

## What is azathioprine?

Azathioprine (Imuran®) is a prescription medication that weakens the body's immune system. It is approved by the FDA for use in organ transplant recipients and to treat rheumatoid arthritis. It is also widely used “off label” to treat other conditions.

## How does azathioprine work?

Azathioprine targets the body's white blood cells, slowing down their ability to multiply and respond to an infection. This weakening of the immune system can also help decrease inflammation in the lungs.

## Who should take azathioprine?

Azathioprine 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 pulmonary fibrosis when inflammation is present in the lungs.

Prior to taking azathioprine, your healthcare provider may perform a special blood test called “TPMT testing” to see if you are at risk for severe effects on your bone marrow from azathioprine. If you are at risk, your healthcare provider may decide to give you a lower dose of azathioprine or to not to give you azathioprine at all.

## How should azathioprine be taken?

Azathioprine comes in 50mg tablets that are taken by mouth. Your healthcare provider will determine the dose that is right for you.

## How can I obtain Azathioprine?

Azathioprine is only available by prescription.

## Will my insurance pay for azathioprine?

Azathioprine is usually covered by most drug plans, although a prior authorization from your drug plan to obtain the medication may be necessary. Your health care team will assist with this authorization if necessary.

## What side effects can occur from azathioprine?

The most common side effects of azathioprine are lower white blood cell counts, nausea, vomiting, infections, and low blood platelet counts.

In some cases, azathioprine can cause abnormalities in liver blood tests. Rarely, azathioprine can cause a severe allergic-like reaction, liver disease, and pancreatitis. There is also a risk of lymphoma, skin cancer, and other forms of cancer with azathioprine. 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 azathioprine?

Yes. If you are a woman of childbearing age, you should talk to your doctor about birth control and the risks of taking azathioprine while pregnant. According to the FDA, “Women of childbearing age should be advised to avoid becoming pregnant.”

## How will my doctor monitor me while I am taking azathioprine?

Your 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 azathioprine.

### **What drug interactions should I know about?**

The drug allopurinol can increase blood levels of azathioprine. If you need to take both medications, talk to your doctor to find out whether your azathioprine dose should be adjusted. Azathioprine can also reduce the effectiveness of warfarin (Coumadin®).

Other drug interactions may occur. 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 azathioprine?**

People with a history of an allergic reaction to azathioprine should not take azathioprine.

According to the **FDA**, “Women of childbearing age should be advised to avoid becoming pregnant.”  
The use of azathioprine in nursing mothers should be avoided.

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