

# Legacy Laboratory Services

## CHANGES IN HIV ANTIBODY TESTING

April 2013

Legacy Laboratory Services has implemented a new HIV Diagnostic Testing Algorithm for routine HIV screening, which replaces Western Blot confirmatory testing with an HIV-1/HIV-2 differentiation assay. This change is in accordance with Clinical and Laboratory Standards Institute and parallels the Oregon State Public Health Laboratory decision to discontinue Western Blot as their confirmatory test for HIV-1. Our *rapid-HIV* testing algorithm remains unchanged, with specimens testing reactive by the rapid HIV test still being reflexed for HIV-1 Western Blot confirmation.

### **New algorithm for routine HIV screening.**

Specimens for routine HIV screening will be tested by the ADVIA Centaur® HIV 1/0/2 Enhanced assay. Samples that are non-reactive/negative by ADVIA Centaur® will be reported as negative, with no further testing performed. Samples that are reactive/positive by ADVIA Centaur® will automatically reflex to an HIV-1/HIV-2 differentiation assay, the Multispot HIV-1/HIV-2 test. Patients testing positive on both the ADVIA Centaur® assay and the Multispot assay are considered to be positive for HIV antibodies (see algorithm below). Patients testing positive by the ADVIA Centaur® assay, but negative or invalid by the Multispot assay may have a recent HIV infection, or may not be infected and have false positive ADVIA Centaur® results. Patients with either negative or inconclusive Multispot results will be reported as inconclusive for HIV-antibodies with a recommendation that HIV nucleic acid amplification testing (HIV NAAT) be performed. HIV NAAT will NOT be automatically performed and must be separately ordered.

HIV antibody testing is performed on serum or EDTA plasma with preferred volume of 1.5 mL and minimum volume of 750 microliters. Testing is performed Monday through Friday with an expected turn-around time of 24 to 72 hours. If desired, HIV Western Blot as a referral test is still available upon request.

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# LEGACY LABORATORY HIV TESTING ALGORITHM

ADVIA Centaur® HIV 1/0/2 Enhanced assay

(+)

(--)

Repeat in Duplicate

(--/--)

Negative for HIV-1 and HIV-2

(+/+) or (+/--)

HIV-1/HIV-2 Antibody Differentiation

HIV-1 (+)  
HIV-2 (--)

HIV-1 (--)  
HIV-2 (+)

HIV-1 (+)  
HIV-2 (+)

HIV-1 (--)  
HIV-2 (--)  
Or  
Multispot Invalid

POSITIVE for HIV-1

POSITIVE for HIV-2

POSITIVE for HIV Ab

INCONCLUSIVE

*Not automatically performed by Legacy*

Rule-out dual infection

Nucleic Acid Testing (NAAT)