

Research news in clinical context

Danielle Solomon ¹, Rayner Tan,^{2,3}
 Francesca Ceccherini-Silberstein ⁴, Weiming Tang,⁵ Monica Desai⁶

A CALL FOR IMPROVED SYPHILIS TESTING AND PREVENTION EFFORTS IN VULNERABLE POPULATIONS

Syphilis testing and incidence were reviewed among 8455 people living with HIV who were seen at four US clinical sites in 2014–2018. Over 29 568 person-years (py) of follow-up, testing rates were 118/100 py; 57% were tested at least every 12 months, increasing to 68% among men who have sex with men (MSM). Syphilis incidence (based on rapid plasma reagin patterns) was 4.7 cases/100 py overall. Rates were highest among younger MSM, transgender women, those who injected drugs, Hispanic people and those with detectable HIV RNA, rectal STIs or hepatitis C. The findings identify subpopulations among people living with HIV who should be prioritised for syphilis testing and interventions for syphilis prevention.

Menza TW, Berry SA, Dombrowski J, *et al.* Syphilis testing and diagnosis among people with HIV engaged in care at four United States clinical sites, 2014–2018. *Clin Infect Dis* 2021. Epub ahead of print.

ASSISTED PARTNER NOTIFICATION HELPS INCREASE HIV TESTING AMONG SEXUAL CONTACTS

Assisted partner notification—when providers help people living with HIV to inform sexual partners of the HIV diagnosis—offers the potential to increase early HIV detection among those at risk. A clinical trial in China randomised 187 newly HIV diagnosed MSM to either assisted (n=97) or passive (n=90) partner notification. The assisted notification group was offered a choice between HIV self-testing kits to give to contacts or anonymous community healthcare worker outreach to contacts. Rates of partner

notification within 3 months were similar in the two groups (58% vs 57% for assisted vs passive notification). However, HIV testing among sexual partners of index cases increased significantly in the assisted notification group (35% vs 17%). Assisted partner notification is a promising strategy for increasing HIV testing among contacts of newly diagnosed MSM.

Hu QH, Qian HZ, Li JM, Leuba SI, *et al.* Assisted partner notification and uptake of HIV testing among men who have sex with men: A randomised controlled trial in China. *Lancet Reg Health West Pac* 2021. Epub ahead of print.

A COMPREHENSIVE PICTURE OF ANAL HPV INFECTION TO GUIDE ANAL CANCER PREVENTION IN MEN

A systematic review and meta-analysis evaluated the age-specific prevalence of anal HPV and high-grade squamous intraepithelial lesions (HSIL) in men, stratified by HIV status and sexuality. Among 29 900 men from 64 studies, prevalence of HPV16 and other high-risk HPV types was lowest in HIV-negative heterosexual men, followed by HIV-positive heterosexual men and HIV-negative MSM and was highest in HIV-positive MSM. Prevalence of anal HPV16 increased rapidly with age among MSM aged 15–24 years and was consistently high in MSM aged ≥25 years. Despite substantial heterogeneity in HSIL detection, HIV infection and HIV-related immunosuppression were significant predictors of anal HSIL. The findings highlight the importance of both primary prevention of HPV and HIV infection and secondary prevention of HPV-related anal cancer, particularly for high-risk populations.

Wei F, Gaisa MM, D'Souza G, *et al.* Epidemiology of anal human papillomavirus infection and high-grade squamous intraepithelial lesions in 29 900 men according to HIV status, sexuality, and age: a collaborative pooled analysis of 64 studies. *Lancet HIV* 2021;8:e531–43.

