

# COVID-19 VACCINE ACCEPTABILITY AMONG PEOPLE LIVING WITH HIV (PLHIV) AND HIV-NEGATIVE PRE-EXPOSURE PROPHYLAXIS (PREP) USERS

## Authors:

Murphy DA<sup>1</sup>, Lewin SR<sup>1,2</sup>, Cornelisse V<sup>1</sup>, Lee SJ<sup>1,3</sup>, Price B<sup>1</sup>, Audsley J<sup>2</sup>, Rule J<sup>4</sup>, Batrouney C<sup>5</sup>, Stoové M<sup>6</sup>, McMahon J<sup>1,3</sup>, Griffin D<sup>1</sup>, Moso M<sup>1</sup>, Hoy J<sup>1,3</sup>, King B<sup>7</sup>, Wright EJ<sup>1,2,3,6</sup>

<sup>1</sup> Department of Infectious Diseases, Alfred Hospital, <sup>2</sup> Department of Infectious Diseases, The Peter Doherty Institute for Infection and Immunity, University of Melbourne, <sup>3</sup> Central Clinical School, Monash University, <sup>4</sup> National Association of People Living With HIV Australia, <sup>5</sup> Thorne Harbour Health, <sup>6</sup> Burnet Institute, <sup>7</sup> Melbourne Centre for Behaviour Change, University of Melbourne

**Background:** COVID-19 vaccine acceptability in Australian PLHIV is unknown. In 2021, during Australia's COVID-19 vaccine rollout, we surveyed PLHIV and HIV-negative pre-exposure prophylaxis (PrEP) users to evaluate their likelihood of receiving a COVID-19 vaccine.

**Methods:** PLHIV and current/previous PrEP users (comparison group) were recruited into a national online (REDCap) survey. We report findings from an interim analysis (13 Mar 2021 – 29 April 2021). Data collected included demographics, health status, COVID-19 vaccination history and intentions, and attitudes towards COVID-19 vaccines. Preliminary comparisons were assessed using a chi-squared, or Fisher's exact test.

**Results:** 681 respondents (211 PLHIV; 470 PrEP users) were analysed. PLHIV were older than PrEP users (median 48 [range: 19–82] vs. 41.5 years [range: 20–76]) and more PLHIV reported having at least one chronic health condition (36.5% vs. 22.1%,  $p < 0.001$ ). PLHIV reported a lower median number (IQR) of sex partners in the past 6 months (2 [0, 10] vs. 5 [2, 15],  $p = 0.0001$ ). 19.6% of PLHIV reported receipt of at least one COVID-19 vaccine dose vs. 5.7% of PrEP users ( $p < 0.001$ ), but fewer unvaccinated PLHIV reported that they were likely to get vaccinated (81% vs. 91%,  $p = 0.005$ ). PLHIV were more worried about acquiring COVID-19 (51.8% vs. 39.6%,  $p = 0.014$ ), were less likely to agree that COVID-19 would be a mild illness (15.5% vs. 33.8%,  $p < 0.001$ ), were more worried about vaccine side effects (42.8% vs. 27.9%,  $p = 0.001$ ), and were less likely to trust in government handling of COVID-19 (47.2% vs. 66.6%,  $p < 0.001$ ).

**Conclusion:** Both PLWHIV and PrEP users are highly likely to be vaccinated against COVID-19, however likelihood is significantly higher in PrEP users. Although PLWHIV were more concerned about acquisition and severity of COVID-19, they were also more worried about COVID-19 vaccine safety.

## Disclosure of Interest Statement:

No pharmaceutical grants were received in the development of this study.