

**Results** The mean C<sub>max</sub> and AUC in the RBT 150 mg arm (C<sub>max</sub>=0.35±0.18 µg/mL, AUC(0–24)=3.94±2.1 µg.h/mL) were significantly lower (p=0.01) than those of the RBT 300 mg arm (C<sub>max</sub>=0.75±0.54 µg/mL AUC(0–24)=7.1±2.7 µg.h/mL). There was no significant difference in T<sub>max</sub> (T<sub>max</sub>=3.44±2.01 hours *vs* T<sub>max</sub>=3.86±2.04 hours) p=0.687. RBT follows linear kinetics and no significant differences were apparent in the mean oral clearance (CL/F) estimates (p=0.683), which were dose independent and similar for the 2 assessment doses. Five of 8 patients in RBT150 mg arm had a C<sub>max</sub> below plasma therapeutic limit (<0.3 µg/mL). All patients in RBT 300 mg arm had a higher C<sub>max</sub> than this limit. Also, at 48 hours of drug ingestion, all patients in the RBT 300 mg arm (8/8) had a mycobacterial minimum inhibitory concentration (MIC) above the limit (>0.06 µg/mL) compared with 4 of 8 patients in the RBT150 mg arm. The means C<sub>max</sub>, AUC (0–24) and T<sub>max</sub> of 25-O-desacetyl rifabutin of the RBT 300 mg arm were increased by 100% and 50% respectively compared to the RBT150 mg arm.

**Conclusions** This study confirmed that the dose of rifabutin 150 mg three times a week in combination with lopinavir/ritonavir is inadequate and could lead to the selection of rifamycin-resistant mycobacteria.

PA-067 **PHARMACOKINETICS OF RIFABUTIN IN COMBINATION WITH LOPINAVIR-RITONAVIR IN ADULT PATIENTS WITH HIV AND TUBERCULOSIS CO-INFECTION IN BURKINA FASO**

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**Background** This study aimed to assess the pharmacokinetic profile of rifabutin (RBT) given at 150 mg or 300 mg every other day (EOD) in tuberculosis (TB)-HIV co-infected adult patients.

**Methods** This is a pharmacokinetic prospective, pilot, open, randomised study of two doses of RBT in combination with lopinavir/ritonavir among HIV–TB patients in Burkina. Sixteen patients were randomised in two arms: TB treatment consisting HZE standard doses in association with RBT150 mg EOD (arm A, 8 patients) or RBT300 mg EOD (arm B, 8 patients) in combination with lopinavir/ritonavir. RBT plasma concentrations were evaluated after two weeks of combined HIV and TB treatment. Samples were collected at pre-dosing and at 1, 2, 3, 4, 6, 8 and 12 hours after drug ingestion to measure plasma drug concentration using HPLC–MS/MS assay.