



Newborn Screening Quality Assurance Program

PROFICIENCY TESTING PROGRAM FOR ANTI-HIV-1 IN DRIED BLOOD SPOTS

Quarterly Report

Quarter 4

November 2010

INTRODUCTION

The Anti-HIV-1 proficiency testing (PT) panel for Quarter 4, 2010 consisted of five individual-matrix dried-blood spot (DBS) specimens representing a variety of serostatuses. HIV antibody screening and confirmatory tests should identify all HIV-positive specimens, regardless of subtype. Method and laboratory performance are evaluated by challenging participants with specimens representing HIV-negative and positive serostatuses.

On October 12, 2010, we sent the Quarter 4 Anti-HIV-1 panel to 23 total participants. We received data reports from 19 participating laboratories by the designated deadline date. This report is the outcome of data reported for the Quarter 4 2010 Anti-HIV-1 PT specimens. This quarterly report is distributed to all participants and to program colleagues upon request.

Each participant was asked to analyze the specimens for anti-HIV-1 using the assay schemes they routinely use and to report for each specimen the screening results

along with results from any confirmatory assays performed for presumptive positives. A final interpretation for each specimen must be submitted to receive a grade. ❖

PARTICIPANTS' RESULTS

Table 1 shows the overall frequency of reported reactive, non-reactive, and indeterminate screening results for specimens 4041-4045.

In Part 1 of the report, Table 2 shows the number of laboratories using each screening method/kit both for the primary and secondary screens.

Table 3 shows the summary of screening errors by method. There were no errors.

In Part 2 of the report, Table 4 shows the number of laboratories using each confirmatory method/kit.

Table 5 shows the Reported Frequency of Bands by Western Blot for each of the PT specimens that tested positive for the Anti-HIV-1 screening analysis. ❖

The Quality Assurance Program will ship next quarter's HIV-1 DBS proficiency testing specimens and the next major allotment of HIV-1 DBS quality control specimens on January 18, 2011. ❖

Future Meetings:

December 2-4, 2010
CME: the Medical Management of HIV/AIDS. San Francisco, CA.

February 27 - March 2
18th Conference on Retroviruses and Opportunistic Infections (CROI). Boston, MA.



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Quarterly publications for colleagues and participants of the Proficiency Testing Program for Anti-HIV-1 in Dried Blood Spots.

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TABLE 1: Frequency Distribution: Outcome of Final Interpretations (#Labs)

Specimen Number	Expected Results	Reactive	Non-reactive	Indeterminate	Not Reported
4041	Reactive	19	0	0	4
4042	Non-Reactive	0	19	0	4
4043	Non-Reactive	0	19	0	4
4044	Non-Reactive	0	19	0	4
4045	Reactive	19	0	0	4

Part 1. SCREENING

TABLE 2: Number of Screening Methods Reported; Includes Primary and Secondary Methods

Method Code	Kit Source	Participants
10	Fujirebio Serodia-HIV 1,2	1
11	In House	1
12	Other (Please specify in detail)	2
15	rLAV EIA (Bio-Rad)	7
20	bioMerieux Vironostika UniForm II Ag/AB	0
21	bioMerieux Vironostika Uni-Form II plus O	1
22	Genescreen HIV 1/2 V2	0
23	Genescreen Plus HIV Ag/Ab (BioRad)	0
24	Murex HIV 1.2.0 (Abbott)	0
25	Murex HIV Ag/Ab Combination (Abbott)	0
26	Recombinant HIV 1/2, Russia	0
27	Tecnosuma (Cuba) UMELISA HIV 1+2	2
28	CombiBest Anti-HIV 1, 2 DCM, Russia	0
29	CombiBest 1/2, Ag/Ab, Russia	0
30	Anti-HIV Unif, Russia	0
31	Dade Behring Enzygnost Anti-HIV 1/2 Plus O	0
33	UniBest HIV 1,2 AB, Russia	0
34	Q-Preven HIV 1+2, DBS, Brazil	0
39	Genescreen Ultra HIV AG-AB	0
40	Avioq HIV-1 Microeleisa Systems	5
41	Bio-Rad HIV-1/Hiv-2 plus O EIA	1
		Total 20

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Primary and Secondary screens methods

	4041		4042		4043		4044		4045	
	FN	IND	FP	IND	FP	IND	FP	IND	FN	IND
10 Fujirebio Serodia-HIV 1,2										
15 Genetic Systems rLAV EIA (Bio-Rad)										
20 bioMerieux Vironostika UniForm II Ag/AB										
21 bioMerieux Vironostika Uni-Form II plus O										
22 Genescreen HIV 1.2, V2										
23 Genescreen Plus HIV AG/AB (BioRad)										
24 Murex HIV 1.2.0 (Abbott)										
26 Recombinant HIV 1/2, Russia										
27 Tecnosuma (Cuba) UMELISA HIV 1+2										
28 CombiBest Anti-HIV 1, 2 DCM, Russia										
30 Anti-HIV Unif, Russia										
31 Dade Behring Enzygnost Anti-HIV 1/2 Plus O										
32 Unibest HIV 1,2 AB, Russia										
34 Q-Preven HIV 1+2, DBS, Brazil										
11 In House										
12 Other										

False Pos = 0
False Neg = 0
Indeterminant = 0

This **NEWBORN SCREENING QUALITY ASSURANCE PROGRAM** report is an internal publication distributed to program participants and selected program colleagues. The laboratory quality assurance program is a project cosponsored by the **Centers for Disease Control and Prevention (CDC)** and the **Association of Public Health Laboratories**.

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