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Fatmawati Armawi <fatma47unair@gmail.com>
to apjtd, apjtd

Dear Prof. Dr. Jeffrey M Bethony,

Editor-in-Chief,

Asian Pacific Journal of Tropical Disease

Please find enclosed the manuscript: "Optimal control of HIV resistance and tuberculosis co-infection using treatment i
"Asian Pacific Journal of Tropical Disease (APJTD)" for consideration of publication.

In the manuscript, we present a mathematical model of co-infection HIV and tuberculosis (TB) considering the resista
model also includes anti-TB and ARV treatments as the system control variables. We consider the sensitive and resis
without controls, we investigated the existence and stability of equilibria based on three basic reproduction numbers c
diseases. We also do sensitivity analysis to determine the dominant factor controlling the spread. Then, the optimal contr
Principle on the model to achieve the goal of minimizing the infected population. The numerical simulation of the opt
results.

I believe that our findings would be interest to the readers of the journal because of APJTD which aims to establish an i
for researchers of tropical medicine and public health workers, especially those of the Asian Pacific region and worldw
research to prevent and control the prevalence of global tropical disease.

I certify that the submission is an original work and is not under review by other publications.