

Open Peer Review on Qeios

Etelcalcetide

National Cancer Institute

Source

National Cancer Institute. <u>Etelcalcetide</u>. NCI Thesaurus. Code C129712.

A calcimimetic and calcium-sensing receptor (CaSR) agonist composed of a synthetic peptide comprised of seven D-amino acids that can be used to treat secondary hyperparathyroidism (sHPT) in hemodialysis patients with chronic kidney disease (CKD). Upon intravenous administration, etelcalcetide mimics calcium and allosterically binds to and activates the CaSR expressed by the parathyroid gland. This suppresses the synthesis and secretion of parathyroid hormone (PTH), thereby reducing PTH levels and lowering serum calcium and phosphorus levels. Elevated PTH is often observed in patients with CKD and is associated with dysregulated calcium-phosphate homeostasis.