

# Kanamycin 25

**Kanamycin** is an antibiotic produced by **Alfasan** that specializes in the production of high quality injectable preparations, ointments, and tablets.

**Alfasan** using a high technology approach in order to comply with the good manufacturing practice (GMP) regulations.



**Kanamycin 2 % from Alfasan ....New Winning Move to control Bacterial infection**

## Composition

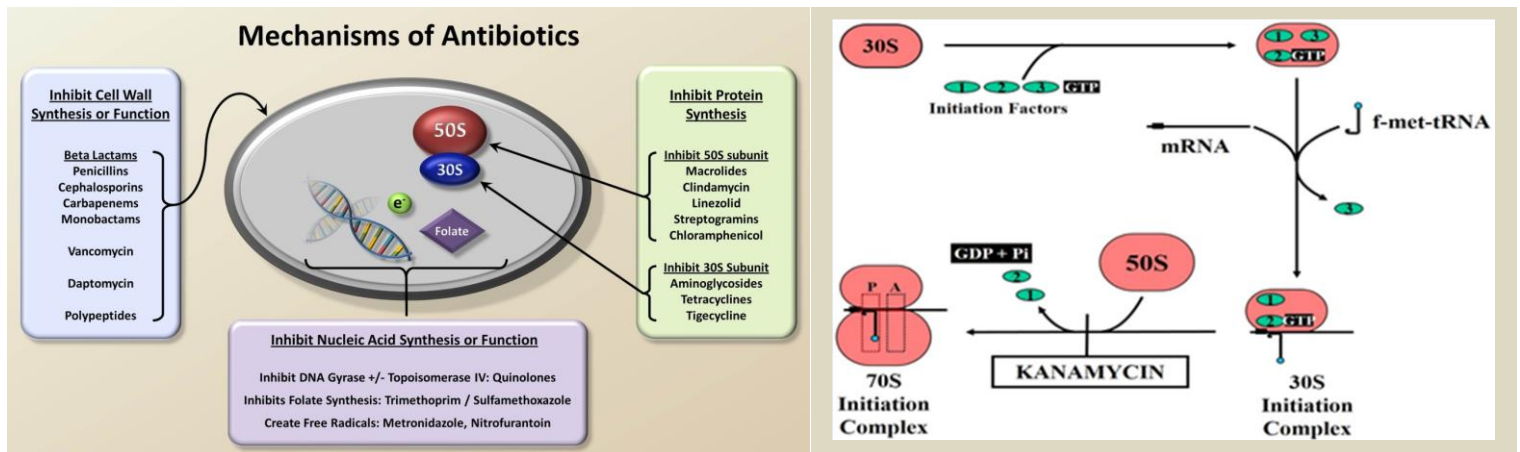
**Each ml contains:**  
**250 mg kanamycin (as sulphate)**

**Kanamycin molecule** is one of aminoglycoside antibiotic, available in, intravenous, and intramuscular forms, and used treatment of a wide variety of infections.

Antibiotics Groups		
<b>1. Penicillins</b>	<b>4. Aminoglycosides</b>	<b>7. Tetracyclines</b>
1. Narrow spectrum e.g. Penicillin-G 2. Semi-synthetic B-Lactamase resistance as Cloxacillin and Dicloxacillin 3. Broad Spectrum -Ampicillin -Amoxicillin.	-Streptomycin. -Neomycin. -Gentamicin. -Kanamycin.	Tetracycline. Oxytetracycline. Doxycycline.
<b>2. Cephalosporins</b>	<b>5. Aminocyclitol</b>	<b>8. Lincosamides</b>
-Cephradin. -Cefotaxime.	-Apramycin. -Spectinomycin.	-Lincomycin. -Clindamycin.
<b>3. Chloromphenicol</b>	<b>6. Macrolides</b>	<b>9. Polypeptides</b>
-Florfenicol.	-Tilmicosin. -Tylosin. -Spiramycin. -Erythromycin. -Tiamulin.	-Colistin (Polymexin E). -Bacitracin.

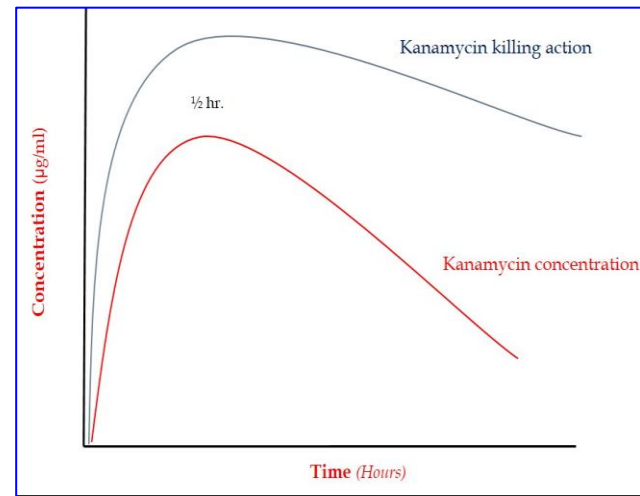
# Mode of Action

**Kanamycin** inhibits protein synthesis by irreversible binding to the 30s ribosom



# Pharmacokinetics

1. Rapid Absorption from IM injection.
2. Reach to plasma peak concentration after 30-60 min
3. Availability reach to >90%.
4. Continues to suppress bacterial growth several hours after fall in Minimum Inhibitory Concentration (MIC).
5. Excreted unchanged in urine
6. Withdrawal time 6 days only compared with others



Aminoglycosides

# Pharmacodynamics

## 1- Broad Spectrum

- Active against:-
  - ✓ Gram-positive (Corynebacterium, Staphylococcus)
  - ✓ Gram-negative bacteria, such as, Enterobacter, coli, Klebsiella, Proteus and Salmonella.

- 2- Kanamycin is bactericidal in low doses, so development of resistance is very slow.

Secondary infections in case of viral diseases.

- CRD, CCRD
- E. coli, Salmonella
- Coryza, Klebsiella
- Chylamidia, Staphylococcus



## Features of Kanamycin 25 %

- 1- **Kanamycin 25 %** Produced by Alfasan Holland
- 2- **Kanamycin 25 %** Registered in MOH (Ministry of Human Health)
- 2- **Kanamycin 25 %** the only Molecule in Egypt with concentration 25 %
- 3- **Kanamycin 25 %** of very low bacterial resistance
- 4- **Kanamycin 25 %** reach to Peak of serum level after 30 minute of I M Injection
- 5- **Kanamycin 25 %** of lowest withdrawal time within Aminoglycosides group

## Indications of Kanamycin 25 %

- 1- **Kanamycin 25 %** used for treatment of respiratory infections
- 2- **Kanamycin 25 %** is highly recommended in CRD.
- 3- **Kanamycin 25 %** effective treatment of salmonellosis
- 4- **Kanamycin 25 %** used for control secondary infections in viral disease

## Synergism and Antagonism

1. **Kanamycin 25 % Synergistic with:**  
Spiramycin, Cephalosporins, Lincomycin, Spectinomycin
2. **Kanamycin 25 % NOT used with:**  
Chloramphenicol, Sulphonamides

## Dosage and administration

Kanamycin 25 %: 15-25 mg/kg body weight / intramuscular

