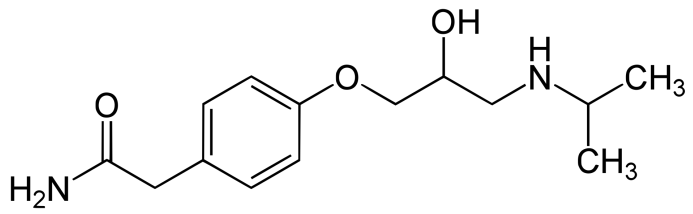
Brand Name: Tenormin
Generic: atenolol
Type: small molecule
Year Accepted/Phase: 1976

Mechanism:

Atenolol is a selective beta-1 adrenergic receptor blocker. By blocking these receptors, it reduces the effects of adrenaline and noradrenaline, leading to a decrease in heart rate and blood pressure.

Chemical Structure:



Indication:

Atenolol is indicated for the treatment of hypertension, angina pectoris, and as secondary prevention after myocardial infarction.

Clinical trials:

Clinical Trials for Hypertension

Purpose: Evaluate the efficacy and safety of atenolol in lowering blood pressure in patients with hypertension.
Dates: Atenolol has been studied in numerous clinical trials over the years, starting from its initial development in the 1970s.
Results: These trials demonstrated that atenolol effectively reduces blood pressure, particularly in patients with hypertension. It has been shown to reduce the risk of stroke, heart attack, and other cardiovascular events.
Impact: The positive results from these trials supported the approval and widespread use of atenolol for the treatment of hypertension.

Clinical Trials for Angina and Myocardial Infarction

Purpose: Evaluate the efficacy of atenolol in reducing angina attacks and improving outcomes in patients with myocardial infarction.
Dates: Conducted over several decades, with landmark studies like the ISIS-1 and BHAT trials in the 1980s.
Results: Atenolol has been shown to reduce the frequency and severity of angina attacks, improve exercise tolerance, and reduce the risk of recurrent myocardial infarction.
Impact: These trials established atenolol as a cornerstone therapy for angina and post-myocardial infarction management.