What are mycophenolate mofetil and mycophenolic acid?
Mycophenolate mofetil (Cellcept®), abbreviated “MMF”, is a prescription medication that weakens the body’s immune system. The body naturally breaks down MMF into “mycophenolic acid” (abbreviated MPA), which is the active form of the drug. MPA (Myfortic®) is also available as a medication. Both drugs are FDA approved to treat patients who have undergone solid organ transplantation. They are also widely used “off label” to treat other conditions.

How does MMF/MPA work?
MMF and MPA both target the body’s white blood cells, slowing down their ability to multiply and respond to infection.

Who should take MMF/MPA?
These medications should only be taken as instructed by your health care provider and according to the prescription label. It is commonly used to treat autoimmune diseases and certain forms of PF when inflammation is present in the lungs.

How should MMF/MPA be taken?
MMF comes in 250mg capsules and 500mg tablets. It is also available as an oral liquid (suspension) and as an intravenous infusion. MPA is available in 180mg and 720mg tablets. MMF and MPA doses are not interchangeable. MMF and MPA tablets should not be crushed, chewed, or cut prior to taking the medication. MMF capsules should not be opened or crushed before taking the medication.

The FDA prescribing information states that MMF should be taken on an empty stomach. Some physicians recommend taking MMF with food. Talk to your health care provider for guidance.

MMF should not be taken at the same time as antacids containing magnesium or aluminum. MMF and MPA should be separated by 2 hours from taking these antacids.

How can I obtain MMF or MPA?
Mycophenolate is only available by prescription.

Will my insurance pay for MMF or MPA?
Insurance coverage will vary by insurer and your individual policy. We recommend that you directly contact your insurance provider to determine your specific coverage. There are organizations that can help those living with pulmonary fibrosis with financial and insurance issues. You can contact Patient Services Inc. at 1-800-366-7741, the HealthWell Foundation at 1-800-675-8416, or the Patient Advocate Foundation at 1-800-532-5274 to find out more about how they can provide assistance.

You can learn about other patient assistance programs on the PFF website here: https://www.pulmonaryfibrosis.org/life-with-pf/pff-educational-resources/pf-community-resources

What side effects can occur from MMF or MPA?
The most common side effects of MMF are diarrhea, low white blood cell counts, infections, and vomiting.
The most common side effects of MPA are anemia, low white blood cell counts, constipation, nausea, diarrhea, vomiting, upset stomach, infections, and insomnia.

There is also a risk of skin cancer, lymphoma, and other forms of cancer with MMF and MPA. Other side effects are also possible. Talk to your doctor if any of these side effects occur.

Are there special precautions I should take if I am taking MMF or MPA?
Yes. If you are a woman of childbearing age, you should know that MMF/MPA is associated with an increased risk of first trimester pregnancy loss and congenital malformations. Women of childbearing age, sexually active men, and partners of sexually active men should take special precautions. See https://www.mycophenolaterems.com/PatientOverview.aspx for more information.

You should avoid “live” vaccines while taking MMF or MPA.

MMF and MPA can reduce the effectiveness of oral contraceptives.

You should not donate blood or semen while taking MMF or MPA.

How will my doctor monitor me while I am taking MMF or MPA?
You doctor will monitor you for side effects and will perform blood tests periodically. If you have side effects, your doctor might lower your dose or temporarily or permanently stop MMF or MPA.

What drug interactions should I know about?
Proton pump inhibitors (a common type of antacid therapy) can decrease the amount of MMF or MPA in the body.

MMF and MPA can have additional drug interactions. It is important to update your physician and pharmacy about any medication changes or additions including all prescriptions, over the counter medicines, vitamins, and herbal supplements.

Are there some people who should not take MMF or MPA?
Women who are pregnant or breastfeeding should not take MMF or MPA.

People with a history of an allergic reaction to MMF, MPA, or polysorbate 80 should not take these medications.

Acknowledgements
The Pulmonary Fibrosis Foundation is thankful to the following for their assistance in writing and reviewing this fact sheet:

David J. Lederer, MD, MS
Former PFF Senior Medical Advisor, Education and Awareness