

Evaluation of the BD ProbeTec CTQ Amplified DNA Assay for Detection of the New *Chlamydia trachomatis* Variant in Sweden

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OBJECTIVES

The nvCT has a 377 bp plasmid deletion that has caused commonly used nucleic acid amplification tests to generate false negative results. In Swedish counties nvCT has been reported to account for up to 65% of all chlamydia cases in 2007.

The aim was to evaluate the CTQ DNA amplification assay for detection of the new *Chlamydia trachomatis* variant (nvCT) in urine specimens from a laboratory in Sweden.

METHODS

In this study, 199 unsorted urine specimens were collected and tested using the BD ProbeTec™ ET CT assay and then tested with the BD ProbeTec™ CTQ assay on the BD Viper System in extracted mode. Discrepant cases were tested with real time PCR.¹

The CTQ assay targets a region of the Cryptic Plasmid outside the 377 bp deletion found in nvCT strains. An additional 30 urine specimens collected in March 2008 and identified as positive with nvCT PCR² were also tested on the CTQ assay for verification of detection accuracy.

RESULTS

Of the 199 unsorted urine samples, 34 (17%) were positive in the routine BD ProbeTec™ ET CT compared to 36 (18%) tested positive in the CTQ assay (Table 1).

Three cases were positive only with BD ProbeTec CTQ assay and two of these were positive also with real time PCR. One case was only positive by BD ProbeTec ET CT assay and was also negative in the real time PCR.

In the collection of 30 urine specimens with nvCT all were detected by the CTQ assay.

Table 1. Comparison between BD ProbeTec ET CT assay and CTQ assay on 199 urine samples.

		BD ProbeTec ET CT	
		Pos	Neg
BD ProbeTec CTQ	Pos	33	3
	Neg	1	162

CONCLUSION

The BD ProbeTec CTQ assay can adequately detect nvCT and wild type strains of *C. trachomatis*.

REFERENCES

1. Chen et al., Sex Transm Inf 2008; 84:273-276.
2. Ripa and Nilsson, Sex Transm Dis 2007; 34:255-6.

