

HIV PRE-EXPOSURE PROPHYLAXIS (PREP) UPTAKE, ADHERENCE, HIV INCIDENCE, AND STI POSITIVITY IN WESTERN AUSTRALIA: PRIMARY RESULTS FROM THE PREPIT-WA TRIAL

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Background: Pre-exposure prophylaxis (PrEP) is recommended as an additional HIV prevention strategy for individuals at high risk of HIV in Australia. PrEPIT-WA was an open-label implementation study conducted at four sites in Western Australia (WA) to allow individuals at high risk of HIV to access oral TDF/FTC-based PrEP prior to public subsidy.

Methods: We describe the impact of PrEP roll-out through the PrEPIT-WA trial. We report demographic characteristics, HIV incidence, and STI positivity. Medication possession ratio (MPR) was calculated as the total number of pills dispensed divided by time on the study (until 31 January 2019).

Results: A total of 901 individuals were enrolled between November 2017 and September 2018. Participants were predominately male (98%), and 91% identified as gay/homosexual. The median age was 37 years (interquartile range (IQR) 28-44). Three-fifths (61%) of participants were Australian-born, and 97% resided in metropolitan Perth. Most (n=861; 96%) participants reported condomless anal intercourse with casual partners (CLAIC) in the three months prior to enrolment. Among individuals who had STI test results available at baseline (n=672), 8.9%, 7.3%, and 0.8% of participants tested positive for chlamydia, gonorrhoea, and infectious syphilis, respectively. By 30 April 2019, only one HIV seroconversion had been reported, giving an incidence of 0.096/100 person-years (95%CI 0.013-0.680). PrEP use was determined as inconsistent in this case. The median MPR was 99.6% (IQR 78.3-100.0), indicating that most participants had sufficient drug to ensure daily PrEP dosing throughout the study.

Conclusion: PrEPIT-WA enrolled participants at high risk of HIV, evidenced by high rates of condomless intercourse with casual partners and STI positivity reported at baseline. Adherence to PrEP remained high throughout study follow-up. HIV incidence of about 1/1000 person-years was extremely low. These data demonstrate that population-based PrEP provision is an important part of the HIV prevention response in WA.

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