

Open Peer Review on Qeios

Abaloparatide

National Cancer Institute

Source

National Cancer Institute. <u>Abaloparatide</u>. NCI Thesaurus. Code C158818.

A 34 amino acid synthetic analog of human parathyroid hormone-related protein (PTHrP) (PTHrP(1-34) analog), with bone-growing and bone density conserving activities. Upon subcutaneous administration, abaloparatide acts similar to PTHrP and targets, binds to and activates parathyroid hormone 1 (PTH1) receptor (PTH1R), a G protein-coupled receptor (GPCR) expressed in osteoblasts and bone stromal cells. PTH1R activates the cyclic AMP (cAMP) signaling pathway and the bone anabolic signaling pathway, leading to bone growth, increased bone mineral density (BMD) and volume. This correlates with increased bone mass and strength and prevents or treats osteoporosis and decreases fractures.