

HTLV seroprevalence among HIV PrEP users in England

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Background:

We sought to measure HTLV-1 and HTLV-2 seroprevalence amongst PrEP-users in England, almost all of whom are gay men.

Methods:

An unlinked anonymous (UA) HTLV seroprevalence surveillance study was undertaken on leftover serum samples following HIV or syphilis tests taken for routine PrEP monitoring, from 09/2019-11/2021, in six London and regional clinics. Demographic and clinical data were linked to each specimen prior to deletion of identifying information. Specimens were pooled into pools of 5, previous studies having shown no loss of sensitivity for HTLV-1/2 antibody detection. Testing was with the Abbott Architect, with indeterminate or reactive results confirmed by western blot. Based on the proportion of PrEP-users in England from HTLV endemic countries (~9%), a sample size of 1500 and overall HTLV prevalence of 0% in those born in non-endemic countries, this would give a 95%CI of 0-0.27% around this prevalence.

Results:

UA samples were matched to 1398 individuals: 95.9% male; 75.6% white, 11.3% mixed/other; 7.0% Asian, 6.1% black ethnicity; 57.0% 30-49 years, 30.7% <30 years, 12.3% 50+ years old. Region of birth was: UK 56.1%, rest of Europe 22.7%, Latin America 5.3%, Asia 5.0%, Sub Saharan Africa 2.9%, Australasia 2.7%, North Africa / Middle East 2.7%, North America 2.0%, Caribbean 0.6%. Overall, 9.5% were born in an HTLV endemic country. Prior syphilis had been diagnosed in 10.3% and a bacterial STI (gonorrhoea, chlamydia or syphilis) in the previous year in 43.9%

All specimens were HTLV antibody negative giving a seroprevalence of 0%(95%CI 0-0.26%).

Conclusion:

No HTLV infections were identified in this PrEP-using population at high bacterial STI risk, likely reflecting the small proportion born in an HTLV endemic country and absence so far of sexual transmission. Our study should be repeated in several years' time, and in places with greater proportions of HIV-PrEP users from HTLV endemic countries.

Disclosure of Interest Statement:

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