used for fever, inflammation and pain, anticoagulants (blood thinners), or oral medicines for diabetes.

If you need to have any vaccinations, please tell your doctor before.

#### **Envarsus with food and drink**

Avoid grapefruit (also as juice) while on treatment with Envarsus, since it can affect its levels in the blood.

#### **Pregnancy and breast-feeding**

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

Tacrolimus passes into breast milk. Therefore, you should not breast-feed whilst taking Envarsus.

#### **Driving and using machines**

Do not drive or use any tools or machines if you feel dizzy or sleepy, or have problems seeing clearly after taking Envarsus. These effects are more frequent if you also drink alcohol.

#### **Envarsus contains lactose**

Envarsus contains lactose (milk sugar).

- Envarsus 0.75 mg tablets: 41.7 mg
- Envarsus 1 mg tablets: 41.7 mg
- Envarsus 4 mg tablets: 104 mg

If you have been told by your doctor that you have an intolerance to some sugars, contact your doctor before taking this medicine.

### **3. How to take Envarsus**

Always take this medicine exactly as your doctor has told you. Check with your doctor or pharmacist if you are not sure.

This medicine should only be prescribed for you by a doctor with experience in the treatment of transplant patients.

### Important information

Make sure that you receive the same tacrolimus medicine every time you collect your prescription, unless your transplant specialist has agreed to change to a different tacrolimus medicine. This medicine should be taken once a day. If the appearance of this medicine is not the same as usual, or if the instructions have changed, speak to your doctor or pharmacist as soon as possible to make sure that you have the right medicine.

### How much Envarsus do I have to take

The starting dose to prevent the rejection of your transplanted organ will be determined by your doctor calculated according to your body weight.

Initial daily doses just after transplantation will generally be in the range of:  
0.11 - 0.17 mg per kg body weight per day  
depending on the transplanted organ. When treating rejection, the same doses may be used.

Your dose depends on your general condition and on which other immunosuppressive medicines you are taking. Following the initiation of your treatment with this medicine, frequent blood tests will be taken by your doctor to define the correct dose. Afterwards regular blood tests by your doctor will be required to define the correct dose and to adjust the dose from time to time. Your doctor will usually reduce your Envarsus dose once your condition has stabilised.

### How should I take the Envarsus tablets

Envarsus is taken orally once daily, generally on an empty stomach.

Take the tablets immediately following removal from the blister. The tablets should be swallowed **whole** with a glass of water. Do not swallow the desiccant contained in the foil wrapper.

### How long should I take the Envarsus tablets

You will need to take Envarsus every day as long as you need immunosuppression to prevent rejection of your transplanted organ. You should keep in regular contact with your doctor.

### **If you take more Envarsus than you should**

If you have accidentally taken too much Envarsus, contact your doctor or nearest hospital emergency department immediately.

### **If you forget to take Envarsus**

Do not take a double dose to make up for a forgotten tablet. Take the tablet as soon as possible on the same day.

### **If you stop taking Envarsus**

Stopping your treatment with Envarsus may increase the risk of rejection of your transplanted organ. Do not stop your treatment unless your doctor tells you to do so.

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

## **4. Possible side effects**

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

Tacrolimus reduces your body's defence mechanism (immune system), which will not be as good at fighting infections. Therefore, you may be more prone to infections while you are taking Envarsus. Please contact your doctor immediately, should you experience severe effects. Severe effects may occur, including allergic and anaphylactic reactions. Benign and malignant tumours have been reported following Envarsus treatment.

**Very common side effects** (may affect more than 1 in 10 people):

- increased blood sugar, diabetes mellitus, increased potassium in the blood
- difficulty in sleeping
- trembling, headache
- increased blood pressure
- liver function tests abnormal
- diarrhoea, nausea
- kidney problems

**Common side effects** (may affect up to 1 in 10 people):

- reduction in blood cell counts (platelets, red or white blood cells), increase in white blood cell counts, changes in red blood cell counts (seen in blood tests)
- reduced magnesium, phosphate, potassium, calcium or sodium in the blood, fluid overload, increased uric acid or lipids in the blood, decreased appetite, loss of appetite, increased acidity of the blood, other changes in the blood salts (seen in blood tests)
- anxiety symptoms, confusion and disorientation, depression, mood changes, nightmare, hallucination, mental disorders
- fits, disturbances in consciousness, tingling and numbness (sometimes painful) in the hands and feet, dizziness, impaired writing ability, nervous system disorders
- blurred vision, increased sensitivity to light, eye disorders
- ringing sound in your ears
- reduced blood flow in the heart vessels, faster heartbeat
- bleeding, partial or complete blocking of blood vessels, reduced blood pressure
- shortness in breath, disorders of the respiratory tissues in the lung, collection of liquid around the lung, inflammation of the pharynx, cough, flu-like symptoms
- stomach problems such as inflammation or ulcer causing abdominal pain or diarrhoea, bleeding in the stomach, inflammation or ulcer in the mouth, collection of fluid in the belly, vomiting, abdominal pain, indigestion, constipation, passing wind, bloating, loose stools
- bile duct disorders, yellowing of the skin due to liver problems, liver tissue damage and inflammation of the liver
- itching, rash, hair loss, acne, increased sweating
- pain in joints, limbs or back, muscle cramps
- insufficient function of the kidneys, reduced production of urine, impaired or painful urination
- general weakness, fever, collection of fluid in your body, pain and discomfort, increase of the enzyme alkaline phosphatase in your blood, weight gain, feeling of temperature disturbed
- insufficient function of your transplanted organ

