

## **HIV pre-exposure prophylaxis (PrEP) uptake, HIV incidence, adherence, and STI positivity among a cohort of Medicare-ineligible people: Primary results from the MI-EPIC study**

Vaccher S<sup>1</sup>, Vickers T<sup>1</sup>, Amin J<sup>2</sup>, Carmody C<sup>3</sup>, Ooi C<sup>4</sup>, McAllister J<sup>5</sup>, Brown K<sup>6</sup>, Yeung B<sup>1</sup>, Guy R<sup>1</sup>, Jin F<sup>1</sup>, Grulich AE<sup>1</sup>, Bavinton BR<sup>1</sup>, on behalf of the Expanded PrEP Implementation in Communities New South Wales (EPIC-NSW) research group

<sup>1</sup> The Kirby Institute, UNSW Sydney, Australia

<sup>2</sup> Macquarie University, Sydney, Australia

<sup>3</sup> Liverpool Sexual Health Service, Sydney, Australia

<sup>4</sup> Clinic 16, St Leonard's, Sydney, Australia

<sup>5</sup> St Vincent's Hospital, Sydney, Australia

<sup>6</sup> Illawarra Shoalhaven Sexual Health Service, Sydney, Australia

### **Background:**

Pre-exposure prophylaxis (PrEP) is an effective HIV prevention strategy, but cost may be prohibitive for individuals without access to Medicare. MI-EPIC was an open-label study conducted at six NSW clinics to allow Medicare-ineligible individuals at high risk of HIV to access oral TDF/FTC-based PrEP at no cost.

### **Methods:**

Demographic characteristics, sexual behaviours, and STI positivity at baseline are summarised. HIV incidence and adherence based on medication possession ratio (MPR) were calculated up to 30 April 2020. MPR was calculated as the total number of pills dispensed divided by days on the study.

### **Results:**

Between July 2019-April 2020, 221 individuals were enrolled. Most participants were male (93%), 6% were trans women, and 89% identified as gay/homosexual. Median age was 29 years IQR=26-32. 53% of participants were born in Asia, and 47% resided in suburbs where <5% of men identify as gay. Most (n=214; 97%) participants reported condomless anal intercourse with casual partners in the three months prior to enrolment; only 5 participants (2.3%) reported injecting drug use. STI test results were available for 213 participants. Baseline prevalence was 13.8%, 6.2%, and 0.9% for chlamydia, gonorrhoea, and infectious syphilis, respectively. Median MPR was 100% (IQR=83.3-100.0); >80% had MPR equivalent to 4 pills/week, indicating most participants had sufficient drug to be protected by PrEP throughout the study. One HIV seroconversion was reported during study follow-up. The individual was not using PrEP consistently at the time of seroconversion.

### **Conclusion:**

MI-EPIC was the first study to follow a Medicare-ineligible cohort taking PrEP. It was well-targeted, with high baseline HIV risk. Participants maintained high adherence throughout, and the only HIV seroconversion was related to poor adherence. These data demonstrate the importance of PrEP provision to individuals living in Australia

who are at high risk of HIV, but potentially vulnerable without ready access to affordable PrEP.

**Disclosure of Interest Statement:**

The MI-EPIC study is funded by the NSW Ministry of Health. The Kirby Institute is funded by the Australian Government Department of Health. The views expressed in this publication do not necessarily represent the position of these organisations.