confirmed HIV-positive. Specificity was high (> 99.8%) for both tests. Four early infections could only be detected by CMIA and confirmed by RT-PCR whereas RA and immunoblot analysis were still negative.

**Discussion**

Approximately half of the LPHA in NRW offered their clients the RA. Clients deciding for RA were slightly different according to age, gender, risk behaviour and HIV status. It could not be shown so far that by offering RAs the LPHA attracted special risk groups which might otherwise not have been tested for HIV. It needs to be considered that some early HIV infections could be detected by CMIA but not by RA.

**P2.059 EVALUATION OF A 2ND GENERATION REAL TIME PCR SYSTEM FOR DIAGNOSIS OF CHLAMYDIA TRACHOMATIS: IMPACT ON LABORATORY WORKFLOW**


D De Maria, M D'Autilia, M A Latino. S.S. of Bacteriology, O.I.R.M. - Sant’Anna Hospital, Turin, Italy

**Background**

The aim of this study was to evaluate the performance and the impact on laboratory workflow of Cepheid Xpert CT, a new generation of Real Time PCR test that provides results in 90 min, with only 2 min of hands on time in comparison with traditional molecular method used (Alert q-PCR ELitech, Nanogen).

**Methods**

101 selected women (< 25 and; 15% ≥ 25 years old with risk factors) have been enrolled for this evaluation. Performances and laboratory workflow were compared: Xpert CT was run on GeneXpert System and Alert q-PCR on ABI 7300 (Life Technologies). Residual samples (500 ul UTM endocervical swabs) previously tested with Alert q-PCR have been used for the Xpert CT assay.

**Results**

On a total of 101 samples, 98 were concordant and 3 were discordant: 2 were positive with Xpert CT and negative for Alert q-PCR and 1 was positive with Alert q-PCR and negative with Xpert CT. It was appreciated the value of Sample Adequacy Control (SAC) in Xpert CT, that presented low Ct value (below 20) in case of severe infection. Laboratory Workflow: GeneXpert® steps n = 23 for extraction, amplification and detection (the whole RT-PCR process happened inside the cartridge), TAT 90 min. Alert q-PCR for a run of 24 samples: extraction steps n = 253, amplification and detection steps n = 286, hands on time 70 min, extraction 55 min, amplification and detection 2h, TAT 4 h.

**Conclusions**

GX simplified the laboratory workflow ensuring standardisation, accuracy and reliability of analytical data. The value of SAC supports the quality of sampling to avoid false negative results due to insufficient cells detected. Need evaluation for discrepancy results.

**P2.060 MULTIPLEX REAL-TIME PCR FOR THE SIMULTANEOUS DETECTION OF 7 SEXUALLY TRANSMITTED PATHOGENS REVEALS A HIGH RATE OF MULTIPLE INFECTIONS**


D Danieth, M Affelter, F Imeri, M Altwegg. Bioanalytica, Lucerne, Switzerland; MZI, Medical Laboratories, Berne, Switzerland; Laborgemeinschaft 1, Zurich, Switzerland

**Background**

Sexually transmitted infections are caused by a relatively well defined group of pathogens. Their individual detection using cultural and molecular techniques is time consuming and costly. Multiplex real-time PCR is a rapid and more cost-effective alternative and allows the detection of multiple infections.

**Methods**

We have validated the Anyplex II™ STI-7, a semiquantitative, highly multiplexed real-time PCR kit (Seegene), using a selection of specimens positive by routine methods (culture, PCR, cytology) for at least one of the 7 different targets. Specimens were assumed to be negative for those parameters not previously tested.
Methods In this study, 80 urines, collected in DC from patients attending a Milan STD clinic. Urines were tested as per current method and after adding urine to 1ml eNat. To find the urine volume with same sensitivity as urine in DC, 1, 2, and 3ml urine in 1 ml eNAT were tested. After vortexing the eNAT samples, NC was extracted from 350ul with the Automated Purification Systems (NIMBUS IVD) and eluted in 100ul buffer. Purified NCs were tested with the with the Segene STI7 assay.

Results In the 80 urine samples tested, 43 negative and 37 positive were detected with DC, while 1 ml, 2 ml and 3 ml urine in eNAT detected 45:40:40 negative or partial negative (1, 2, 3) and 35:40:40 positive (1, 2, 3) respectively. More co-infections were detected with eNAT 3 ml. Loss of sensitivity with 1 ml eNAT and inhibition with DC versus 3 ml in eNAT was detected in 7 samples.

Conclusions Good agreement was found between Copan eNAT-3 ml urine and urine in DC for the detection of 7 STI with the Segene assay. Copan eNAT, is available in leak proof tube, easy to transport-store urines, prevents bacterial overgrowth, stabilises NC at RT and is compatible with the STI7 assay.

A Archenti, ASL Milano - Prevention Laboratory, Milan, Italy

Backgrounds Molecular urine devices are not compatible for all molecular assays and are not good bacteria culture. Copan produces the UriSwab (US), a LBM device used with the WASP automation. It’s a leak-proof screw-cap tube with 3 treated sponges on a plastic stick to absorb and retain urine during transport and prevent bacterial overgrowth. UriSwab can be used for urine self-collection for STD screening by culture and molecular assays. Urine collected in dry container (DC) were compared to US for detection of Trichomonas vaginalis (TV), Mycoplasma hominis (MH), Mycoplasma genitalium (MG), Chlamydia trachomatis (CT), Neisseria gonorrhoeae (NG) and Ureaplasma urealyticum (UU).

Methods Duplicate urines were collected to-date from 153 patients attending a Milan STD clinic. One urine was collected in DC and another in US. For the DC, 5 ml urine was placed in a tube, and both, DC tube and US were centrifuged at 3000 g/20 min. After discarding the supernatant, the cell pellets were eluted in PBS and nucleic acid was extracted with the QIAamp DNA Mini kit (Qiagen). 3 ul purified sample was tested with the Seeplex® STD6 ACE assay (Seegene Inc).

Results In the 153 urine, DC and US had 90 negative and 52 positive concordant (91.25%) and 9 discordant (9.75%) results; positive included 10 CT, 11 MH, 8 UU, 5 NG and 3 MG. In the discordant, DC had 3 positive missed by US while US had 4 positive missed by DC. No inhibition or TV was detected, the study is-ongoing.

Conclusions Good agreement was found between the Copan US and the DC for storing urines for STIs with the Seeplex® STD6 ACE. The US is leak-proof, easy-to-transport, store urines for STIs with molecular assays, prevents overgrowth, stabilises bacteria for culture and facilitates self-collection for STI screening.

A Pierro, I Bragaglia, A Moroni, M Landini, V Sambri. Unit of Clinical Microbiology, St. Orosio-Malpighi University Hospital, Bologna, Italy