

[Open Peer Review on Qeios](#)

# Doxycycline Hyclate Injection

National Cancer Institute

## Source

National Cancer Institute. *Doxycycline Hyclate Injection*. NCI Thesaurus. Code C125186.

An injectable formulation composed of the hyclate salt form of doxycycline, a synthetic, broad-spectrum tetracycline antibiotic, with antimicrobial activity. Upon injection, doxycycline reversibly binds to the bacterial 30S ribosomal subunit, and blocks the binding of aminoacyl-tRNA to the mRNA-ribosome complex. This leads to an inhibition of bacterial protein synthesis and abrogates bacterial infections.