# The Transplant Center

Lowry Building 110 Francis Street Boston, Telephone: (617) 632-9700 MA 02215



Beth Israel Deaconess Medical Center

# **Tacrolimus Medication Information**

## What is tacrolimus?

Tacrolimus is an immunosuppressant that is in the class known as calcineurin inhibitors. This drug is used to suppress your immune system so your body does not reject your transplanted organ.

# Are there other names for tacrolimus?

Yes, tacrolimus may be referred to by its brand name which is Prograf<sup>®</sup> or by it's shorter original name FK506 or even shorter FK.

# Is tacrolimus available in a generic formulation or any other formulation that I should be aware of?

The generic formulation of tacrolimus is available as of August 12, 2009. It is anticipated the BIDMC in patient pharmacy will begin dispensing generic tacrolimus in early 2010. If you are started on generic tacrolimus when you are in the hospital and you are discharged on generic tacrolimus you will be followed regularly. If you are discharged from the hospital on brand name tacrolimus and you are later switched to generic tacrolimus by your pharmacy you must notify you transplant coordinator. After you switch to the generic tacrolimus we will need to monitor your tacrolimus level closely to ensure that you do not need a dose adjustment. You will be asked to have weekly tacrolimus troughs (level drawn 12 hours after your last dose) until your level remains stable.

It is important that you do not switch between various tacrolimus products. This means that you can not switch between brand and generic and between various makers of generics. If you notice that your tacrolimus appearance has changed call your transplant coordinator immediately.

If you wish to stay on brand name tacrolimus you may be required to pay a higher co-pay. You must notify you're your transplant coordinator if you wish to stay on branded product so they can write the prescription correctly.

### How do I take tacrolimus?

Follow your physician's instructions carefully. Tacrolimus should be taken at the same time each day to maintain a steady blood level. Most patients take it at 8am and 8 pm. It may be taken on an empty stomach or with food to reduce stomach irritation. The most important thing to remember is to take it the same way everyday, either with or without food, as food can affect the drugs absorption. The capsules should be swallowed whole and not opened, crushed or chewed.

Please direct your medication questions to your transplant coordinator or transplant pharmacist.



#### Tacrolimus Medication Information: Page 2 of 3

#### What do I do if I a missed a dose or I have a late clinic appointment?

Do not take two doses of tacrolimus within 6 hours of each other. If you have a late clinic appointment and you haven't taken your am tacrolimus and your next dose is due within 6 hours push that evening dose back until 6 hours after you take your am dose. Example: If you normally take your tacrolimus at 8am and 8 pm, but your clinic appointment is at 4pm and you have your labs drawn at 3:30 you will take your 8 am dose at 3:30 right after your labs are drawn. You will now push your 8pm dose back to 9:30-10pm or a little later if possible. You will then resume your 8am / 8 pm schedule the next day. You want to remember to always keep 6-8hours between tacrolimus doses and not to skip a dose because you remember to take it too late. If you have questions about what to do if you miss a dose call your transplant coordinator.

### Does tacrolimus interact with any foods or beverages?

Avoid excessive intake of high potassium foods (bananas, oranges, orange juice, potatoes, spinach, etc). Do not eat grapefruits, grapefruit juice or any soda (Fresca) or fruit juice blend that contains grapefruit juice. Grapefruit can increase your levels of tacrolimus to a potentially toxic level.

### Does tacrolimus interact with other drugs?

Drug interactions can occur when one drug affects the levels of another drug, it can cause the levels to either go up or down. Always check with your transplant team before starting any new medications.

Interactions with tacrolimus may occur with the following:

- diuretics (Aldactone, Dyazide)
- anti-convulsants (Dilantin, carbamazepine, phenobarbital)
- antibiotics (erythromycin, metronidazole)
- anti-fungals (Diflucan, Sporanox, Nizoral, Vfend)
- anti-nausea or prokinetics (Reglan)
- calcium channel blockers (Cardizem, Calan)
- arthritis drugs (ibuprofen, Advil, Motrin, many others)
- HIV medications (ritonavir, nelfinavir, saquinavir)
- birth control pills

### What if I become pregnant, or are considering pregnancy or breast-feeding?

Some drugs are avoided during pregnancy due to the potential harm they may have on the unborn baby. The FDA has a grading system that lets you know how safe a drug is for your unborn child. It ranks drugs from A, where medical studies show no evidence for danger to the fetus or mother, to B, C, D and X, where the medical evidence indicates that the risk to the fetus outweighs any benefit to the mother. Tacrolimus is ranked C. Always consult your physician before taking any drug during or when planning pregnancy as your immunosuppression regimen may have to be changed during this time.

Please direct your medication questions to your transplant coordinator or transplant pharmacist.



#### **Tacrolimus Medication Information**: Page 3 of 3

#### Are there other precautions that I need to be concerned about while taking tacrolimus?

When you take medications that suppress your immune system you are at an increased risk of infection. Report promptly to your physician any indication of infection such as fever, sore throat, swollen glands, sores or lumps in the skin, abnormal bleeding or bruising. Avoid friends and family member that are sick, ask them to wear a mask in your presence. Avoid live vaccines while taking this drug and avoid contact with individuals who have recently taken the oral poliovirus vaccine or the live (nasal) seasonal or H1N1 flu vaccine. Be sure to inform your physician if you have had a recent infection, especially chicken pox or shingles. Long term use of immunosuppressive medications may place you at a higher risk of developing certain types of cancers such as skin cancer, cervical cancer and lymphoma (lymph node cancer).

#### How long will I have to take tacrolimus?

You will likely be on this immunosuppressant or one similar to it for as long as your transplanted organ is functioning. Over time, there may be some changes to the types of immunosuppressants you will take. Make sure your transplant team is aware of any changes made to this medication by other doctors.

### What kind of side effects could I have while taking tacrolimus?

Side effects can occur with any drug, even over-the-counter medications. Some of these side effects are mild where as other can be more severe. Minor reactions may resolve on their own, however, if they persist, contact your physician. You should contact your transplant coordinator or physician immediately if you experience any of the major reactions listed below.

For tacrolimus, the following are the observed side effects:

#### Minor:

- headache
- loss of appetite
- tremors
- leg cramps
- acne
- hair loss
- tingling in hands/feet

### Major:

- fever
- sore throat
- urgent or painful urination
- kidney damage- decrease in urine output
- severe stomach pain
- nausea/vomiting
- diarrhea
- high blood pressure
- elevated blood sugar
- seizures

Please direct your medication questions to your transplant coordinator or transplant pharmacist.