

MEDICATION REFERENCE LIST

TERBUTALINE (BRETHINE)

1. Classification: β 2-adrenergic receptor agonist, tocolytic
2. Physiologic Effect: Terbutaline is a relatively selective beta2-adrenergic bronchodilator that has little or no effect on alpha-adrenergic receptors. The drug has exerts a preferential effect on beta2-adrenergic receptors but stimulates beta-adrenergic receptors less selectively than relatively selective beta2-agonists. Terbutaline appears to have a greater stimulating effect on beta-receptors of the bronchial, vascular, and uterine smooth muscles (beta2 receptors) than on the beta-receptors of the heart (beta1 receptors). This drug relaxes smooth muscle and inhibits uterine contractions, but may also cause some cardiostimulatory effects and CNS stimulation.
3. Major Indications:
 - 3.1. prevention and reversal of bronchospasm in patients 12 years of age and older with asthma
 - 3.2. reversible bronchospasm associated with bronchitis and emphysema
 - 3.3. treatment for premature labor is an off-label use not approved by the FDA.
4. Primary Contraindications:
 - 4.1. caution in patients with cardiovascular disorders, especially coronary insufficiency, cardiac arrhythmias, and hypertension.
 - 4.2. known hypersensitivity to sympathomimetic amines or any component of this drug product.
5. Side Effects:
 - 5.1. Adult
 - 5.1.1. tachycardia
 - 5.1.2. anxiety, nervousness, tremors
 - 5.1.3. headache
 - 5.1.4. hyperglycemia
 - 5.1.5. hypokalemia
 - 5.1.6. hypotension
 - 5.1.7. pulmonary edema.
 - 5.2. Fetal
 - 5.2.1. tachycardia
 - 5.2.2. hypoglycemia
6. Additional information:
 - 6.1. Can be used to delay preterm labor for up to 48 hours
 - 6.2. Vials should be used only for subcutaneous administration and not intravenous infusion.
 - 6.3. The usual subcutaneous dose of terbutaline sulfate injection is 0.25 mg injected into the lateral deltoid area. If significant clinical improvement does not occur within 15 to 30 minutes, a second dose of 0.25 mg may be administered. If the patient then fails to respond within another 15 to 30 minutes, other therapeutic measures should be considered. The total dose within 4 hours should not exceed 0.5 mg.