

# Penicillin G

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# Mechanism of action

- Inhibits bacterial cell wall synthesis
- Antimicrobial spectrum
  1. Gram-negative
  2. Gram-positive

# Dosing information

- Dosage form
- Storage and stability
- Adult and pediatric dosage:
  1. Normal dose  
Oral,IV,IM
  2. Dosage in renal failure
  3. Dosage in hepatic failure
  4. Dosage adjustment during dialysis

# Pharmacokinetic

- Onset and duration
- Drug concentration levels

Time to peak conc.

- Administration :

## 1. Absorption:

Bioavailability

oral 65%-80%

I.M 72%

# Pharmacokinetic

## 2. Distribution

Protein binding : 65%

Volume of distribution : 33L

## 3. Metabolism

Liver , 30 %

## 4. Excretion

Breast milk

kidney

## 5. Half life: 20-50 minutes

# CAUTION

- Contraindication

History of anaphylaxis

Serum sickness

- Precaution

History of penicillin or cephalosporin hypersensitivity

- Pregnancy category : B

# Adverse reaction

- Blood
- Cardiovascular
- Central nervous system
- Endocrine
- Liver
- Kidney
- Gastrointestinal
- Respiratory
- SKIN

# Drug interaction

- Drug-drug combination
- Drug-food combination
- Drug-lab modification



# Therapeutic uses

- Actinomycosis
- Anthrax
- Arthritis
- Bacteremia
- Clostridia infection
- Empyema
- Endocarditis
- Gonorrhoea
- Syphilis

# Patient instruction

- When you should not use this medication?
- How to use and store this medication?
- Drug and food to avoid
- Warnings
- Side effects