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# Minocycline-EDTA

National Cancer Institute

## Source

National Cancer Institute. *Minocycline-EDTA*. NCI Thesaurus. Code C63545.

A combination preparation containing minocycline, a broad-spectrum, semi-synthetic tetracycline antibiotic, and ethylenediaminetetraacetate (EDTA) with antimicrobial and anticoagulant activities. Minocycline exerts its bacteriostatic effect by binding to the bacterial 30S ribosomal subunit and preventing binding of aminoacyl-tRNA to the mRNA-ribosome complex during protein translation. This leads to an inhibition of bacterial protein synthesis and consequently interferes with cell growth. EDTA, a metal chelator, exerts its anticoagulant activity by binding to calcium, thereby impeding the activity of calcium-dependent coagulation proteins. This leads to an inhibition of thrombotic occlusion and prevention of bacterial colonization that could occur upon clot formation.