

**Supplementary Table 1 Reasons for exclusion of studies (Preferred Reporting Items for Systematic Reviews and Meta-Analyses 16B)**

Author	Summary of the excluded studies
Merchant <i>et al</i> <sup>[1]</sup> (2018)	This article was excluded because it focused on preferences for oral fluid rapid HIV self-testing among social media-using young black, Hispanic, and white men-who-have-sex-with-men (YMSM) compared to other currently available HIV testing options, rather than comparing preferences between oral and blood-based HIVST among actual users, which is the focus of the inclusion criteria.
Luo <i>et al</i> <sup>[2]</sup> 2013	This article was excluded because it focused on the comparison of HIV oral fluid and plasma antibody results during early infection in a longitudinal Nigerian cohort, rather than evaluating user preferences for oral versus blood-based HIV self-testing among actual users as specified in the inclusion criteria.
Balan <i>et al</i> <sup>[3]</sup> 2020	The article does not provide a clear comparison between oral and blood-based HIV self-testing preferences, which is required by the inclusion criteria. This article was excluded because it does not focus on the preferences of oral- versus blood-based HIV self-testing among actual users. Instead, it investigates the acceptability of blood-based testing in relation to oral swabs if other sexually transmitted infections (STIs) can be detected, which does not meet the specific inclusion criteria.
Frye <i>et al</i> <sup>[4]</sup> 2015	Instead, the study explores preferences for various HIV test characteristics, including newer options such as mobile unit testing, one-minute testing, at-home or self-testing, and

	couples HIV testing and counseling among young Black MSM and transgender women.
Tan <i>et al</i> <sup>[5]</sup> 2021	This article is excluded because it focuses on perceptions of HIV self-testing (HIVST) among heterosexual men and does not compare oral versus blood-based HIVST. In addition, the article does not include actual users of oral and blood-based HIVST, which is one of the inclusion criteria.
Obieze-Umeh <i>et al</i> <sup>[6]</sup> 2021	This article is excluded because it focuses on the preferences for HIV self-testing among young people in Nigeria and does not compare oral versus blood-based HIVST. It also does not include actual users of oral and blood-based HIVST, which is one of the inclusion criteria.
Kelvin <i>et al</i> <sup>[7]</sup> 2016	This article is excluded because it discusses the acceptability and anticipated use of a self-administered at-home oral HIV test among South Africans, but does not compare oral versus blood-based HIV self-testing. In addition, the article does not include actual users of oral and blood-based HIVST, which is one of the inclusion criteria.
Indravudh <i>et al</i> <sup>[8]</sup> 2017	This article is excluded because it does not compare oral versus blood-based HIV self-testing (HIVST), one of the inclusion criteria. While it identifies young people's preferences for HIVST delivery in Malawi and Zimbabwe, it does not report on actual use of either oral or blood-based HIVST among the participants. HIVST preference was also measured qualitatively

Kelvin <i>et al</i> <sup>[9]</sup> 2018	The study includes comparison of HIV test uptake between provider-administered rapid blood HIV test and a self-administered oral rapid HIV test with provider supervision in the clinic, as well as offering test kits for home use.
Miners <i>et al</i> <sup>[10]</sup> 2019	The article was excluded from the PRISMA 16B appendix because it does not focus on the preferences of oral- versus blood-based HIV self-testing among actual users. Instead, it examines how different HIV testing characteristics affect the choice of testing options, including remote testing, among men who have sex with men (MSM) in the United Kingdom, using an online questionnaire-based discrete choice experiment. Therefore, it does not meet the inclusion criteria of the review

HIVST: HIV self-testing; PRISMA: Preferred Reporting Items for Systematic Reviews and Meta-Analyses.

