

# Mycophenolate Mofetil (MMF) for Interstitial Lung Diseases

Your treating pulmonologist has discussed the use of mycophenolate mofetil (MMF, brand name Cellcept®). In this leaflet, you will find information about the effects and use of this medication. You will also read what to do if you experience side effects. However, this leaflet is not a substitute for the official package insert. If you have any questions after reading this leaflet, you can ask your treating physician.

## Why are you prescribed mycophenolate mofetil?

In several interstitial lung diseases (pulmonary fibrosis), such as non-specific interstitial pneumonia (NSIP), hypersensitivity pneumonitis (bird fancier's lung), and also interstitial lung diseases in autoimmune diseases, there is activation of the immune system. This leads to damage to the lung tissue. Therefore, treatment focuses on suppressing the immune system. This results in a reduction of the accumulation of inflammatory cells. As a result, the lung abnormalities and symptoms decrease, or we prevent the symptoms from worsening. Unfortunately, the disease is not cured by treatment with medication. MMF is usually given in combination with prednisone, as these drugs support each other's effects.

## How does mycophenolate mofetil work?

The exact mechanism of MMF in interstitial lung diseases is unknown. It is known to have anti-inflammatory effects by suppressing inflammatory cells (B and T lymphocytes). By preventing the accumulation of inflammatory cells and thus the formation of connective tissue, we try to reduce the symptoms of the disease, such as shortness of breath. MMF works much slower than, for example, prednisone. It can take more than 6 weeks before the medication starts to work. Because the manifestation and severity of the disease vary greatly from person to person, the effect of MMF and the body's response to the medication also differ per individual. Unfortunately, not everyone experiences sufficient benefit.

## When should you not use mycophenolate mofetil?

- With reduced production of blood cells
- Women: if you want to become pregnant, are pregnant, or are breastfeeding
- Men: if your partner wants to become pregnant
- If you have Lesch-Nyhan syndrome.

## **What is the dosage and how do you take mycophenolate mofetil?**

MMF is a medication in the form of tablets of 500 mg. The usual dosage is 1.000 mg to 3.000 mg, usually 2.000 mg per day. This dose is taken in two doses, so two times a day one, two, or three tablets of 500 mg, depending on what your pulmonologist prescribes. The tablets are preferably taken on an empty stomach. Depending on whether you experience side effects and how well your body tolerates the medication, the dosage will be carefully increased. It is important not to break or chew the tablets, but to swallow them whole.

## **What are the side effects?**

The pharmacy's package insert lists all side effects of MMF that have ever occurred.

### **The most common side effects are:**

- gastrointestinal complaints (such as nausea, vomiting, abdominal pain, and/or diarrhea)
- disorders in the production of blood cells
- mild infections such as colds and flu, shingles, and urinary tract infections
- fever, flu-like symptoms
- headache
- skin and mucous membrane problems: mild hair loss, gum inflammation
- gastric or intestinal mucosal inflammation.

### **In some cases:**

- infections.

### **Rare:**

- skin tumors.

If you have severe side effects, you must stop taking mycophenolate mofetil. Therefore, contact your pulmonologist if you experience:

- severe sore throat with fever
- repeated nosebleeds
- easy bruising
- shortness of breath or frequent coughing
- fever and feeling ill
- persistent diarrhea.

Usually, side effects disappear after lowering the dose or discontinuing MMF. If you have recovered from the side effect, MMF can often be resumed.

## **What monitoring is needed when using mycophenolate mofetil?**

Sometimes liver, kidney function, and blood cell production are disturbed. To detect this at an early stage, your pulmonologist will regularly have your blood tested. In the first one and a half to three months, this usually happens every two weeks. After this, the checks take place less frequently.

## What is the effect on fertility, pregnancy, and breastfeeding?

### For men:

As far as is known, MMF does not affect fertility. Men who use MMF and wish to have children must stop this medication three months before the intended pregnancy of their partner. It is therefore important to use reliable contraception during this period and while using MMF.

### For women:

As far as is known, MMF does not affect fertility. It is very important to inform your pulmonologist if you are considering pregnancy or are already pregnant. MMF can cause abnormalities in the unborn child and increase the risk of miscarriage. Therefore, you must not use MMF during pregnancy. You must stop using MMF six weeks before a possible pregnancy. You must also not use MMF if you are breastfeeding, as it is not yet known whether MMF poses risks to the child. Discuss your situation with your pulmonologist.

## Can I use mycophenolate mofetil with other medications?

You can use MMF in combination with almost all medications.

### MMF works less well in combination with:

- Antacids
- Cholestyramine (Questran®) (a cholesterol-lowering drug)
- Medications for viral infections such as aciclovir (Zovirax®), ganciclovir (Cymevene®), and valaciclovir (Zelitrex®)
- Rifampicin (Rifadin®) (an antibiotic for, among others, tuberculosis and leprosy).

### Medications whose effect MMF can enhance:

- Ciclosporin (Neoral®). If you use any of the above medications, consult your pulmonologist.

## What else should I know?

Do not use alcohol. In combination with MMF, the risk of liver dysfunction is higher.

The use of MMF slightly increases the risk of skin cancer. Therefore, avoid sunlight and UV radiation as much as possible. This can be done by wearing protective clothing or using sunscreen with a high protection factor (SPF 30 or higher). Do not use tanning beds. Check your skin annually yourself. If you notice any skin abnormalities, it is wise to visit your general practitioner.

If you use MMF, you must not receive vaccination with live, attenuated viruses and bacteria. These include vaccinations against mumps, measles, and rubella (MMR), yellow fever, oral polio vaccine, oral typhoid vaccine, and BCG. A flu shot is allowed. Inform the doctor or nurse who prescribes your vaccinations that you use MMF.

## Do you need a new prescription?

MMF may only be prescribed by a physician experienced with this medication.

You can request a repeat prescription from your treating specialist during your outpatient visit.

If you need a new prescription earlier, you can request it by

- 'Mijn Dossier' and then 'Medicines'. Click on 'Request repeat prescriptions'
- call the pulmonary medicine outpatient clinic to request a repeat prescription by phone.
  - Please do this at least 2 weeks before you need your new prescription. Otherwise, we cannot guarantee that your prescription will be sent to your pharmacy on time.

You can request a prescription from your treating physician during your outpatient visit. If you need a new prescription earlier, you can call the pulmonary diseases outpatient clinic and request a telephone consultation with your treating physician. We will then fax a new prescription to your pharmacy.

- Please do this at least 2 weeks before you need your new prescription. Otherwise, we cannot guarantee that you will receive your prescription on time.

## **Do you have any questions?**

If you have any questions or doubts, please contact the pulmonary diseases outpatient clinic using the contact options and details known to you.