

Brand Name: Neoral[®], Sandimmune[®], Gengraf[®]
Common Name: Cyclosporine



What is it?

Cyclosporine is an immunosuppressive drug which helps prevent you from rejecting your transplanted organ(s). You may be taking other medications along with Cyclosporine to prevent rejection, such as prednisone, mycophenolate and/or sirolimus.

How should it be taken?

Cyclosporine is taken twice a day, **every 12 hours**. You may take it with or without food, as long as you take it the same way every day. When you go home, take the medication at the same time **every morning** and **every evening** (for example, 8AM and 8PM). Do not open, cut, crush, or chew the capsule.

DO NOT take Cyclosporine with grapefruit, grapefruit juice or pomegranates. This may cause the amount of Cyclosporine in your blood to increase. Orange juice has no effect and is safe to drink.

Dose changes:

For the first few months after your transplant, your dose of Cyclosporine may change often. Dose changes are based on the amount of Cyclosporine in your blood. The dose will vary among different people. Your transplant doctor will tell you what dose you should take. It is important this medication is taken exactly as directed by your transplant team to avoid complications.

When you leave the hospital, you will continue to have your Cyclosporine blood level checked periodically. When you come to the clinic for blood tests, **DO NOT** take your Cyclosporine dose that morning. Bring it with you to the hospital and **take it after** your blood is drawn. Your doctor will tell you if you need to change your dose (for the next day) after seeing the results of your blood test.

If you miss a dose:

Take it as soon as you remember, as long as it is within 6 hours of your usual time. If you remember more than 6 hours later, skip the missed dose and take your next dose as scheduled. NEVER double the dose.

It is important to remember to take this medication regularly and on time so that it can work most effectively for you. Missing too many doses can lead to rejection.

If you are sick:

If you vomit within 30 minutes of taking Cyclosporine, you should take it again. If you vomit more than 30 minutes after taking your dose, it is not necessary to take another dose. If you have diarrhea for several days or continue to vomit, you should contact your transplant team. They may want to check your Cyclosporine blood level.

How should Cyclosporine be stored?

Keep your medications away from extremes of temperature (very hot or very cold). Keep them at room temperature, away from children. Do not keep medication in your vehicle. When you travel, take your medication in a carry-on bag and keep it with you at all times.

What are the side effects?

- Shaking/ tremors
- Headache
- Unusual growth of body hair
- Muscle cramps
- Stomach upset
- Nausea/ vomiting
- Diarrhea
- Tingling in arms, legs, hands, or feet
- High cholesterol
- Unusual growth/ swelling of gums
- High blood pressure
- Kidney or liver problems
- Acne

All anti-rejection medications can increase your risk for:

- Infections
- Certain types of cancers, especially skin cancer

Many of these side effects can also occur when your blood levels of Cyclosporine are too high, which is why it is important for your transplant team to continue to monitor your blood levels.

Drug interactions

Many prescription and non-prescription medications can interact (not mix well) with Cyclosporine affecting the way it works in your body. It is important to check with your doctor or pharmacist before you take any new medications, even products you buy off the shelf, to make sure it will not affect the amount Cyclosporine in your blood or cause more side effects. You should avoid herbal or homeopathic medications, as these may also affect how Cyclosporine works in your body.

Drugs used to treat high cholesterol or triglycerides may become more potent when taken with Cyclosporine. You should always check with your transplant team before taking these types of medications (e.g., atorvastatin, simvastatin, pravastatin, lovastatin, rosuvastatin, fenofibrate, etc.). You should also check with your transplant team before having any vaccinations.

Some examples of medications that do not mix well with Prograf® are listed below. This is not a complete list, so you should always check with your transplant team or a pharmacist before taking any new medications not prescribed by your transplant team.

May increase Cyclosporine levels	May decrease Cyclosporine levels	May increase harm to kidneys
<ul style="list-style-type: none"> • Diltiazem • Verapamil • Amiodarone • Fluconazole/ ketoconazole/ itraconazole/ voriconazole • Erythromycin/ clarithromycin (azithromycin is safe) • Estrogen • Birth control pills • Grapefruit/ grapefruit juice/pomegranates 	<ul style="list-style-type: none"> • Phenytoin • Phenobarbital • Carbamazepine • Rifampin • St. John's wort 	<ul style="list-style-type: none"> • Aspirin (unless prescribed by your doctor) • Ibuprofen and other anti-inflammatory medications

Other information

Cyclosporine is a very specialized drug and may not be readily available at every pharmacy. Be sure you always have enough on hand so you never run out.

Cyclosporine has a very distinctive "skunky" smell. Allowing the capsule to air out for 10 minutes can help reduce the odour.

If you are prescribed cyclosporine and sirolimus, the dose of sirolimus must be taken 4 hours apart from Cyclosporine.

