

Review of cases of new HIV diagnosis confirmed the same day by Xpert® HIV-1 viral load test in a sexual health clinic

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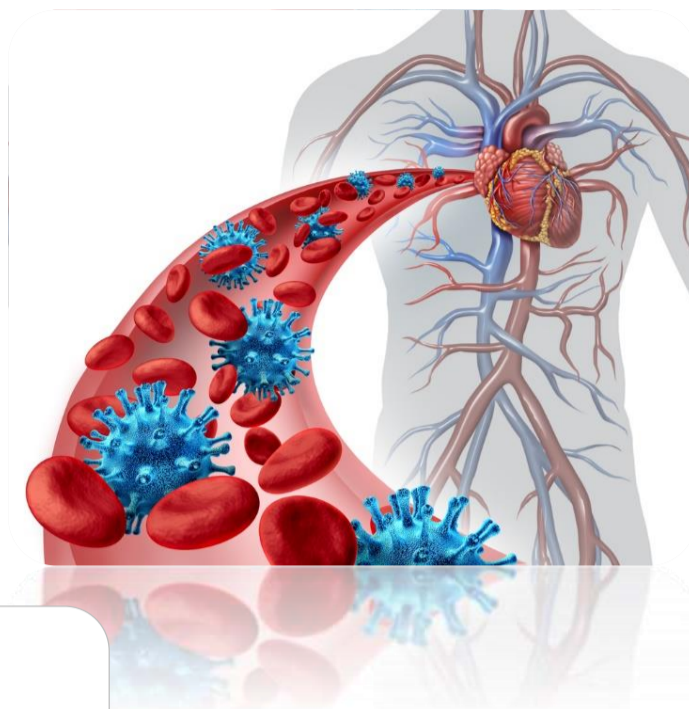


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OVERVIEW:

Confirming HIV-1 diagnosis with Xpert® HIV-1 Viral Load system in just 90 minutes was welcomed by our patients in this pilot project. All patients who had tested positive in any other type of HIV test were all confirmed by positive viral load with the results available in just 90 minutes. The test successfully detected very recent infections and across a widely distributed range of viral load. One patient was detected who may not have been confirmed using qualitative PCR techniques.

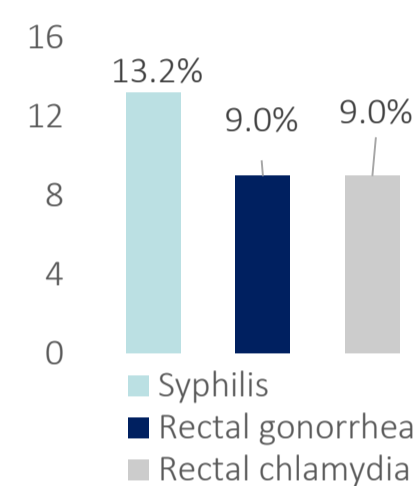
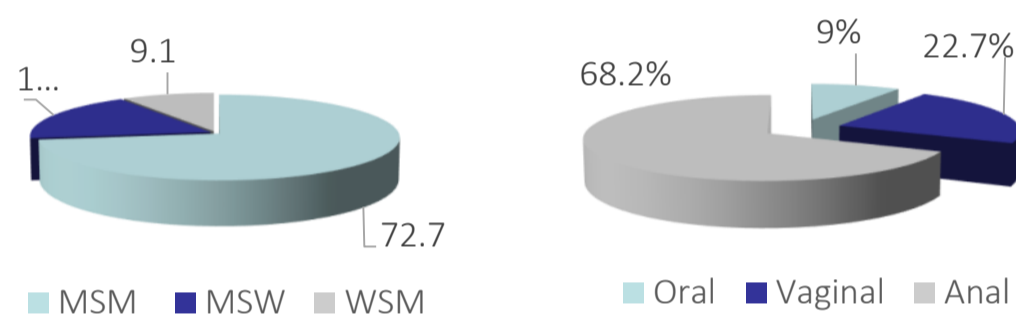


BACKGROUND:

