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Enalapril Maleate/Hydrochlorothiazide

National Cancer Institute

Source

National Cancer Institute. *Enalapril Maleate/Hydrochlorothiazide*. NCI Thesaurus. Code C29539.

A combination preparation of a synthetic angiotensin-converting enzyme (ACE) inhibitor prodrug and a diuretic thiazide, with antihypertensive activity. Enalapril maleate is de-esterified within the cells into its active form enalaprilat that inhibits ACE, thereby prevents the formation of angiotensin II, and blocks angiotensin II mediated activities, including vasoconstriction and stimulation of aldosterone synthesis and secretion, which regulates extracellular sodium concentration. Hydrochlorothiazide inhibits electrolytes reabsorption via binding to Na-Cl cotransporter on the renal distal tubular, thereby increasing excretion of sodium, potassium, chloride, bicarbonate and water. Both agents lead to a reduction in blood pressure.