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TECHNICAL BULLETIN

DECEMBER 2016

ALERE™ i INFLUENZA A & B – EFFECTIVE FEBRUARY 1, 2017

We are pleased to announce that we will begin offering the rapid molecular Alere™ i Influenza A & B test for your flu orders in the Microbiology department, beginning February 1, 2017.
The Alere™ i test is significantly faster than other molecular methods and more accurate than conventional rapid antigen testing, giving you the confidence to make effective patient management decisions sooner. Molecular amplification increases the likelihood of detection and may compensate for suboptimal sample collection.

The Centers for Disease Control (CDC) state that rapid immunoassay diagnostic tests have limited sensitivity to detect influenza viral infection and negative test results should be interpreted with caution given the potential for false negative results.[1] Molecular assays are more sensitive and specific than other influenza diagnostic methods, with a low likelihood of false positive or false negative results.[2]

Please feel free to contact Shari Talbert or Jean Fisher if you have any questions regarding the new Alere™ i Influenza A & B test at (800)642-1117.

Specimen Requirements:

Collect:	Nasopharyngeal Swab in M4 Viral Transport Media
Stability:	Refrigerated 24 hours.
Performed:	Mon – Sun. Reported Same Day.
CPT Code:	87502
Test Number:	1592

*Be sure to update your test description to reflect this test methodology change.

[1]CDC Guidance for Clinicians on the Use of Rapid Influenza Diagnostic Tests, Oct 16 2014.

[2]CDC Guidance for Clinicians on the Use of RT-PCR and Other Molecular Assays for Diagnosis of Influenza Virus Infection, Oct 16 2014.

OVER THE COUNTER HIGH DOSE BIOTIN AFFECTS THYROID IMMUNOASSAY RESULTS

Recent literature has reported that over the counter vitamin Biotin (B7) can affect immunoassays that employ Streptavidin in the antibody-antigen binding complex. Streptavidin avidly binds to biotin and when people supplement with high doses (5,000–10,000 µg) of biotin, the biotin interferes with the biotinyl-antibody-analyte complex and has two possible effects:

Sandwich assay results such as TSH will result in lower to undetectable results.
Competitive assays such as T3 and T4 will result in higher values than are clinically present.

This can result in spurious results and mislead the clinician when assessing thyroid status.

Other assays potentially affected by high doses of Biotin include thyroglobulin, PTH, estradiol and ferritin. There is no simple solution to this issue on the manufacturing level and awareness of over the counter medicinals becomes an important component in the interpretation of results that do not match the clinical presentation of the patient.

Reference: Barbesino, G. "The Unintended Consequences of Biotin Supplementation: Spurius Immunoassay Results Lead to Misdiagnoses". https://www.aacc.org/publications/cln/articles/2016/december/bench-matters-december-2016

HEMATOLOGY – SEMEN ANALYSIS TESTING

Effective January 1, 2017 ~ Physicians Laboratory will no longer perform and report the 2 hour motility test for Semen Analysis.

Test #	Test Name
213	Semen Analysis, Fertility

HEMATOLOGY – BODY FLUID TESTING

Effective January 1, 2017 ~ Physicians Laboratory will no longer report Mononuclear and Polymorphonuclear cells as part as of the body fluid differential. Reference ranges for body fluid testing will also be updated accordingly.

Test #	Test Name
317	Cell Count & Differential (CSF/Dialysis)
1317	Cell Count & Differential (Body Fluid) – Synovial, Pleural, Pericardial, Peritoneal, Paracentesis
2317	Cell Count & Differential (BAL) – Bronchial Alveolar Lavage

COMPLETING SOURCE & HISTORY SECTIONS ON ANATOMIC REQUISITIONS

It is imperative that complete and detailed source and patient history are indicated for all anatomic tests, which includes tissue, Pap smears, and Non-Gyn Cytology. This information speeds up processing and screening, while preventing calls to the ordering provider to obtain additional information.

Tissue: Please indicate source, procedure performed and clinical history. Please be as specific as possible (ex: breast biopsy vs. breast needle biopsy) when indicating this information.

Pap: Please indicate source and detailed clinical history including when applicable LMP, hormone therapy, abnormal bleeding, and whether there are previous pap(s)/biopsies with abnormal results.

Non-Gyn Cytology: Please indicate source and detailed clinical history.