

Tacrolimus Therapy After Limbal Stem Cell Transplant

What is tacrolimus?

Tacrolimus is a medication that helps prevent rejection of transplanted organs and tissues by decreasing your immune system's activity. Tacrolimus comes in capsules of 0.5 milligrams (mg), 1 mg, and 5 mg.

How do I take tacrolimus?

You will take tacrolimus twice a day, 12 hours apart (for example, at 9:00 AM and 9:00 PM). Your tacrolimus dose (the amount you will take) depends on the level of tacrolimus in your blood. We will measure your tacrolimus level by a simple blood draw.

- After transplant, your tacrolimus level should be between 8-10 nanograms per milliliter (ng/mL). About 3-6 months after transplant, your level should be between 5-8 ng/mL.

How do I complete the tacrolimus level blood draw?

- To get an accurate tacrolimus level (you may also hear it called a "tacrolimus trough level"), **you must get your blood drawn 12 hours after your last dose.** For example, if you took your last tacrolimus dose at 9:00 PM, you should get your blood drawn at 9:00 AM the following day.
- **Do not take your morning dose of tacrolimus before your blood draw.** Once the blood is drawn, you may take your usual dose of tacrolimus.
- Once we receive your tacrolimus level result, we may ask you to change your next dose.

What if my tacrolimus level is high or low?

If your result is higher or lower than your goal, a team member will contact you to see if your tacrolimus level was accurate. The team will ask you when your last dose of tacrolimus was before the lab draw, how you are feeling, if you have started any new medications or supplements recently, and if you have added anything new to your diet (including grapefruit or other tropical fruits).

What else do I need to know about taking tacrolimus?

- You must take tacrolimus as prescribed to prevent rejection of your limbal stem cell transplant.
- If you miss a dose and it is within 4 hours of your usual dose time, go ahead and take the dose. If it has been longer than 4 hours, please call the clinic for directions. **Do not double up the dose.**
- Do not eat grapefruit or drink grapefruit juice while taking tacrolimus.
- Do not eat papaya, pomegranate, pomelo, or starfruit while taking tacrolimus.
- Before starting a new medication or supplement, always check with your tacrolimus prescriber. Tacrolimus has several medication interactions (side effects that can happen when it's combined with other medications). Your team can let you know if the new medication is safe to take or not.
- Patients taking tacrolimus are at an increased risk of developing skin cancer. Please use sunscreen (SPF 30 or greater) and wear sun protection such as hats or long sleeves.
- Patients on tacrolimus should not receive live vaccines, such as MMR, smallpox, chicken pox, and shingles (Zostavax®) vaccines.

What are some possible side effects of tacrolimus?

Please let your care team know if you have any of these side effects:

- Kidney damage

- Your team will monitor your creatinine levels (this measures your kidney function). If your creatinine level is high, we may change your tacrolimus dose.
- High blood pressure
- Headache
- Tremors (shaking)
- Diarrhea
- Nausea
- Hair loss
 - If you experience hair loss, please reach out to your team for recommendations.
- High potassium
- Low magnesium

Please contact the Cornea Clinic at (734) 764-5106 with any questions or concerns.

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