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# Minoxidil

National Cancer Institute

## Source

National Cancer Institute. *Minoxidil*. NCI Thesaurus. Code C47623.

An orally administered vasodilator with hair growth stimulatory and antihypertensive effects. Minoxidil is converted into its active metabolite minoxidil sulphate by sulphotransferase enzymes. Minoxidil sulphate exerts its antihypertensive effect by opening of plasma membrane adenosine triphosphate (ATP)-sensitive potassium channels (KATP channels), thereby directly and rapidly relaxing arteriolar smooth muscle and subsequent reduction of elevated systolic and diastolic blood pressure by decreasing peripheral vascular resistance. This agent's hair growth stimulatory effect may be mediated through its vasodilatory activity, thereby increasing cutaneous blood flow, or due to its direct stimulatory effect on hair follicle cells and forcing them from their resting phase into their active growth phase.