Abstract# 3: *Evaluation of weekly dosing of isoniazid/rifapentine (3HP) for 3 months and 6-months of daily isoniazid regimen for tuberculosis prevention treatment.*

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The World Health Organization has estimated that two billion people – approximately one quarter of the world's population – are infected with latent tuberculosis infection (LTBI). TB preventive treatment (TPT) can reduce the risk of individuals developing TB disease by treating LTBI. TB is the number one killer of persons living with HIV (PLHIV); therefore, PLHIV have been prioritized to receive TPT in Zimbabwe. Patients have either received a daily course of isoniazid for 6 months or a weekly course of rifapentine with isoniazid for 3 months. This study was conducted to evaluate completion rates for these 2 different TPT modalities.

- To compare the completion rates of HIV infected patients taking 3HP and 6H for TPT.
- To determine adverse drug reactions leading to treatment discontinuation of each regimen.

This was a retrospective cohort study which was conducted at Newlands Clinic, Harare, Zimbabwe. In this study patients were either receiving 6 months of daily isoniazid (6H) or 3 months of weekly rifapentine/isoniazid (3HP) for the treatment of LTBI. Data to be used was collected from electronic medical records after receiving approval from the Newlands Clinic and the Joint Research Ethics Committee (JREC/140/2021). A customized query was written in Microsoft SQL Server Management Studio to abstract data. Query outputs were saved in Microsoft Excel. Descriptive statistics are used to evaluate the data.

Results: A total of 500 patients received 3HP whilst a total of 1490 patients have ever received 6H. All patients were HIV infected. The median ages for patients receiving 3HP and 6H were 37 (IQR: 22-49) and 26 (IQR: 16-46) years of age respectively. One hundred and seventy-nine (35.7%) and 650 (43.6%) participants on 3HP and 6H respectively were male. Completion rates were 96.6% for 3HP and 89.1% for 6H. There were 17(3.4%) discontinuations in the 3HP arm with 8(1.6%) of them being as a result of an adverse effect (2 developed a rash, 2 developed nausea and vomiting, 1 developed facial oedema, 1 developed impaired renal function and 1 of the adverse effects was not documented) or drug-drug interaction. Of the 162 discontinuations in the 6H arm, 29(1.9%) were as a result of an adverse effect or drug interaction. Eight participants in the 6H arm were either lost to follow up, deceased or transferred out.

Conclusion: Completion rates were higher with 3HP compared to 6H. However the rates of adverse drug reactions between the 2 groups were comparable.