Abstract #47

Identifying HIV-2 Infections Using a Differential HIV-1(gp41) /HIV-2 (gp36) Serological Assays (Select HIV or Multispot) by Testing HIV EIA Reactive Specimens Unconfirmed as HIV-1 Antibody Positive by HIV-1 Western Blot

Abstract Category:	Emerging Dilemmas: HIV-2 Confirmation and Diagnosis in HIV Vaccine Recipients
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ABSTRACT

Since the early 1990's when HIV-2 infections were first identified in Maryland the Maryland DHMH Laboratory has routinely used dual HIV-1/HIV-2 screening EIA's and employed differential HIV-1 (gp41) and HIV-2 (gp36) serological assays [Select HIV (Adaltis International): HIV-1/HIV-2 synthetic peptide based EIA and/or Multi-Spot (Bio-Rad) Synthetic peptide/recombinant antigen rapid test] to quickly serologically distinguish HIV-2 antibody positive specimens from HIV EIA reactive specimens that could not be conclusive confirmed as HIV-1 positive by either western blot testing or NAAT.

To date we have identified 30 HIV-2 infected individuals in our testing populations using this approach. All specimens that were considered exclusively HIV-2 reactive in the differential assays were found to be reactive in the FDA approved HIV-2 viral lysate EIA(Bio-Rad) and confirmed as HIV-2 antibody positive by western blot testing or demonstrated HIV-2 proviral DNA in PBMC specimens that were subsequently collected and tested using a HIV-1/HIV-2 (LTR-gene) DNA PCR.

This testing strategy that employs supplemental HIV-1/HIV-2 differential serological assays has demonstrated proven utility to quickly and accurately identify HIV-2 infections that sporadically appear within our testing populations.