REMDESIVIR MODESTLY REDUCES EBOLA VIRUS RNA IN SEMEN

Among survivors, Ebola virus RNA may persist in semen for months or even years following acute infection and potentially result in sexual transmission.¹ Remdesivir

is a nucleotide analogue prodrug that distributes efficiently into the testes. A trial in Liberia and Guinea randomised 38 men to receive intravenous remdesivir (n=20) or matching placebo (n=18) for 5 days. Compared with the placebo arm, the treatment arm showed a higher mean assay negative rate (ie, lack of viral RNA detection in semen): 85% versus 76% over day 1–28 (p=0.27) and 96% versus 81% over month 2–6 (p=0.04). While a more extensive study is needed to validate these findings, potential applications of remdesivir in outbreak management may be limited by the need for intravenous infusion.

Higgs ES, Gayedyu-Dennis D, Fischer II WA, *et al.* PREVAIL IV: A randomised, double-blind, 2-phase, phase 2 trial of remdesivir vs placebo for reduction of Ebola virus RNA in the semen of male survivors. *Clin Infect Dis* 2021;73:1849–56.

PUBLISHED IN STI: THE EDITOR'S CHOICE: LONG-ACTING INJECTABLE REGIMENS FOR HIV TREATMENT ARE ACCEPTABLE TO BOTH PATIENTS AND CLINICIANS

Long-acting injectable regimens are a recent addition to antiretroviral treatment (ART) options. In a survey of 688 people living with HIV and 120 HIV physicians in Germany, Italy, the UK and France during 2019, 69% of people living with HIV expressed interest in trying the new regimens. Main perceived benefits included convenience when travelling (56%) and minimising transmission risk (50%); the predominant perceived disadvantage was the need to schedule frequent appointments to receive treatment (37%). Physicians were willing to offer long-acting ART if required, particularly to address significant side effects (88%–93%), privacy concerns (87%), suboptimal adherence (84%) and convenience (84%), although there was some concern about resource implications (58%). Overall, both groups viewed the new regimens as having the potential to address multiple unmet needs.

Akinwunmi B, Buchenberger D, Scherzer J, *et al.* Factors associated with interest in a long-acting HIV regimen: perspectives of people living with HIV and healthcare providers in four European countries. *Sex Transm Infect* 2021;97:566–73.

CHARACTERISTICS OF INCIDENT HIV INFECTIONS AMONG MEN USING CABOTEGRAVIR FOR PREP

In the HPTN083 trial of cabotegravir (CAB) versus TDF/FTC for HIV PreP, there have been 12 and 39 incident HIV

¹UCL Institute for Global Health, London, UK

²University of North Carolina Project-China, Guangzhou, Guangdong, China

³Saw Swee Hock School of Public Health, National University Singapore, Singapore

⁴Department of Experimental Medicine, University of Rome Tor Vergata, Roma, Italy

⁵Division of Infectious Diseases, Department of Medicine, University of North Carolina at Chapel Hill, North Carolina, USA

⁶MRC Clinical Trials Unit at UCL, London, UK

Correspondence to Dr Danielle Solomon, UCL Institute for Global Health, London, London, UK; danielle.solomon@ucl.ac.uk

infections documented, respectively. In the CAB arm, five infections occurred in the absence of CAB exposure, three during the oral lead-in phase (potentially before target drug concentrations were attained) and four during the injection phase (despite mostly on-time CAB injections and expected plasma concentrations). Diagnosis of HIV infection was delayed in 7/12 cases due to prolonged viral suppression and delayed antibody expression. The delay was more frequent and longer with CAB than TDF/FTC, leading to ongoing PrEP use among some participants with undetected infection and increasing risk of potential drug resistance.

Marzinke MA, Grinsztejn B, Fogel JM, *et al.* Characterization of human immunodeficiency virus (HIV) infection in cisgender men and transgender women who have sex with men receiving injectable cabotegravir for HIV prevention: HPTN 083. *J Infect Dis* 2021;224:1581–92.

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Twitter Danielle Solomon @df_solomon and Rayner Tan @raynerkjtan

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ORCID iDs

Danielle Solomon <http://orcid.org/0000-0003-4177-1832>

Francesca Ceccherini-Silberstein <http://orcid.org/0000-0002-6024-5101>

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