

# USE OF DOXYCYCLINE PROPHYLAXIS AGAINST STI AMONG GAY AND BISEXUAL MEN TAKING PRE-EXPOSURE PROPHYLAXIS

**Authors:** Chow EPF<sup>1,2</sup>, Fairley CK<sup>1,2</sup>

<sup>1</sup> Melbourne Sexual Health Centre, Alfred Health, Melbourne, Victoria, Australia

<sup>2</sup> Central Clinical School, Monash University, Melbourne, Victoria, Australia

**Background:** Two trials have shown the use of doxycycline prophylaxis could prevent sexually transmitted infections such as chlamydia and syphilis among men who have sex with men (MSM) but its use is controversial because of concerns about the potential to increase antimicrobial resistance. This study aimed to estimate the proportion of MSM who used doxycycline prophylaxis and the related factors.

**Methods:** MSM who taking pre-exposure prophylaxis for HIV (PrEP) attended the Melbourne Sexual Health Centre between June and November 2018 were invited to complete a question on whether they had taken doxycycline to prevent STI in the past month. Demographic characteristics and sexual behavioural data were also collected as part of routine STI care. Multivariable logistic regression with generalised estimating equations was used to identify the factors associated with the use of doxycycline prophylaxis for STI.

**Results:** There were 1,686 men reported taking PrEP during the study period and 1,065 (63%) completed the additional question on doxycycline. Of those, 105 men (9.9%; 95% CI: 8.1 to 11.8%) used doxycycline prophylaxis in the past month. Multivariable analysis showed that men who injected drugs in the last 3 months had higher odds of using doxycycline prophylaxis (aOR 3.26; 95% CI: 1.50 to 7.08) compared to those who did not inject drugs. Use of doxycycline prophylaxis was not associated with demographic characteristics (age and country of birth) and sexual behaviours (number of casual partners and condomless anal sex in the last 3 months).

**Conclusion:** About one in ten MSM taking PrEP who also use doxycycline prophylaxis to prevent STI. This is the first estimate among Australian MSM and it is similar to the data from London showing 8% of MSM taking doxycycline prophylaxis in a sample of 106 MSM. Use of doxycycline prophylaxis is associated with drug use behaviours but not sexual behaviours.

**Disclosure of Interest Statement:** All other authors have no conflicts of interest to declare.