Octreotide is a somatostatin peptide analog that acts at somatostatin receptors and inhibits the release of growth hormone. Octreotide exhibits anticancer, anti-fibrotic, anti-inflammatory, and immunomodulatory activities. Octreotide inhibits colon cancer cell growth through the suppression of Wnt/β-catenin signaling. Octreotide inhibits hepatic stellate cell proliferation, downregulating the expression of TGF-β, α-SMA, Smad-4a, c-Jun, sp-1, ET-1, and collagen; it is also protective against fibrosis in animal models. Additionally, octreotide inhibits peripheral blood mononuclear cell proliferation, decreasing levels of IL-6, IL-10, and IFN-γ and producing clinical improvements in subjects with systematic lupus erythematosus.

References


