# Anti-tuberculous Drugs

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## 1st Line Anti-TB drug

- **⇔ ISONIAZID (INH)**
- **RIFAMPICIN**
- **PYRAZINAMIDE**
- **ETHAMBUTOL**
- **STREPTOMYCIN**



- **Potent bactericidal**
- Metabolically active M. tuberculosis
- **♥INH**: Rate of elimination
  - ∴ N-acetyltransferease 2 gene (NAT2)
  - **⇔** Fast
  - **☆**Intermediate
  - ⇔Slow

### INH

#### PK at 1 month after anti-TB drugs\*

INH dose (mg/kg)	No. of children	Cmax mg/L
< 4	7	0.8 (0.7-2.2)
4-6	30	2.4 (1.6-3.4)
>6 to <8	2	5.9 (5.7-6)
8-12	15	5.7 (4.7-7.6)
>12	2	6.5 (5.9-7)
TOTAL	56	

\*McIlleron H, et al. CID 2009

## Rifampicin (RMP)

- Bactericidal
- **Active growing/ Slow growing**
- **⇔** Activate cytochrome P-450
  - **◇ ↓ NVP 20-58%**
  - **⇔ ↓** EFV 26%
  - **♦ U** Boosted PI 75%