

### AZATHIOPRINE (IMURAN)

Azathioprine is an oral medication that is a safe and effective treatment for many forms of severe skin problems. It is usually used when standard therapies produce side effects or are not effective.

The original use for azathioprine was to prevent organ rejection in patients who had received an organ transplant. Our immune system produces white blood cells that protect us against both infectious disease and foreign materials. Azathioprine acts to inhibit the formation of DNA that is necessary for the function of these cells, which in turn prevents the cells from acting on the organ causing rejection. Some of the same types of cells are overactive in forms of severe skin diseases; therefore, azathioprine can be an effective treatment.

Before starting azathioprine you must be tested for a specific enzyme that is required to metabolize the therapy. Some patients may be genetically deficient in this enzyme which does not cause a problem unless you are taking this specific medication. A test for the enzyme will be done in the office prior to starting therapy and I will adjust the dose according to your levels

Azathioprine is usually well tolerated. However, like all drugs, there are potential side effects. Most patients taking azathioprine do not have any problems, but occasionally some people experience stomach upset. To prevent this you can take your medication with meals. Normally these side effects disappear with continued use of the medication. Azathioprine also has the potential to affect your blood counts and liver enzymes. That is why I will monitor your laboratory tests while on therapy. Azathioprine can rarely decrease your body's ability to fight infection. If you develop a fever or infection you should contact my office.

There are no adequate, well-controlled studies that have taken place in humans, but when given to animals in doses equivalent to human dosages azathioprine was observed to cause birth defects. Therefore, you should not take Azathioprine if you are pregnant or planning on becoming pregnant in the near future. It is best to use a form of birth control you can trust while on this medication to prevent pregnancy. Azathioprine has few drug to drug interactions so it is important to keep us informed of your medications at all times. If you are taking an ACE Inhibitor, allopurinol, or coumadin there are potential drug interactions that should be discussed before starting therapy with azathioprine.

In summary, Azathioprine is a medication that is usually well-tolerated and can be beneficial for patients who do not respond to standard treatments. If you have any other questions regarding this, please ask me before you leave the office.