

## Performance Characteristics of the Determine HIV-1/2 and Syphilis TP Antibody Tests in Indonesia

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### Abstract taken directly from paper

#### Background

Rapid laboratory tests for HIV and syphilis are needed in resource limited settings. The performance profiles of the Determine HIV-1/2 and Syphilis TP rapid tests on plasma specimens have not been evaluated in Indonesia. *Methods:* Between May – August 2002, we collected 524 serum/plasma from Indonesian men who have sex with men (MSM) for HIV and syphilis testing. Plasma was tested with the Determine (Abbott Park, IL) HIV-1/2 and Syphilis TP rapid tests. HIV results were compared to HIV EIAs (Vidas DUO HIV 1/2 and Abbott HIV 1/2 plus gO) confirmed by Western blot (WB). Syphilis results were compared to the Macro-Vue RPR with positives confirmed by TPPA (Serodia, Fujirebio, Japan), and the AIM RPR Test (Indonesian) with positives confirmed by TPHA (Organon Teknika).

#### Results

A total of 12% (63/524) of the MSM were positive for HIV confirmed antibody. The Determine-HIV1/2 on plasma and the Abbott HIV-1/2 plus gO EIA test on serum had 100% sensitivity with two false positives (FP) and 4 FPs, respectively. As a confirmatory test, the Determine HIV-1/2 test was 100% specific compared to WB. The Determine Syphilis TP test on plasma had 99.3% sensitivity and 89.6% specificity compared to the Macro-Vue RPR confirmed with TPPA. As a confirmatory test, the Determine Syphilis TP was comparable with TPHA.

#### Conclusions

We found the Determine HIV test comparable to the serum EIA test for use as a screening test and comparable to Western Blot confirmation of EIA positive sera. The Determine Syphilis TP test is sensitive in detecting *T. pallidum* antibodies, but does not distinguish between early and late syphilis infection.