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Teglarinad

National Cancer Institute

Source

National Cancer Institute. *Teglarinad*. NCI Thesaurus. Code C90746.

A water-soluble prodrug of a pyridyl cyanoguanidine compound and an inhibitor of nicotinamide phosphoribosyltransferase (NAMPT) with potential antineoplastic activity. Teglarinad is rapidly converted in the bloodstream into an active compound through hydrolytic cleavage of the carbonate ester bond. The activated form inhibits NAMPT, thereby inhibiting nicotinamide adenine dinucleotide (NAD⁺) biosynthesis and induces a rapid decline in intracellular NAD⁺ followed by ATP reduction. As NAD⁺ is essential for tumor cell growth, inhibition of NAMPT induces tumor cell death. NAMPT is an essential enzyme in the synthesis of NAD⁺ and is upregulated in some cancers.