ANTIMYCOBACTERIAL AGENTS

- Antimycobacterial drugs are agents used for the treatment of parasitic diseases caused by mycobacteria.
- Mycobacterium characterised by nonmotile nonsporulating rods that resist decolorization with acidified organic solvents (acid fast bacteria).
- The pathogenic mycobacteria for man are Mycobacterium tuberculosis, the causative agent of tuberculosis (T.B.) and Mycobacterium leprae , the causative agent for leprosy.
- Mycobacterium other than M. tuberculosis and M. leprae, commonly known as "atypical mycobacteria". Atypical mycobacteria are saprophytic species that are widely distributed in soil and water. Such organisms are not normally considered particularly virulent or infectious.

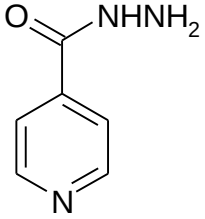
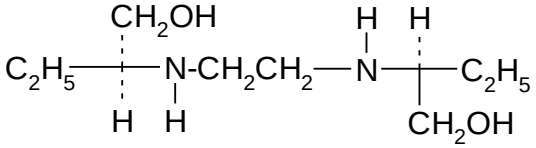
1) ANTITUBERCULOSIS DRUGS =>

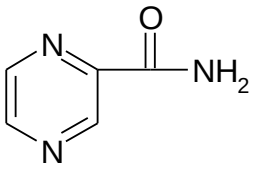
CLASSIFICATION

The drugs used in the treatment of tuberculosis can be divided into two major categories.

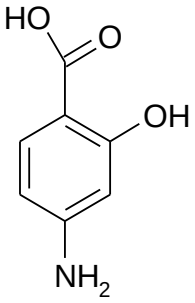
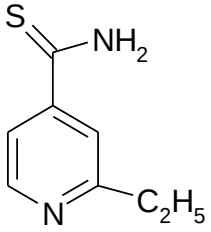
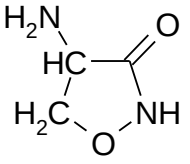
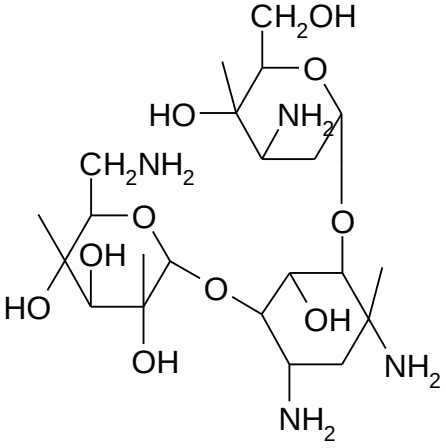
A)- **First line** => Highly effective bactericidal agents, with an acceptable degree of toxicity.

Example-

S.NO.	DRUG	STRUCTURES
1	ISONIAZID	
2	ETHAMBUTOL	
3	RIFAMPIN	
4	STREPTOMYCINE	

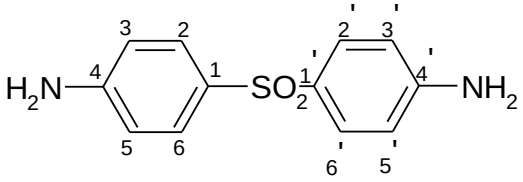
5	PYRAZINAMIDE	

B)- **SECOND LINE** => For microbial resistance. In second line agents for tuberculosis include the antibiotics cycloserine, kanamycine and capreomycine and the synthetic compounds ethionamide and *p*-aminosalicylic acid (PAS).

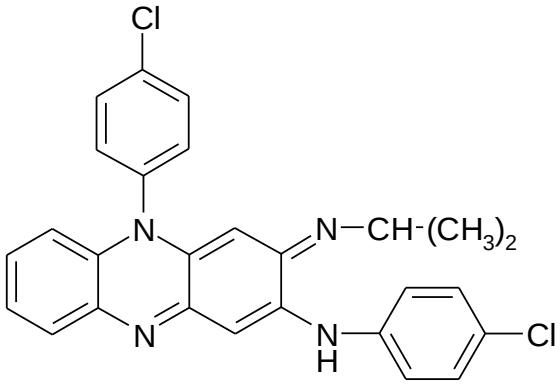
S.NO	DRUG	STRUCTURE
1	*P*-AMINOSALICYLIC ACID (PAS)	
2	ETHIONAMIDE	
3	CYCLOSERINE	
4	KANAMYCIN	

2)- **ANTILEPRAL AGENTS** =>

- SULFONES =>
  Example- Dapsone



- CLOFAZIMINE (Lamprene)



- THALIDOMIDE