

# Antibiotics ( meningitis treatment )

MOA	All antibiotics used in Meningitis is <b>bactericidal</b>				
Drugs	Penicillin		Cephalosporin's 3rd generation.	Carbapenems	Vancomycin
	Penicillin G	Aminopenicillins ( Amoxicillin - Ampicillin )	Ceftazidime. Ceftriaxone.	Imipenem	
Spectrum	narrow	wide ( + and - )	*Gm -ve bacilli. *Anaerobes. *against P. aeruginosa. (Ceftazidime).	Wide	narrow ( only gram + )
ADR's	*Hypersensitivity (anaphylactic reaction) *diarrhea *High dose in renal failure ( <b>seizure</b> )		*Allergy <b>*Thrombophlebitis</b>	*Skin rash and reaction at the site of infusion *High dose in renal failure ( <b>seizure</b> )	<b>*Phlebitis</b> <b>*Histamine release &gt; red man syndrome</b>
Comination	-	<b>with B-lactamase inhibitors</b>	-	With dehydropeptidases inhibitor ( <b>cilastatin</b> )	*with 3rd generation <b>cephalosporins</b> for treatment of meningitis caused by <b>penicillin resistant pneumococci</b> . *With <b>ampicillin</b> or <b>ceftazidime</b> as an <b>initial therapy</b> for <b>immunocompromised</b> patients.
Others	Affected by b-lactemase		*IV only *Highly <b>resistant</b> to $\beta$ -lactamases.	<b>Resistant</b> to most $\beta$ lactamases	IV for treatment of meningitis