The usability and acceptability of both oral fluid- and blood-based HIV self-test kits is high among users, but access to the kits should be expanded, according to the authors of research published today by the *Medical Journal of Australia*.

Stigmatization, the stress of waiting for results, and costs are barriers to HIV testing that can largely be overcome by self-testing, but restrictions on availability have limited its uptake in Australia so far, wrote the authors, led by Dr. Dana Lee and Associate Professor Jason Ong from Monash University's Central Clinical School.

Lee, Ong and colleagues compare the usability and acceptability of oral fluid- and blood-based HIV self-test kits among 170 gay, bisexual, and other men who have sex with men aged 18 years or older who attended two metropolitan sexual health clinics in Sydney and Melbourne between 7 January—10 December 2019.

"Participants were more likely to report the oral fluid HIV self-test was easy to use than the blood-based self-test (oral fluid, 99%; blood, 86%)," they reported.

"The oral fluid test was preferred by 98 participants (58%), the blood-based test by 69 (41%). Difficulties with the oral fluid test kit identified by observing nurses included problems placing the buffer solution into the stand (40 of 170 participants, 24%) and not swabbing both gums (23 of 169, 14%); difficulties with the blood-based test kit included problems filling the device test channel (69 of 170, 41%) and squeezing the finger firmly enough to generate a blood drop (42 of 170, 25%)."

"No participant received an invalid result with the oral fluid self-test; two of 162 participants (1%) received invalid results with the blood self-test.

"After adjusting for age, education level, and ethnic background, characteristics associated with higher odds of using HIV self-testing in the future were overseas birth, and self-evaluated ease of use and confidence in using the kits."

The manufacturer of the oral fluid HIV test reports its sensitivity as 99.3% and specificity as 99.8%; the manufacturer of the blood HIV self-test reports 99.6% sensitivity and 99.6% specificity.

"In November 2018, the Therapeutic Goods Administration (TGA) approved a blood-based HIV self-test, the first for an infectious disease approved in Australia," wrote Lee, Ong and colleagues.

"However, no oral fluid HIV self-test has yet been approved, reducing choice for Australian men. Uptake of HIV self-testing has been limited; in surveys of the Sydney gay community during 2019 and 2020, fewer than 1% of HIV-negative participants reported that their most recent HIV test had been a self-test."
"Online access makes HIV testing more available, particularly to people living in rural and remote areas. However, access to HIV self-test kits from a range of locations, as is the case overseas, is preferable; informed by the findings from our study, the requirement to watch the video has been lifted, and the blood-based kits are now available from pharmacies in Australia. Nine of ten participants in our sample completed all steps without the video, and that 98.8% received valid test results."

Lee, Ong and colleagues emphasized the importance of TGA approval for an oral fluid-based HIV self-test kit.

"The oral fluid-based HIV self-test was regarded by participants as easier to use, and was preferred by a larger proportion of men than the blood-based self-test, but the usability and acceptability of both kits were high," they concluded.

"Despite the very low proportion of invalid test results, further refinements to make HIV self-testing easier and more reliable are important."