32.7; p<0.01). Men with urogenital NG had higher urine Cq values than men without urogenital NG (33.9 vs 32.6;p<0.01). Cq values were higher in urines of HIV positive men compared to HIV negative men (33.9 vs 32.7;p<0.01). In women, Cq-values were higher in oropharyngeal swabs and anorectal swabs compared to vaginal swabs (36.7 and 33.9 vs 30.8;p<0.001). Cq-values were higher in vaginal swabs of HIV positive women compared to HIV negative women (35.1 vs 31.0;p<0.01).

Conclusion Vaginal swabs and urine samples had much lower Cq values, i.e. higher CT loads, compared to oropharyngeal swabs which could have impact on transmission potential and sequelae. We hypothesize that high risk populations, such as HIV and NG positive patients, likely have repeat CT infections leading to partial immunity and therefore lower CT loads.

Disclosure No significant relationships.

**P485**

THE IMPACT OF CHLAMYDIA TRACHOMATIS NAAT DETECTION PROBABILITY ON TEST-OF-CURE RESULTS

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Background In spite of excellent analytical sensitivity, NAAT assays for Chlamydia trachomatis (CT) do not have a 100% detection probability (DP), especially at low concentrations of CT. This might especially impact test results after treatment, when CT concentrations are expected to be very low. The aim of this study was to use repeat testing to investigate the CT DP after treatment.

Methods As part of the FemCure study, women with vaginal or rectal CT infection were followed for 12 weeks after treatment. Single NAAT testing (Cobas 4800 CT/NG) of vaginal and rectal swabs at 1, 2, 4, 6, 8, 10 and 12 weeks after treatment was performed. For this project after initial NAAT, a selection of 63 swabs (29 vaginal and 34 rectal) was tested 4 additional times using again the COBAS 4800 CT/NG assay. DP was defined as the percentage of positive detections/5 repeat tests.

Results A selection of 47 follow-up swabs which tested CT negative with initial NAAT were investigated. Overall, 70% of swabs remained negative in all repeat samples (DP=90%). However, ≥10% of swabs showed a DP ≥60% in spite of the initial negative NAAT. The results were independent of sampling site (vaginal or rectal) and follow-up time-point during the study and included 15 swabs taken at 4–8 weeks (time-points sometimes used for test-of-cure). Additionally, 16 positive swabs prior to subsequent negative testing were also investigated. Results showed a DP of 100% in ~30% of samples confirming initial NAAT, but showed also a DP ≤40% in ~25% of samples.

Conclusion It is important to be aware of limitations in NAAT inherent DP, especially at low CT concentrations found after treatment. Further research will combine current data with CT viability testing which will potentially shed more light on the clinical relevance of NAAT testing below 100% DP.

Disclosure No significant relationships.

**P486**

POPULATION STRUCTURE OF LYMPHOGRAHONULUM VENEREUM IN BELGIUM: SURVEILLANCE DATA FROM 2010 UNTIL 2017

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Background The number of Chlamydia trachomatis (CT) L genotypes/serovars or Lymphogranuloma venereum (LGV) is on the rise in Belgium, however the genetic diversity of the CT L genotypes in Belgium remained unknown. Our aim was...