Open Peer Review on Qeios

Amikacin Inhalation Solution

National Cancer Institute

Source

National Cancer Institute. <u>Amikacin Inhalation Solution</u>. NCI Thesaurus. Code C135613.

A solution for inhalation containing the aminoglycoside antibiotic amikacin, with antibacterial activity. Upon aerosolized administration using the Pulmonary Drug Delivery System (PDDS), amikacin irreversibly binds to the 30S ribosomal subunit of susceptible organisms, thereby interfering with the activity of the translation initiation complex, which leads to both the misreading of mRNA and the production of non-functional or toxic peptides, and prevents normal protein synthesis. This kills susceptible bacteria.