Azathioprine (Imuran) is used to treat dermatomyositis, systemic lupus erythematosus (lupus), inflammatory bowel disease, vasculitis (inflammation of the blood vessels), rheumatoid arthritis, as well as other inflammatory conditions. It suppresses the immune system by interfering with DNA synthesis (the creation of DNA molecules). It is also used in combination with other medications to suppress the immune system after organ transplantation to prevent rejection of transplanted organs.

Azathioprine is usually taken orally (in doses between 50-150mg), once or divided twice daily. The initial dose for rheumatoid arthritis is approximately 1 milligram/kilogram [mg/kg] of body weight. The dose can be increased every 1-2 months, up to a maximum dose of 2.5 mg/kg of body weight, or approximately 75 to 150 mg given twice a day. A benefit in arthritis or other conditions may appear as early as 6-8 weeks. It may take up to 12 weeks to notice a full effect.

The most common side effects of azathioprine can involve the gastrointestinal tract (which includes the stomach, intestines, liver and pancreas) and the blood cells. Taking the medication twice daily instead of all at once, or taking it after eating, may help avoid these problems. Less often, azathioprine may cause damage to the liver, pancreas or an allergic reaction that may include a flu-like illness or a rash. Azathioprine also can lower the number of infection-fighting white blood cells. Before or during treatment, your doctor may perform a blood test called TPMT activity level. TPMT helps clear the medication from your system. If you have lower amounts of TPMT, you may be at higher risk for medication toxicity. It is important to take azathioprine as directed and have regular blood tests.

You should notify your doctor if you have these symptoms while taking this medication: fever, rash, easy bruising or bleeding, or signs of an infection. If vomiting occurs, you should contact your doctor, as this may be a sign of a serious reaction. Be sure to tell your doctor about all of the medications you are taking, which may include over-the-counter medications and natural remedies. Medications that may interfere with azathioprine and potentially cause serious problems include the gout medication allopurinol (Aloprim, Zyloprim); warfarin (Coumadin); some blood pressure medications, including some angiotensin-converting enzyme (ACE) inhibitors (Accupril or Vasotec); olsalazine (Dipentum); mesalamine (Asacol, Pentasa); and sulfasalazine (Azulfidine). Make sure to notify your other physicians while you are taking this drug. If you are pregnant or considering pregnancy. Breast-feeding should be avoided while taking azathioprine because the drug can enter breast milk. Be sure to talk with your doctor before receiving any vaccines or undergoing any surgeries while taking this medication. Live vaccines should be avoided while on this medication and you should discuss updating your vaccinations prior to starting this medication.

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