ETANERCEPT (ENBREL)

http://www.aocd.org

Etanercept is a biologic response modifier, or biologic, indicated for the treatment of patients with chronic long-term inflammatory disorders of the skin and other systems. Originally etanercept was approved for the treatment of rheumatoid arthritis, but has subsequently been approved to treat several other conditions. In April 2004, the US FDA approved its use for the treatment of chronic moderate-to-severe plaque psoriasis.

**Mechanism:** Etanercept is an injectable protein which inactivates tumor necrosis factor (TNF). TNF is a pro-inflammatory cytokine. Its dysregulation leads to excessive amounts of circulating TNF, which results in a chronic inflammatory response. TNF alpha is the key mediator and source of inflammation in several autoimmune diseases. TNF is found in excess in synovial fluid and psoriatic plaques. Etanercept binds to the TNF-alpha receptor, thereby blocking its pro-inflammatory activity.

**Uses:**
- Adults (18 years and older) with chronic, moderate to severe plaque psoriasis in patients who are candidates for systemic or phototherapy
- Psoriatic arthritis
- Moderate to severe rheumatoid arthritis (RA)
- Ankylosing spondylitis (AS)
- Moderate to severe polyarticular juvenile idiopathic rheumatoid arthritis (JIA) in children two years of age and older

**Side effects:** The side effect profile for Enbrel can be divided into common and serious side effects. Taking Enbrel decreases your immune response, thus making you more susceptible to infections and cancers. The most common side effects associated with Enbrel use are injection site reactions and infections. Injection site reactions such as redness, swelling, itching and rash can occur but usually dissipates over 3-5 days. Other commonly reported side effects are: upper respiratory tract infections, headache, nausea, rhinitis, and dizziness. The more serious side effects includes autoimmune hepatitis, leukemia, lymphoma and other malignancies, myelosuppression, lupus like syndrome, optic neuritis, multiple sclerosis, seizure, heart failure, aplastic anemia, opportunistic infections and sepsis. All patients who are candidates for biologic therapy need to undergo testing for tuberculosis and hepatitis before beginning treatment, since these diseases can be reactivated.