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Doxycycline Hyclate Foam

National Cancer Institute

Source

National Cancer Institute. *Doxycycline Hyclate Foam*. NCI Thesaurus. Code C118369.

A foam-based formulation composed of the hyclate salt form of doxycycline, a synthetic, broad-spectrum tetracycline antibiotic, with antimicrobial activity. Upon topical application of the foam, 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. This may prevent both the bacterial infections and the subsequent infections and pain associated with epidermal growth factor receptor inhibitor (EGFRI)-induced acne-like rash.