- Confirmation of an HIV positive result can be slow:** Patients with a positive HIV test who reside in the Madrid Regional Health Service catchment area typically have to wait up to a week or more before receiving the results of any confirmatory tests 1
- Anecdotal superiority of viral load at Open House:** In the first 20 patients seen at Open House Medical Centre and who were positive in a screening HIV test, we performed Western Blot as a first line confirmatory test. When we reached a total of 8 cases of "borderline" positive results (40%) we decided this anecdotal evidence was sufficient to use viral load as a routine alternative. To date, we have not had any borderline or indeterminate results with viral load systems, being our now preferred confirmation tool.
- Xpert® HIV-1 Viral Load testing at Open House:** We first introduced this system in 2015 for in-house confirmation of HIV positive results and hereby present our findings of the first cases we saw.

METHODS:

We reviewed all the Xpert® HIV-1 Viral Load tests we performed between November 2015 and February 2017 patients who were positive in any other kind of HIV screening test. The probable moment of infection, their sexual practices of risk for HIV, their clinical situation and sexuality were all recorded.

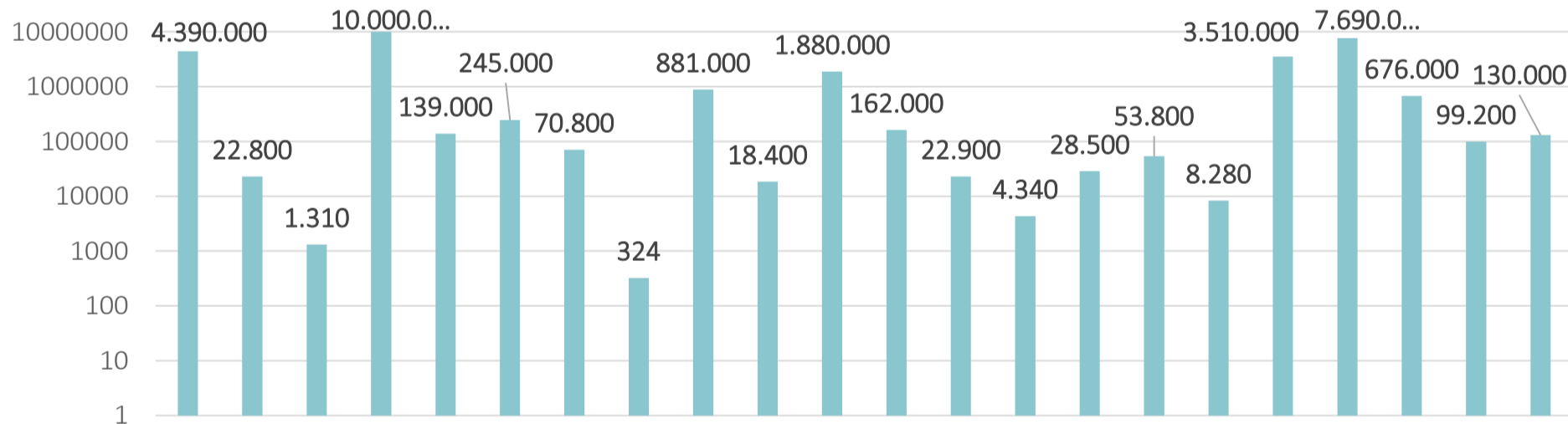


Concomitant STIs at the time of diagnosis

Results key messages:

