Perindopril exhibits antihypertensive, anti-fibrotic, neuroprotective, cognition enhancing, anticancer chemotherapeutic, and chemopreventive activities. Perindopril is an angiotensin-converting enzyme (ACE) inhibitor that decreases blood pressure, vascular resistance, and vasoconstriction in animal models and in clinical settings. Perindopril also increases extracellular acetylcholine (ACh) and ameliorates cognitive impairment in animal models of vascular dementia and Alzheimer’s disease. In other animal models, perindopril decreases activity of NF-κB and levels of AT1R, TGF-β1, PDGF-BB, laminin, and hyaluronic acid, decreasing hepatic fibrosis. Perindopril displays both pro-angiogenic and anti-angiogenic activities depending on the animal models. In diabetic animal models of hind limb ischemia, perindopril increases expression of eNOS, VEGF, bFGF and BO, increasing capillary density and post-ischemic revascularization. In animal models of hepatocellular carcinoma, this compound inhibits VEGF expression and tubule formation, preventing angiogenesis and tumor development.

References


