Introduction

Leukotrienes play a role in the inflammatory process. They are typically prescribed in patients with asthma but may be beneficial in patients with Chronic Rhinosinusitis with Polyposis. These drugs block the activation of leukotrienes by interfering with their synthesis pathway. Zileuton (Zyflo®) blocks one part of the pathway while Zafirlukast (Accolate®) and Montelukast (Singulair®) work in a different area. Therefore, Zyflo® may be prescribed together with either Accolate® or Singulair®.

Dosing
Singulair is taken once daily, while Accolate® is taken 4 times a day, 1 hour before or 2 hours after meals. Zyflo® is also taken 4 times a day, without regard to meals. Both need to be taken every day, not just with acute attacks.

Adverse reactions
Zyflo® can elevate liver enzymes. Liver function tests should be monitored while on therapy. Zyflo® can increase the effects of theophylline. If you are taking theophylline, this level should also be monitored. It can also increase the effects of other medications such as Coumadin and beta-blockers. Accolate® and Singulair® can potentiate drugs metabolized by certain isoenzymes (including Coumadin, Dilantin®, calcium channel blockers, and cyclosporine). Erythromycins, Biaxin®, or theophylline may antagonize them.

Two rare but serious conditions are cause to stop these medications. They are severe depression/suicidal thoughts and Churg-Strauss Syndrome. Churg-Strauss Syndrome can appear in association with use of these medicines. Symptoms of the problem can appear suddenly, even after long term use of these agents. These symptoms can include joint pains, nerve inflammation with tingling sensations, numbness, or progressive shortness of breath. However, whether these drugs have a direct role in causing this problem remains controversial in 2005.

If you experience any of the followings serious side effects, stop taking your leukotriene modifier, seek emergency medical attention and notify your doctor immediately:
- an allergic reaction (difficulty breathing; closing of the throat, swelling of the lips, tongue, or face; or hives)
- numbness, tingling, or pain
- a rash or unexplained open sores or bruising
- a flu-like illness
- severe inflammation (pain and swelling) of the sinuses
- worsening respiratory symptoms
Other, less serious side effects more likely to occur include:
- upset stomach, stomach pain, or heartburn
- dizziness or headache
- fatigue
- sore throat or cough
- nasal irritation