

[Open Peer Review on Qeios](#)

Ceftaroline Fosamil

National Cancer Institute

Source

National Cancer Institute. *Ceftaroline Fosamil*. NCI Thesaurus. Code C81034.

An N-phosphono prodrug of the fifth-generation cephalosporin derivative ceftaroline with antibacterial activity. Ceftaroline fosamil is hydrolyzed to the active form ceftaroline in vivo. Ceftaroline binds to and inactivates penicillin-binding proteins (PBPs) located on the inner membrane of the bacterial cell wall. PBPs are enzymes involved in the terminal stages of assembling the bacterial cell wall and in reshaping the cell wall during growth and division. Inactivation of PBPs interferes with the cross-linkage of peptidoglycan chains necessary for bacterial cell wall strength and rigidity. This results in the weakening of the bacterial cell wall and causes cell lysis.