HIV Testing Algorithm (Fourth-Generation Screening Assay), Including Neonatal Testing and Follow-up of Reactive Rapid Serologic Test Results

Reactive plasma specimens from 3rd generation HIV-1/-2 antibody screening tests
Order: HVDIP / HIV-1 and HIV-2 Antibody Confirmation and Differentiation, Plasma

HIV-1 Ab Positive
HIV-2 Ab Negative

HIV-1 infection

HIV-1 Ab Positive
HIV-2 Ab Indeterminate

HIV-1 infection

HIV-2 Ab Positive
HIV-2 Ab Positive

Possible HIV-1 and HIV-2 coinfection

HIV-1 Ab Negative
HIV-2 Ab Negative

Stop

Repeat HVCOP or HIVDX (depending on which was originally ordered) in 2 to 4 weeks for at-risk patients

HIV-1 Ab Negative
HIV-2 Ab Negative

HIV-1 Ab Indeterminate
HIV-2 Ab Indeterminate

HIV-1 and HIV-2 Antibody Confirmation and Differentiation

HIV-1 Ab Indeterminate
HIV-2 Ab Indeterminate

HIV-1 Ab Reactive
HIV-2 Ab Positive

HIV-2 infection

HIV-1 Ab Indeterminate
HIV-2 Ab Indeterminate

HIV-2 Ab Positive
HIV-2 Ab Positive

Possible HIV-1 and HIV-2 coinfection

HIV-1 RNA Detection and Quantification, Plasma

Order: HIVQ / HIV-1 DNA and RNA Qualitative Detection by PCR, Plasma

Order: HIVQN / HIV-1 RNA Detection and Quantification, Plasma (Preferred) or follow Alternative branch OR

HIVRT / HIV-1 RNA Quantification with Reflex to HIV-1 Genotypic Drug Resistance to Protease and Reverse Transcriptase Inhibitors, Plasma

Order: HIVQN / HIV-1 RNA Detection and Quantification, Plasma OR

HIVRT / HIV-1 RNA Quantification with Reflex to HIV-1 Genotypic Drug Resistance to Protease and Reverse Transcriptase Inhibitors, Plasma

Order: HIV2Q / HIV-2 DNA/RNA Qualitative Real-Time PCR

Order: HIVP / HIV-1 DNA and RNA Qualitative Detection by PCR, Plasma

Order: HIVP / HIV-1 DNA and RNA Qualitative Detection by PCR, Plasma

HIV-1 infection

HIV-1 infection

HIV-2 infection

HIV-2 infection

At risk for HIV-2 infection?

Repeat serologic testing HVCOP in 2 to 4 weeks if clinically indicated

STOP

1 For verification, submit new specimen for HIVQN
2 For verification, submit new specimen for HIV2Q
3 Contact Mayo Clinic Laboratories for testing advice

* Specimens from individuals with reactive results of 3rd generation HIV-1/-2 antibody screening tests can enter this testing algorithm at HVDIP with applicable downstream testing.

Note: For diagnostic and screening for HIV-2 infection only, Testing see HIV-2 Testing Algorithm: Screening (Nonsymptomatic) and Diagnostic (Symptomatic)