Clinical presentation of incident syphilis among men who have sex with men taking HIV Pre-Exposure Prophylaxis in Melbourne, Australia.

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Background
Current international guidelines on HIV Pre-Exposure Prophylaxis (PrEP) recommend serological screening for syphilis at routine 3-monthly PrEP appointments. The aim of our study was to describe the pattern of clinical presentation of syphilis among men who have sex with men (MSM) taking PrEP. We were interested in whether syphilis is detected through screening at scheduled 3-monthly PrEP clinic appointments or whether primary or secondary syphilis presented at unscheduled interval visits.

Methods
This was a retrospective study of MSM attending the PrEP clinic at the Melbourne Sexual Health Centre between February 2016 and March 2019. Serological screening for syphilis was routinely undertaken at 3-monthly PrEP clinic appointments. Diagnoses of early syphilis were identified from PrEP clinic visits and from interim walk-in STI clinic attendances.

Results
There were 69 cases of early syphilis among 62 MSM taking PrEP during the study period. There were 24 (35%) primary, 16 (23%) secondary and 29 (42%) early latent infections. The incidence of early syphilis was 7.0 per 100 person-years. A substantial proportion of primary (58%) and secondary (44%) syphilis diagnoses were made at interim STI clinic attendances, between PrEP appointments.

Conclusions
Syphilis screening at routine 3-monthly PrEP visits alone fails to detect a proportion of primary and secondary syphilis infections and may be insufficient in preventing onward transmission. Education of MSM taking PrEP regarding the risk of syphilis and symptom recognition is necessary together with access to syphilis testing between PrEP visits.