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Gemigliptin

National Cancer Institute

Source

National Cancer Institute. *Gemigliptin*. NCI Thesaurus. Code C118446.

An orally bioavailable inhibitor of the serine protease dipeptidyl peptidase 4 (DPP-4), with hypoglycemic and potential renoprotective activities. Upon administration, gemigliptin binds to DPP-4 and inhibits the breakdown of the incretin hormones, glucagon-like peptide-1 (GLP-1) and glucose-dependent insulinotropic polypeptide (GIP). This prolongs incretin activity, increases postprandial insulin secretion from pancreatic beta cells, decreases glucagon secretion, delays gastric emptying and lowers blood glucose levels. In addition, gemigliptin exerts a renoprotective effect, probably through enhanced GLP-1 signaling, may prevent apoptosis and acute kidney injury induced by nephrotoxic agents, and may protect against diabetic nephropathy.