# AHEAD OF THE CURVE? USE OF DUAL ANTIRETROVIRAL THERAPY IN CLINICAL PRACTICE

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**Background:** Therapeutic choices for HIV have continually evolved over time; triple therapy being the mainstay of antiretroviral treatment (ART) for many years. Recently, ART choices have become safer, more efficacious and simpler to use, prompting the use of less conventional regimens, including dual therapy. International guidelines have evolved, endorsing dual therapy in specific circumstances, including people living with HIV (PLHIV) who are virologically stable wishing to simplify therapy.

**Methods:** This retrospective study at a large Melbourne teaching hospital used pharmacy dispensing to identify PLHIV receiving dual ART. Hospital electronic records were utilised to describe patient characteristics. The study describes the proportion of all PLHIV on ART taking dual therapy, their characteristics and outcomes. In addition, adherence to the US Department of Health and Human Services (US DHHS) guidelines (utilised in Australia) at time of switch to dual ART was assessed.

**Results:** In 2017, 3.2% of PLHIV outpatients received dual ART (29 of 908 patients); dual therapy commenced between 2010 and 2017. Median age was 53yrs, 72% were male. Patients were all treatment experienced (median 21 years since diagnosis), 13 (45%) had documented history of HIV drug resistance, 3 (10%) had detectable viral load pre-switch (range: 34-150copies/mL). Two re-initiated ART as dual therapy after a treatment break. Twenty-one (72%) were receiving a boosted protease inhibitor plus integrase inhibitor, three (10%) were receiving rilpivirine and dolutegravir, and two (7%) lamivudine and dolutegravir. Reasons for dual therapy included side-effect avoidance in 11 (38%) and simplification in 9 (31%). All but one patient switched prior to US DHHS recommendations. All were virologically suppressed at 6-months post switch.

**Conclusion:** Dual therapy has been utilised in a small proportion of treatment-experienced patients. These regimens may be used successfully in selected individuals that do not reflect the trial populations that led to their recommendation in treatment guidelines.

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