**Uncommon side effects** (may affect up to 1 in 100 people):

- changes in blood clotting, reduction in the number of all types of blood cells (seen in blood tests)
- dehydration, inability to urinate
- psychotic behaviour, such as delusions, hallucinations, and confusion
- abnormal blood test results: reduced protein or sugar, increased phosphate, increase of the enzyme lactate dehydrogenase
- coma, bleeding in the brain, stroke, paralysis, brain disorder, speech and language abnormalities, memory problems
- clouding of the eye lens, partial or total inability to hear
- irregular heartbeat, stop of heartbeat, reduced performance of your heart, disorder of the heart muscle, enlargement of the heart muscle, stronger heartbeat, abnormal ECG, heart rate and pulse abnormal
- blood clot in a vein of a limb, shock
- difficulties in breathing, respiratory tract disorders, asthma
- acute or chronic inflammation of the pancreas, inflammation of the lining of the inner wall of the abdomen, obstruction of the gut, increased blood level of the enzyme amylase, reflux of stomach contents in your throat, delayed emptying of the stomach
- inflammation of the skin, burning sensation in the sunlight
- joint disorders

- painful menstruation and abnormal menstrual bleeding
- multiple organ failure, flu-like illness, increased sensitivity to heat and cold, feeling of pressure on your chest, jittery or abnormal feeling, weight loss

**Rare side effects** (may affect up to 1 in 1,000 people):

- Small bleedings in your skin due to blood clots
- Increased muscle stiffness
- Blindness, deafness
- Collection of fluid around the heart
- Acute breathlessness
- Cyst formation in your pancreas, pre-stage of a blockage in your bowel
- Problems with blood flow in the liver
- Serious illness with blistering of skin, mouth, eyes and genitals;
- Increased hairiness
- Thirst, fall, feeling of tightness in your chest, decreased mobility, ulcer

**Very rare side effects** (may affect up to 1 in 10,000 people):

- Muscular weakness
- Impaired hearing
- Abnormal heart scan
- Liver failure
- Painful urination with blood in the urine
- Increase of fat tissue

**Unknown side effects** (frequency not known):

- Cases of pure red cell aplasia (a very severe reduction in red blood cell counts),
- Agranulocytosis (a severely lowered number of white blood cells)
- Haemolytic anaemia (decreased number of red blood cells due to abnormal breakdown)
- Febrile neutropenia (a decrease in the type of white blood cells which fight infection, accompanied by fever)
- Abnormality of the optic nerve (optic neuropathy)

**Reporting of side effects**

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

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

ROI: 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).

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

**5. How to store Envarsus**

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 carton, blister and wrapper after 'EXP'. The expiry date refers to the last day of that month.

Do not store above 25°C.

Store in the original aluminium foil wrapper in order to protect from light.

Use all the prolonged-release tablets within 45 days of opening the aluminium wrapping.

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

## 6. Contents of the pack and other information

### What Envarsus contains

- The active substance is tacrolimus.

#### Envarsus 0.75 mg prolonged-release tablets

Each prolonged-release tablet contains 0.75 mg tacrolimus (as monohydrate).

#### Envarsus 1 mg prolonged-release tablets

Each prolonged-release tablet contains 1.0 mg tacrolimus (as monohydrate).

#### Envarsus 4 mg prolonged-release tablets

Each prolonged-release tablet contains 4.0 mg tacrolimus (as monohydrate).

- The other excipients are hypromellose, lactose monohydrate, macrogol 6000, poloxamer 188, magnesium stearate, tartaric acid (E334), butylated hydroxytoluene (E321), dimethicone 350.

### What Envarsus looks like and contents of the pack

Envarsus 0.75 mg prolonged-release tablets are oval, white to off-white uncoated tablet, debossed with “0.75” on one side and “TCS” on the other side.

Envarsus 1 mg prolonged-release tablets are oval, white to off-white uncoated tablet, debossed with “1” on one side and “TCS” on the other side

Envarsus 4 mg prolonged-release tablets are oval, white to off-white uncoated tablet, debossed with “4” on one side and “TCS” on the other side.

Envarsus is supplied in PVC/alu blisters containing 10 tablets. 3 blisters are packed together within a protective aluminium foil wrapper, including a desiccant. Packs of 30, 60 and 90 prolonged-release tablets are available.

Not all pack sizes may be marketed.

### Marketing Authorisation Holder

Chiesi Farmaceutici S.p.A.  
Via Palermo, 26/A  
43122 Parma  
Italy

### Manufacturer

Rottendorf Pharma GmbH  
Ostenfelder Straße 51 - 61  
59320 Ennigerloh  
Germany

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

### Ireland

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### United Kingdom

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**This leaflet was last revised in March 2020.**

**Other sources of information**

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