



## MEMORANDUM

Date: April 6, 2009

To: All Manitoba Physicians sending microbiology to Health Sciences Centre and St. Boniface General Hospital Clinical Microbiology Labs, Diagnostic Services of Manitoba

From: Dr. Michelle Alfa, Medical Director, Clinical Microbiology *Michelle J. Alfa*  
Shirley Hoban, Technical Director, Clinical Microbiology *Shirley Hoban*

Re: **Trichomonas Antigen Testing at HSC and SBGH Microbiology Lab sites**

### TAKE HOME MESSAGES:

1. On April 20, 2009 DSM will begin using an antigen test for detection of *Trichomonas vaginalis* in place of wet mount and culture at the Microbiology Labs at the HSC and SBGH sites.
2. Specimens from the vaginal cavity should be collected with a conventional commercial swab system such as the M40 Transystem® or Aimes and submitted to the microbiology laboratory. Cotton swabs or swabs with wooden shafts will be rejected.
3. A second swab collected at the time of patient evaluation should be submitted if testing for bacterial vaginosis and vulvovaginal candidiasis is also required.

### ***Trichomonas vaginalis* Diagnostic Testing:**

*Trichomonas vaginalis* is a pathogenic flagellate parasite that is transmitted by sexual contact. This organism is capable of causing vaginitis in women, characterized by intense vaginal/vulvar pruritis and vaginal discharge. The clinical microbiology laboratory currently makes the diagnosis of *Trichomonas* infection using a combination of wet mount and culture. However, these tests have significant limitations. Wet mount has a sensitivity of only 50 to 70% and culture, while more sensitive, require up to 5 days for a positive result. In order to improve the turn-around time for *Trichomonas* testing while maintaining adequate test sensitivity, DSM will be implementing a *Trichomonas* antigen test (OSOM® *Trichomonas* Rapid Test). This test will come into use on April 20, 2009 and it will take the place of wet mount and culture.

### **Test Characteristics:**

The OSOM® *Trichomonas* Rapid Test is an immunochromatographic assay which detects the presence of solubilised *Trichomonas* proteins. In clinical studies, this test has demonstrated a sensitivity of 75 to 95%, and a specificity of approximately 98%. The advantages of the *Trichomonas* rapid antigen test are that transport issues that date: mutually affect culture or wet mount methods are not an issue, and turn-around time for test results is greatly reduced.



### Specimen Collection:

Specimens for *Trichomonas* should be collected from the vaginal cavity using a sterile Commercial swab system (e.g. M40 Transystem®). **Swabs with cotton tips and wooden shafts should not be used.** The swab should then be placed in the transport media and sent to the microbiology laboratory. Specimens may be held at room temperature if transport will require less than 24 hours. If transport to the microbiology laboratory will be delayed beyond 24 hours, the sample should be stored at 4°C. Please note that if testing for bacterial vaginosis and vulvovaginal candidiasis is also required, a second swab collected at the time of patient evaluation should be submitted.

### References:

1. Campbell L, Woods V, Lloyd T, Elsayed S, Church DL. Evaluation of the OSOM *Trichomonas* Rapid Test versus wet preparation examination for detection of *Trichomonas vaginalis* vaginitis in specimens from women with a low prevalence of infection. *J Clin Micro* 2008;46:3467-9.
2. Huppert JS, Batteiger BE, Braslins P, et al. Use of an immunochromatographic assay for rapid detection of *Trichomonas vaginalis* in vaginal specimens. *J Clin Micro* 2005;43:684-7.
3. Huppert JS, Mortensen JE, Reed JL, et al. Rapid antigen testing compares favorably with transcription-mediated amplification assay for the detection of *Trichomonas vaginalis* in young women. *Clin Infect Dis* 2007;45:195-8.
4. OSOM *Trichomonas* Rapid Test [Package Insert]. San Diego (CA): Genzyme Diagnostics; 2006.