

Presented as: Oral Presentation

51-OP-22-PM

Impacts of Early and Delayed Antiretroviral Therapy (ART) in TB-HIV Patients: A Literature Review

Dian Natasya Raharjo^{1,2*}, Stefannie Sherine Santoso², Mariana Wahyudi³,
Ratu Ayu Dewi Sartika⁴, Retnosari Andrajati¹

¹*Department of Clinical Pharmacy, Faculty of Pharmacy, Universitas Indonesia, Depok, 16424, Indonesia;*

²*Department of Clinical and Community Pharmacy, Faculty of Pharmacy, Universitas Surabaya, Jalan Raya Kalirungkut, Surabaya, 60293, Indonesia;*

³*Department of Purification and Molecular Biology, Faculty of Biotechnology, Universitas Surabaya, Jalan Raya Kalirungkut, Surabaya, 60293, Indonesia;*

⁴*Department of Public Health Nutrition, Faculty of Public Health, Universitas Indonesia, Depok, 16424, Indonesia*

*Corresponding author: natasya@staff.ubaya.ac.id

Indonesia is one of the countries with a high burden of TB-HIV. Only about 42% of TB-HIV co-infection patients are receiving antiretroviral therapy (ART). Delayed treatment of ART is one of the factors that responsible for this low usage of ART. However, early treatment of ART in these patients is remains risky due to high potential of drug-drug interactions and Immune Reconstitution Inflammatory Syndrome (IRIS) side effects when combining with anti-TB drug. On the other hand, delaying ART treatment can increase the progression of disease and the death risk. In this study, a literature review were conducted by comparing the early ART (≤ 4 weeks after presenting anti-tuberculosis therapy) to the delayed ART (≥ 8 weeks after giving anti-tuberculosis therapy) in TB-HIV patients. For systematic electronic data search, PubMed and Science Direct databases were used to obtain the data. In our study, the results indicated that early treatment of ART did not show a significant difference in the incidence of mortality compared with the delayed ART group. However, the early ART group had a significantly higher risk of experiencing an IRIS event, especially in patients with a CD4 count <50 / mm³. In conclusion, delayed treatment of ART in TB-HIV patients is preferred strategy compared to early treatment. Higher incidence of IRIS event is one of the main considered factors to decided the timing of ART treatment in TB-HIV patients.

Keywords: antiretroviral therapy, effectiveness, initiation time, TB-HIV co-infection