

### IIIM-1132- BIOENHANCER LEAD

- Potent human Pgp inhibitor
- IP: Indian patent: 0525/2008
  
- Significantly enhance the PK of rifampicin (2.33 folds increase in Cmax and 1.62 folds increase in AUC of rifampicin).
- The compound has good solubility (>5 $\mu$ M) under different test conditions and good permeability (ER ratio = 1.40) in Caco-2 cell lines.
- No Cyp liabilities (Cyp 3A4 & Cyp 2D6) upto 10 $\mu$ M associated with the compound.
- Better efficacy in combination with rifampicin and isoniazid in mouse model of TB infection.

**End point:** The proposed formulation will be aimed at maintaining high peak plasma concentrations of rifampicin resulting in:

- Elimination of risk of emergence of MDRs
- Shortening the duration of treatment