patients with a diagnosed STD. EPT is legal for *Chlamydia trachomatis* (CT) infections in New York State. To guide EPT implementation at New York City STD (NYC STD) clinics, we estimated potential EPT use and EPT treatments to dispense.

**Methods** We analysed electronic medical record data for heterosexual patient visits to NYC STD clinics in 2009. To estimate potential EPT use, we measured: proportion clinic patients with presumptive diagnosis of mucopurulent cervicitis (MPC); nongenital urethritis (NGU); and genitally infected persons with ST positivity. We then estimated the proportion of clinic patients that met the presumptive diagnosis because CT-prevalence was low among patients presumptively diagnosed with either MPC or NGU and their contacts. Approximately 20% of CT-infected persons qualify for EPT; the majority of CT-infected persons are treated on day of visit. EPT-legible patients should be offered up to three treatments for sex partners. Asymptomatic CT contacts reporting they have taken EPT should be routed to EV. Those who report not taking EPT should be routed to an MD visit regardless of symptoms. Symptomatic CT contacts should receive an MD visit.

**Results** Among clinic patients with presumptive diagnoses of MPC, NGU, and genitally infected persons with ST positivity by ST diagnosis, 90.9% of the clinics. In spite of the lower GC ST positivity, the per cent CT AT positive was significantly higher than the per cent GC AT positive (p<0.0001). Discordant GC AT results were defined as GC ST positive specimens with RLU >1 million (results not shown). The per cent of ST specimens with RLU >1 million and the per cent AT negative among these lower RLU positives were also not associated with clinic ST positivity (p=0.14 and p=0.78, respectively).

**Conclusions** Performing APTIMA CT or GC ATs added little to Combo 2 ST PPV, although the decrease in per cent AT positive with decreasing ST positivity observed in this study raises concern about Combo 2 PPV at CT prevalence levels lower than 6%. The lack of impact of GC prevalence on GC ST RLU or AT results is unexpected and might indicate that the Combo 2 ST PPV is very high even at the lower GC prevalence. In other words, most negative GC AT results are false rather than true negatives and the patients should be treated.

---

**Table P3-S1.11** APTIMA AT additional test results among women by clinic Combo 2 positivity and organism Mississippi—2007

<table>
<thead>
<tr>
<th>Organism</th>
<th>Clinic Combo CT 2% positivity</th>
<th>Retested #</th>
<th>Positive #</th>
<th>%</th>
<th>95% CI</th>
<th>p Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>CT &lt;6.0</td>
<td>6553 6278 95.8 95.3 to 96.3</td>
<td>10 90.9 58.7 to 99.8</td>
<td>&lt;0.0001*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.0−&lt;8.0</td>
<td>3.0 459 442 96.6 92.8 to 98.8</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8.0−&lt;10.0</td>
<td>3.0 392 383 97.7 95.7 to 98.9</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10.0+</td>
<td>3.0 177 171 96.6 92.8 to 98.8</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>6553 6278 95.8 95.3 to 96.3</td>
<td>10 90.9 58.7 to 99.8</td>
<td>&lt;0.0001*</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Table P3-S1.12** HIGH CONCORDANCE OF TEST RESULTS OF THE CHLAMYDIA TRACHOMATIS DETECTION AND GENOTYPING KIT COMPARED TO THE COBAS AMPLICOR CT/NG TEST

<table>
<thead>
<tr>
<th>Organism</th>
<th>Kit #</th>
<th>Positive #</th>
<th>%</th>
<th>95% CI</th>
<th>p Value</th>
</tr>
</thead>
</table>

**Methods** Based-on CDC’s electronic prevalence monitoring databases from 2005 to 2007, we stratified 132 clinics (with >400 females tested) served by Mississippi State Public Health Laboratory (MSPHL) based on ST positivity. We calculated the per cent AT positive among 6553 CT ST positive and 1841 GC ST positive specimens. We further examined the impact of the quantitative Combo 2 GC results (relative light units (RLU)) for a sample of 508 specimens from clinics with low (<2.0%, family planning) and high (>6.0%, STD) ST positivity by abstracting the RLU values from hard copy records.
DNA was determined by the COBAS Amplicor CT/NG. In agreement
with the manufacturer, 200 µl of processed COBAS Amplicor
CT/NG medium was used for DNA isolation using the Qiagen DNA
mini kit (Qiagen GmbH, Hilden, Germany). For the Ct-DT kit, 10 µl
DNA was used. All CT positive samples were used for serovar
typing. Discrepant samples were retested using COBAS TagMan CT
Test v2.0 (Roche Diagnostics Systems, Basel, Switzerland). A sample
was considered CT positive (comparison standard) if both NAAT
were positive or if one of these NAAT and the retest was positive.