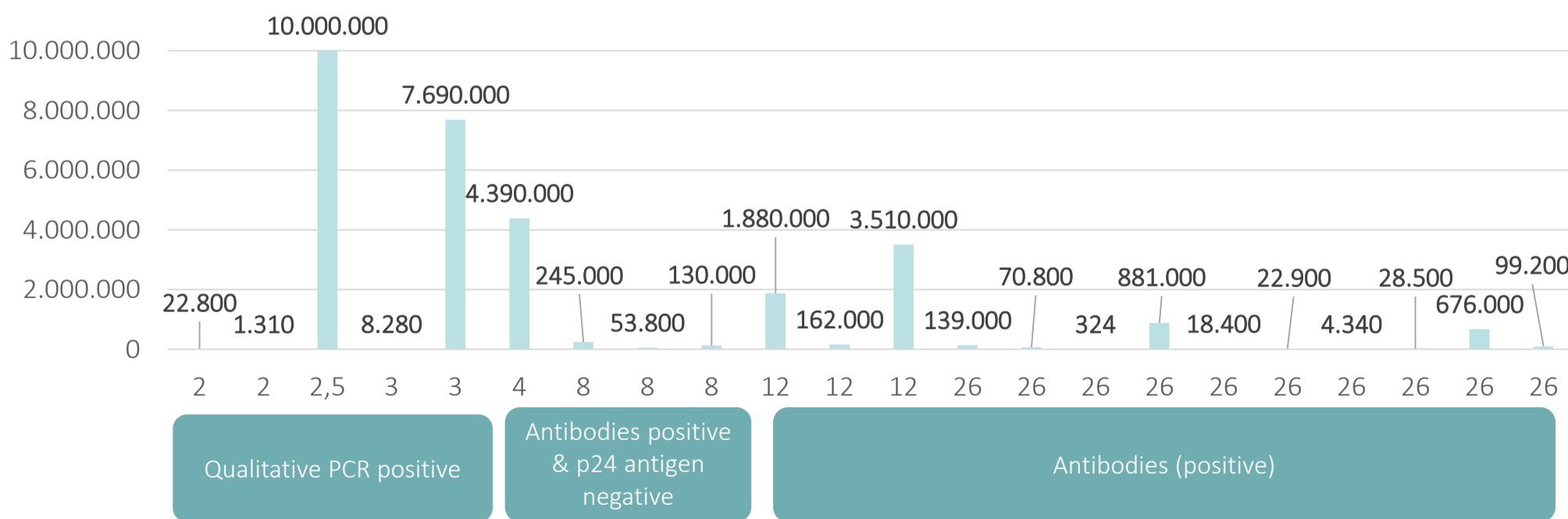
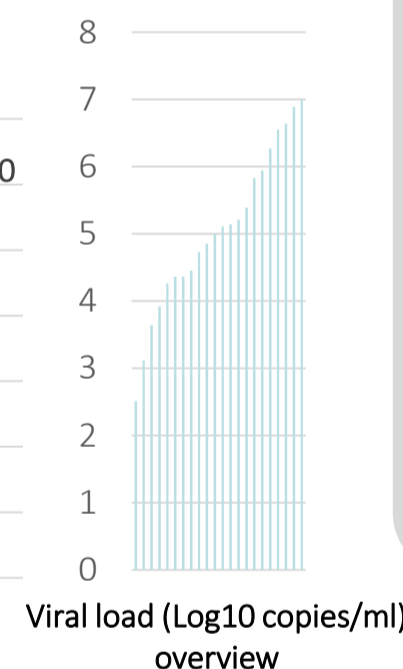
Three quarters of new HIV diagnoses at Open House occur in MSM. A fifth of these patients will be positive for another bacterial STI. Curiously 9% of newly diagnosed patients at Open House reported oral sex as being their only risk for HIV in sex.

Results – viral load series



Viral load (copies/ml) patient by patient

Viral load ranged from just 324 copies/ml to 10 million. In all 22 patients the diagnosis was confirmed



Viral load (copies/ml) organized by patient-reported moment of infection (weeks) and the type of screening test that prompted confirmation compared to weeks of infection

Results key messages:

Xpert® HIV-1 Viral Load test confirmed all patients positive for HIV in other screening tests

Viral load varied from 324 to 10 million copies/mL

Very early infections were successfully detected by the Xpert HIV-1 Qualitative PCR tests and also confirmed by the HIV-1 Viral Load test

SUMMARY:

- Xpert® HIV-1 Viral Load test confirmed all patients positive for HIV in other screening tests.
- Since TAT for this test is just 90 minutes, the process of referral to a specialist is faster for the patient as confirmation can be performed as a point-of-care test
- As is seen in other centres, MSM predominate in our new HIV diagnoses with significant numbers having another STI.
- We are unable to explain why 9% of newly diagnosed patients describe only oral sex as the likely route of transmission of HIV.

