

Prodrug: activated by mycobacterial enzyme.

Bactericidal: for rapidly dividing bacilli (killing the bacilli).

Bacteriostatic: for resting bacilli.

	Isoniazid (INH)	Rifampin	Ethambutol	Streptomycin	Pyrazinamide
Properties	<ul style="list-style-type: none"> ▪ <u>Prodrug</u> ▪ <u>Bactericidal</u>(rapidly dividing bacilli) ▪ <u>Bacteriostatic</u> (resting bacilli) هينا ذكرت لازم نعرف الطرق والحاله ▪ Effective against intracellular & extracellular bacilli 	<ul style="list-style-type: none"> ▪ <u>Bactericidal</u> ▪ Intracellular & Extracellular bacilli 	<ul style="list-style-type: none"> ▪ <u>Bacteriostatic</u> ▪ Intracellular & Extracellular bacilli 	<ul style="list-style-type: none"> ▪ <u>Bactericidal</u> ▪ Extracellular bacilli 	<ul style="list-style-type: none"> ▪ <u>Prodrug</u> ▪ <u>Bactericidal</u> ▪ Intracellular Bacilli
MOA	<u>Inhibits the synthesis of mycobacterial cell wall by inhibiting the synthesis of mycolic acid</u>	<u>Inhibits RNA synthesis</u> by binding to DNA dependent RNA polymerase enzyme هذي مره مهمه ركزت عليها انها مره تجي بالتفصيل	<u>Inhibits the synthesis of mycobacterial cell wall by inhibiting the synthesis of Arabinoglycan</u>	<u>Inhibitor of protein synthesis by binding to 30s ribosomal subunits</u>	UNKOWN
Uses	<ul style="list-style-type: none"> ▪ <u>Mycobacterial infections</u> ▪ <u>Latent tuberculosis</u> in patients with positive tuberculin skin test ▪ <u>Prophylaxis</u> against active TB in individuals who are in great risk 	<ul style="list-style-type: none"> ▪ <u>Mycobacterial infections</u> ▪ <u>Prophylaxis</u> of active tuberculosis ▪ <u>Treatment of serious staphylococcal infections</u> ▪ <u>Meningitis</u> by highly resistant penicillin pneumococci 	Treatment of <u>tuberculosis</u>	<u>Severe , life-threatening form of T.B. as meningitis, disseminated disease</u>	<ul style="list-style-type: none"> ▪ Mycobacterial infections mainly in resistance cases. ▪ Prophylaxis of TB
Adverse effects	<ul style="list-style-type: none"> ▪ Peripheral neuritis(common) ▪ Optic neuritis & atrophy (Pyridoxine should be given) ▪ Allergic reactions ▪ systemic lupus erythematosus (SLE) ▪ Hepatitis 	<ul style="list-style-type: none"> ▪ Harmless red-orange discoloration of body secretions(common) ▪ Hepatitis ▪ Flu-like syndrome ▪ Hemolytic anemia 	<ul style="list-style-type: none"> ▪ Optic neuritis causing loss of visual acuity ▪ Red-green color blindness (contraindicated in children under 5 years) ▪ Hyperuricemia 	<ul style="list-style-type: none"> ▪ Ototoxicity ▪ Nephrotoxicity ▪ Neuromuscular block 	<ul style="list-style-type: none"> ▪ Hepatotoxicity ▪ Hyperuricemia ▪ Drug fever & skin rash
Drug Interactions	<u>Inhibits</u> the hepatic microsomal enzymes, cytochrome P450	<u>Induces</u> the hepatic microsomal enzymes, cytochrome P450	-----	-----	-----