**Results** In all, 772 clients were included in the original study.
COBAS medium was available from 71 CT positive clients and 179
CT negative samples were randomly selected. With the Ct-DT kit,
68 out of 71 CT positive samples (97%) tested positive and one
borderline, leaving two discrepant results. Retesting of the latter two
samples using the COBAS TagMan assay resulted in two positive
tests. All COBAS Amplicor CT negative samples were also negative
with the Ct-DT kit. The sensitivity, specificity, positive and negative
predictive value of the Ct-DT kit were 97%, 100%, 100% and 99%,
respectively, if the borderline result is included in the positive results.

**Conclusion** Semen specimens can be tested in the cobas
4800 CT test applying our easy to perform, highly sensitive, and low
inhibition protocol.

---

**Abstract P3-S1.13 Table 1** Comparison of ct values in different semen
sample volumes spiked with serial dilutions of CT-infected cells

<table>
<thead>
<tr>
<th>Ct values</th>
<th>Control sample</th>
<th>25 µl semen</th>
<th>40 µl semen</th>
<th>50 µl semen</th>
</tr>
</thead>
<tbody>
<tr>
<td>10^-1</td>
<td>31</td>
<td>30.2</td>
<td>30.6</td>
<td>32.6</td>
</tr>
<tr>
<td>10^-2</td>
<td>33.2</td>
<td>33.8</td>
<td>32.8</td>
<td>35.8</td>
</tr>
<tr>
<td>10^-3</td>
<td>35.7</td>
<td>36.8</td>
<td>35.3</td>
<td>37.5</td>
</tr>
<tr>
<td>10^-4</td>
<td>37.9</td>
<td>37.1</td>
<td>38</td>
<td>40.0</td>
</tr>
<tr>
<td>10^-5</td>
<td>40</td>
<td>40.0</td>
<td>neg</td>
<td>neg</td>
</tr>
</tbody>
</table>

**Conclusion** Semen specimens can be tested in the cobas® 4800
CT test applying our easy to perform, highly sensitive, and low
inhibition protocol.

---

**P3-S1.14** EVALUATION OF THE PLATEFORM COBAS® 4800 CT/NG
TEST FOR DETECTING CHLAMYDIA TRACHOMATIS IN UROGENITAL SAMPLES

doi:10.1136/sextrans-2011-050108.414

B de Barbeyrac, V Mehats, M Clerc, C Le Roy, C Bébéar. Inra-Université de Bordeaux, Bordeaux, France

**Objectives** To assess the performance of the Roche fully automated
cobas® 4800 CT/NG test for the detection of C trachomatis (CT)
infection in clinical specimens compared to the current routine
practice.

**Methods** Consecutive clinical specimens sent to the Bacteriology
department of the Bordeaux University Hospital, Bordeaux,
between July and September 2010 were included. Results of the
cobas® 4800 CT/NG test were compared with those obtained with
the cobas® TaqMan CT 48 assay (Roche). For the latter, DNA from
200 µl of urine or swab resuspended in transport medium, (2SP or
universal transport medium) was extracted on the MagNA Pure
using the DNA I isolation kit (Roche) and amplification tests were run in the cobas® 4800 CT test. The inhibition rate was compared to the inhibition rate obtained in 323 urogenital swabs and 278 urines using the ct values of the internal control (IC).

The latter, DNA from 200 µl of urine or swab resuspended in transport medium, (2SP or universal transport medium) was extracted on the MagNA Pure using the DNA I isolation kit (Roche) and amplification tests were run in the cobas® 4800 CT test. The inhibition rate was compared to the inhibition rate obtained in 323 urogenital swabs and 278 urines using the ct values of the internal control (IC).

**Conclusion** Semen specimens can be tested in the cobas® 4800
CT test applying our easy to perform, highly sensitive, and low
inhibition protocol.

---

**P3-S1.13** ESTABLISHMENT OF A PROTOCOL FOR THE DETECTION OF
CHLAMYDIA TRACHOMATIS IN SEMEN SPECIMENS USING THE COBAS® 4800 CT/NG TEST

doi:10.1136/sextrans-2011-050108.413

1B de Barbeyrac, 1V Mehats, 2A Papaxanthos, 1C Bébéar. 1Inra-Université de Bordeaux, Bordeaux, France; 2CHU Bordeaux, Bordeaux, France

**Background** In addition to common urogenital samples, semen
specimens are used to detect Chlamydia trachomatis (CT). In France,
testing of semen specimens is mandatory by law in context of
and in vitro fertilisation. However, semen specimens are
known to show significant inhibition in PCR assays. Analysis of
cycles of threshold (ct) values can be used to determine inhibition
and limits of detection of assays.