WCK 771 – Predictive MRSA Eradication Through In Vitro Pharmacokinetic Model (IVPM) Based on Human PK


WOORKARD RESEARCH CENTRE, AURANGABAD, INDIA.

E-mail: wonmdcr@sancharnet.in

RESULTS & DISCUSSION

WCK 771-IVPM-MRSA XIII Kinetics at 2, 3 & 4 mg/kg

Fig. 1: Cmax- mg/kg, t1/2 – h, DOSE - BID

WCK 771-IVPM-MRSA Titration at 2, 3 & 4 mg/kg

Fig. 2: Cmax- mg/kg, t1/2 – h, DOSE - BID

WCK 771-IVPM-MRSA Titration at 2, 3 & 4 mg/kg

Fig. 3: Cmax- mg/kg, t1/2 – h, DOSE - BID

WCK 771-IVPM-MRSA Titration at 2, 3 & 4 mg/kg

Fig. 4: Cmax- mg/kg, t1/2 – h, DOSE - BID

Conclusions

- WCK 771 free Cmax of 4 mcg/ml and AUC of 53.37 mcg/ml, achieved in IVPM through 12 h BID dosing with 5 h half life, is adequate for MRSA eradication and prevention of emergence of resistant mutants.
- On the basis of our IVPM data, 600 mg dose resulted in MRSA MIC4, drug levels at 12 h.
- While the Phase I clinical trials, 600 mg dose would be adequate for the management of MRSA infections.

REFERENCES
