







July 2013

## STI Testing with Combined Chlamydia/Gonorrhoea PCR

Pathlab is pleased to offer a combined molecular test for detection of **both** *Chlamydia trachomatis* and *Neisseria gonorrhoeae*, starting from 5<sup>th</sup> August, 2013.

The combined test will be carried out on the Roche Cobas 4800 molecular platform, and the multiplex PCR assay has been extensively validated throughout New Zealand and internationally.

From 5<sup>th</sup> August, any genital swab or urine received by the laboratory in a molecular collection tube will be tested for the presence of **both** *Chlamydia trachomatis* and *Neisseria gonorrhoeae*, regardless of the request. We believe there are no practical circumstances where it is desirable to know one result but not the other.

The main advantages of detecting N. gonorrhoeae by molecular methods are as follows:

- Increased sensitivity over culture. The PCR method is thought to increase sensitivity of detection of *N. gonorrhoeae* by at least 30% and possibly up to 50%
- Is validated for detection of gonorrhoea from a wider range of sites than culture. This includes vaginal swabs in women and urine samples from men.
- Faster Turnaround time than culture. The combined chlamydia/gonorrhoea PCR assay will be performed each working day Monday to Friday.

## **Specimen Recommendations**

To test for both chlamydia and gonorrhoea, only one swab/urine sample is required. The collection kits for the combined gonorrhoea/chlamydia PCR are exactly the same as those being used currently for chlamydia testing.

- Females: Cervical Swab if a speculum examination is being carried out. Otherwise a selfcollected vaginal swab is satisfactory. (Note that female urine samples are not recommended due to lower sensitivity)
- Males: The first 10-20 mls of voided urine decanted into a Cobas PCR collection tube. See below for diagrams of the specimen collection kits:



Please note: All Clinical Updates are now on the Clinician page on our website.

www.pathlab.co.nz

If you would like to receive these updates via e-mail please forward your details to: info@pathlab.co.nz

INICAL UPDATE

## When to Culture?

PCR testing cannot provide antibiotic susceptibilities as no bacteria are grown. There are some instances where culture for *Neisseria gonorrhoeae* will still be undertaken by the laboratory. These are as follows:

- Treatment Failure
- Extra-genital sites
- Medico-legal cases
- Patients with anaphylaxis to penicillin or cephalosporin allergy.

(For all the above indications we recommend that you send both a molecular sample and also a swab for *N. gonorrhoeae* culture and clearly indicate on the laboratory request form the reason susceptibilities are required.)

In all other circumstances, the laboratory will do **PCR only** for detection of *N. gonorrhoeae/C. trachomatis*, regardless of what samples are sent.

## **Treatment:**

See http://www.nzshs.org/guidelines.html for full guidelines.

Neisseria gonorrhoeae: IM Ceftriaxone 500mg.

Ciprofloxacin may be used if susceptibility is confirmed, and patient is not

Pregnant or breastfeeding.

Chlamydia trachomatis: Azithromycin 1g oral stat.

OR Doxycycline 100mg b.d. for 7 days.

Combination testing for *Neisseria gonorrhoeae* and *Chlamydia trachomatis* by PCR is now undertaken by the majority of NZ DHBs, for the reasons outlined above.

Please contact myself for any queries in relation to the above changes.

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