## References

- 1 **Merchant RC**, Clark MA, Liu T, Rosenberger JG, Romanoff J, Bauermeister J, Mayer KH. Preferences for oral fluid rapid HIV self-testing among social media-using young black, Hispanic, and white men-who-have-sex-with-men (YMSM): implications for future interventions. *Public Health* 2017; **145**: 7-19 [PMID: 28359394 DOI: 10.1016/j.puhe.2016.12.002]
- 2 **Luo W**, Masciotra S, Delaney KP, Charurat M, Croxton T, Constantine N, Blattner W, Wesolowski L, Owen SM. Comparison of HIV oral fluid and plasma antibody results during early infection in a longitudinal Nigerian cohort. *J Clin Virol* 2013; **58** Suppl 1: e113-e118 [PMID: 24342470 DOI: 10.1016/j.jcv.2013.08.017]
- 3 **Balán IC**, Lopez-Rios J, Nayak S, Lentz C, Arumugam S, Kutner B, Dolezal C, Macar OU, Pabari T, Wang Ying A, Okrah M, Sia SK. SMARTtest: A Smartphone App to Facilitate HIV and Syphilis Self- and Partner-Testing, Interpretation of Results, and Linkage to Care. *AIDS Behav* 2020; **24**: 1560-1573 [PMID: 31679075 DOI: 10.1007/s10461-019-02718-y]
- 4 **Frye V**, Wilton L, Hirshfield S, Chiasson MA, Usher D, Lucy D, McCrossin J, Greene E, Koblin B; All About Me Study Team. "Just Because It's Out There, People Aren't Going to Use It." HIV Self-Testing Among Young, Black MSM, and Transgender Women. *AIDS Patient Care STDS* 2015; **29**: 617-624 [PMID: 26376029 DOI: 10.1089/apc.2015.0100]
- 5 **Tan YR**, Kaur N, Ye AJ, Zhang Y, Lim JXZ, Tan RKJ, Ho LP, Chen MI, Wong ML, Wong CS, Yap P. Perceptions of an HIV self-testing intervention and its potential role in addressing the barriers to HIV testing among at-risk heterosexual men: a qualitative analysis. *Sex Transm Infect* 2021; **97**: 514-520 [PMID: 33452131 DOI: 10.1136/sextrans-2020-054773]
- 6 **Obiezu-Umeh C**, Gbajabiamila T, Ezechi O, Nwaozuru U, Ong JJ, Idigbe I, Oladele D, Musa AZ, Uzoaru F, Airhihenbuwa C, Tucker JD, Iwelunmor J. Young people's preferences for HIV self-testing services in Nigeria: a qualitative analysis. *BMC Public Health* 21, 67 (2021) [DOI: 10.1186/s12889-020-10072-1]

7 **Kelvin EA**, George G, Mwai E, Kinyanjui S, Romo ML, Odhiambo JO, Oruko F, Nyaga E, Govender K, Mantell JE. A randomized controlled trial to increase HIV testing demand among female sex workers in Kenya through announcing the availability of HIV self-testing via text message. *AIDS Behav.* 2016;20(4):922-932.

8 **Indravudh PP**, Sibanda EL, d'Elbée M, Kumwenda MK, Ringwald B, Maringwa G, Simwinga M, Nyirenda LJ, Johnson CC, Hatzold K, Terris-Prestholt F, Taegtmeier M. 'I will choose when to test, where I want to test': investigating young people's preferences for HIV self-testing in Malawi and Zimbabwe. *AIDS* 2017; **31** Suppl 3: S203-S212 [PMID: 28665878 DOI: 10.1097/QAD.0000000000001516]

9 **Kelvin EA**, Akasreku B. The Evidence for HIV Self-Testing to Increase HIV Testing Rates and the Implementation Challenges that Remain. *Curr HIV/AIDS Rep* 2020; **17**: 281-289 [PMID: 32519185 DOI: 10.1007/s11904-020-00504-3]

10 **Miners A**, Nadarzynski T, Witzel C, Phillips AN, Cambiano V, Rodger AJ, Llewellyn CD. Preferences for HIV testing services among men who have sex with men in the UK: A discrete choice experiment. *PLoS Med* 2019; **16**: e1002779 [PMID: 30973868 DOI: 10.1371/journal.pmed.1002779]