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# Hetacillin

National Cancer Institute

## Source

National Cancer Institute. *Hetacillin*. NCI Thesaurus. Code C47555.

A semi-synthetic penicillin compound with bactericidal properties. Hetacillin is a prodrug that is converted to ampicillin via esterases. Ampicillin binds to inactivated penicillin-binding proteins (PBPs) located on the inner membrane of the bacterial cell wall. PBPs, including transpeptidases, carboxypeptidases, and endopeptidases, participate in the terminal stages of assembling the bacterial cell wall and in reshaping the cell wall during growth and division. This results in the weakening of the bacterial cell wall and eventually causes cell lysis. (NCI05)