

STREPTOCOCCUS PNEUMONIAE ANTIGEN



EFFECTIVE DATE: 11/28/06

The rapid Streptococcus pneumoniae Antigen test is intended, in conjunction with culture and other methods, to aid in the diagnosis of pneumococcal pneumonia and pneumococcal meningitis. Urine should be submitted for diagnosis of pneumonia, and CSF should be submitted for diagnosis of meningitis.

Performing both the rapid Streptococcus pneumoniae Antigen test and the rapid Influenza Antigen test can help identify two of the leading causes of acute “flu-like” respiratory infections for early initiation of appropriate therapy.

ADVANTAGES:

- Blood cultures are positive in only 25% of the patients with pneumococcal pneumonia. The Streptococcus pneumoniae Antigen test detects 78% of the non-bacteremic pneumococcal pneumonia cases.
- Rapid immunochromatographic methodology with a test time of less than 1 hr.

Binax NOW Streptococcus pneumoniae Antigen Test				
Disease	Specimen	Sensitivity*	Specificity*	Accuracy*
Pneumococcal Pneumonia	Urine	86%	94%	93%
Pneumococcal Meningitis	CSF	97%	99%	99%

* As compared to positive blood cultures for urine specimens and positive CSF cultures for CSF specimens.

LIMITATIONS:

- Do not perform the test within 5 days of the administration of S. pneumoniae vaccine, due to the potential for false positive results.
- The high rate of *S.pneumoniae* carriage in children <5 years of age may result in false positives in urine specimens due to the shedding of antigen in the urine. Urine from patients <5 years is unacceptable for this test. However, CSF for meningitis is acceptable for this age group.

TESTING SITE: Allina Medical Laboratories

DAYS PERFORMED: 7 days/week, 24 hr/day

TURNAROUND TIME: 2 hr. after specimen receipt. May be ordered Stat.

SPECIMEN TYPE: Pneumonia (patients \geq 5 years old): urine
Meningitis (all ages): CSF

CONTAINER: Urine: sterile container or urine culture preservative tube
CSF: sterile container

TRANSPORT: Urine: Ambient temperature within 24 hr. of collection.
Refrigerated or frozen within 14 days of collection.

CSF: Ambient temperature within 24 hr. of collection.
Refrigerated within 7 days of collection.

REFERENCE RANGE: Urine: Presumptive negative for pneumococcal pneumonia, suggesting no current or recent pneumococcal infection. Infection due to *S. pneumoniae* cannot be ruled out, since the antigen present in the sample may be below the detection limit of the test.

CSF: Presumptive negative for pneumococcal meningitis. Infection due to *S. pneumoniae* cannot be ruled out, since the antigen present in the sample may be below the detection limit of the test.

CPT CODE: 87449

**VAGINAL TRICHOMONAS, GARDNERELLA,
CANDIDA DNA PROBE**



EFFECTIVE DATE: 11/28/06

The Vaginal Trichomonas, Gardnerella, Candida DNA Probe test is a non-amplified DNA probe that detects the three infectious agents causing up to 95% of the cases of infectious vaginitis.

- *Trichomonas vaginalis* is a parasite causing a sexually transmitted vaginitis.
- *Gardnerella vaginalis* is detected as a sentinel indicator of bacterial vaginosis.
- *Candida albicans* causes 80-90% of the cases of yeast vaginitis. This probe detects *C. albicans*, *C. glabrata*, *C. kefyr*, *C. krusei*, *C. parapsilosis*, and *C. tropicalis*.

ADVANTAGES:

- Increased sensitivity of the DNA probe (82-95%), compared to the vaginal wet prep (50-75%). Note: The Wet Prep Genital test will still be available for ordering.
- Simultaneous detection of the 3 most common causes of infectious vaginitis from a single sample, and diagnosis in cases of mixed infections.
- No loss of *Trichomonas* due to >1 hr delays in wet prep testing. DNA probe specimens in special DNA transport tubes can be tested up to 72 hr. after collection.
- Detection of clinically relevant levels of *Gardnerella* and *Candida*, minimizing false positives.
- No interference from vaginal lubricants and menstruation.
- The Trichomonas/Gardnerella/Candida DNA Probe combined with the GC & Chlamydia trachomatis Probe make the routine Vaginal Culture obsolete, except in cases of Toxic Shock. For group B Strep in OB patients, order the Vaginal/Rectal OB Strep Culture. Yeast Culture is available for follow up on patients with a negative Candida Probe, but a suspicion of vaginitis due to other yeast genera.

Organism	Sensitivity	Specificity	Overall Accuracy
<i>Gardnerella vaginalis</i>	95%	100%	98.5%
<i>Trichomonas vaginalis</i>	92%	100%	95.3%
<i>Candida</i> species	82%	98%	95.2%

TESTING SITE: Allina Medical Laboratories

DAYS PERFORMED: 7 days/week, 24 hr/day

TURNAROUND TIME: Stat - 2 hr
Routine - 8 hr

SPECIMEN TYPE: Vaginal only

CONTAINER: BD Affirm VPIII Ambient Temperature Transport System (includes collection swab, transport reagent, and transport tube). Collection swab included must be used for collection, and then placed in the transport tube.

Unacceptable:

- Swabs other than the Affirm VPIII swab.
- No swab in the transport tube.
- Urethral and other non-vaginal sources.

TRANSPORT: Ambient temperature or refrigerated within 72 hr of collection

REFERENCE RANGES: Trichomonas Probe negative
Gardnerella Probe negative
Candida Probe negative

CPT CODES: Trichomonas Probe 87660
Gardnerella Probe 87510
Candida Probe 87480