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Luspatercept

National Cancer Institute

Source

National Cancer Institute. *Luspatercept*. NCI Thesaurus. Code C104012.

A soluble, recombinant fusion protein composed of a modified form of the extracellular domain of human activin receptor type IIb (ActRIIb) and linked to the human IgG1 Fc domain, with red blood cell stimulating activity. Upon subcutaneous administration, luspatercept inhibits several ligands in the transforming growth factor (TGF)-beta superfamily. This prevents activation of a variety of TGF-beta superfamily members involved in late stage erythropoiesis and results in an increased differentiation and proliferation of erythroid progenitors. luspatercept acts at a different, later stage than erythropoietin. This agent ultimately enhances red blood cell production and prevents anemia.