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Semuloparin

National Cancer Institute

Source

National Cancer Institute. *Semuloparin*. NCI Thesaurus. Code C78447.

An ultralow-molecular-weight heparin (ULMWH) (Mw: 2000-3000 daltons) consisting of a polydisperse mixture of oligomeric heparin fragments with potential anticoagulant activity. Ultralow-molecular-weight heparin AVE5026 binds to and activates antithrombin III (ATIII), which may result in the inhibition of activated factor Xa and, to a much lesser extent, factor IIa (thrombin) and so the inhibition of fibrin formation. Compared to low-molecular-weight heparins (LMWHs), AVE5026 exhibits an even higher ratio of anti-Factor Xa to anti-Factor IIa activity (>30:1). Compared to unfractionated heparins, the use of LMWHs is associated with lower incidences of major bleeding, osteoporosis and heparin-induced thrombocytopenia. Like LMWHs, this agent may inhibit tumor growth by regulating angiogenesis and apoptosis. AVE5026 is prepared by partial depolymerization of unfractionated porcine mucosal heparin.