HIV Testing and Study Procedures for Seroconverters

MTN-003 Operational Walkthrough
11 November 2008
Johannesburg, South Africa
HIV Testing at Screening
HIV Testing at Screening

Sample 1
WB

Sample 2
2 different rapid tests

START
sample 1
2 different rapid tests

STOP. Report to participant as HIV-uninfected

STOP. Report to participant as HIV-infected

Discordant/requires additional testing. Notify The MTN Network Laboratory

Sample 1 WB

ind

Sample 2 2 different rapid tests

Repeat testing, beginning at “START” in approximately one month.
HIV Testing at Screening

Start with two different concurrent rapid tests:

- If both tests **negative** ⇒ uninected ⇒ eligible
HIV Testing at Screening

STOP. Report to participant as HIV-infected

START
sample 1
2 different rapid tests

+/+

STOP. Report to participant as HIV-uninfected

+/-

Discordant/requires additional testing. Notify The MTN Network Laboratory

+/

Sample 1
WB

ind

Sample 2
2 different rapid tests

Repeat testing, beginning at “START” in approximately one month.
HIV Testing at Screening

Start with two different concurrent rapid tests:

- If both tests **negative** ⇒ uninfected ⇒ eligible
- If both tests **positive** ⇒ infected ⇒ not eligible
Sample 1
WB
Sample 2
2 different rapid tests

START
sample 1
2 different rapid tests

HIV-uninfected
HIV-infected
Discordant/requires additional testing. Notify the MTN Network Laboratory.

Sample 1 WB

ind

Sample 2
2 different rapid tests

Repeat testing, beginning at “START” in approximately one month.

STOP. Report to participant as HIV-uninfected

STOP. Report to participant as HIV-infected
HIV Testing at Screening

Start with two different concurrent rapid tests:

- If both tests **negative** ⇒ uninected ⇒ eligible
- If both tests **positive** ⇒ infected ⇒ not eligible
- If one test **negative** and one test **positive** ⇒ WB
  and notify the MTN NL for their awareness
  - If WB **negative** ⇒ uninected ⇒ eligible
HIV Testing at Screening

STOP. Report to participant as HIV-infected

START

Sample 1
WB

Sample 2
2 different rapid tests

STOP. Report to participant as HIV-uninfected

Discordant/requires additional testing. Notify The MTN Network Laboratory

Sample 1
WB

Sample 2
2 different rapid tests

Repeat testing, beginning at “START” in approximately one month.
HIV Testing at Screening

Start with two different concurrent rapid tests:

- If both tests **negative** ⇒ uninfected ⇒ eligible
- If both tests **positive** ⇒ infected ⇒ not eligible
- If one test **negative** and one test **positive** ⇒ WB
  - If WB **negative** ⇒ uninfected ⇒ eligible
  - If WB **positive** ⇒ infected ⇒ not eligible
STOP. Report to participant as HIV-infected

START
sample 1
2 different rapid tests

+/-
Discordant/requires additional testing. Notify The MTN Network Laboratory

Sample 1 WB

ind

Sample 2
2 different rapid tests

+/-

+/

-/

+/+

=/-

STOP. Report to participant as HIV-uninfected

Repeat testing, beginning at “START” in approximately one month.
HIV Testing at Screening

Start with two different concurrent rapid tests:

- If both tests negative ⇒ uninformed ⇒ eligible
- If both tests positive ⇒ infected ⇒ not eligible
- If one test negative and one test positive ⇒ WB
  - If WB negative ⇒ uninformed ⇒ eligible
  - If WB positive ⇒ infected ⇒ not eligible
  - If WB indeterminate ⇒ status unclear ⇒ not currently eligible ⇒ repeat testing from beginning of algorithm in one month
HIV Testing During Follow-up
HIV Testing During Follow-Up

START
Sample 1 rapid test

- STOP. Report to participant as HIV-uninfected

+ Requires additional testing.

Sample 1 WB

- or ind

Sample 1 HIV viral load

Consult the MTN Network Laboratory for further testing and follow up

Sample 2 WB

- or ind

STOP. HIV infection confirmed
Report to participant as HIV-infected
HIV Testing During Follow-Up

- Start with rapid test(s)
- If all rapid tests negative, report as uninfected, no further testing required
HIV Testing During Follow-Up

START
Sample 1 rapid test

+ Requires additional testing.

Sample 1 WB

- or ind Sample 1 HIV viral load

+ + STOP. HIV infection confirmed
Report to participant as HIV-infected

- or ind Consult the MTN Network Laboratory for further testing and follow up

STOP. Report to participant as HIV-uninfected
HIV Testing During Follow-Up

- Start with rapid test(s)
- If one or more rapid tests positive, report as requiring additional testing, request WB (sample 1)
  - If sample 1 WB positive ⇒ report as infected, collect sample 2 and request WB
    - If sample 2 WB positive ⇒ seroconversion confirmed, no further testing required
HIV Testing During Follow-Up

START
Sample 1 rapid test

+ Requires additional testing.

Sample 1 WB

- or ind

Sample 1 HIV viral load

- or ind

Sample 2 WB

+ STOP. HIV infection confirmed
Report to participant as HIV-infected

- or ind

Consult the MTN Network Laboratory for further testing and follow up

STOP. Report to participant as HIV-uninfected
HIV Testing During Follow-Up

- Start with rapid test(s)
- If one or more rapid tests positive, report as requiring additional testing, request WB (sample 1)
  - If sample 1 WB positive ⇒ report as infected, collect sample 2 and request WB
    - If sample 2 WB negative or determinate ⇒ status unknown, consult MTN NL
HIV Testing During Follow-Up

START
Sample 1 rapid test

Requires additional testing.

Sample 1 WB

Sample 1 HIV viral load

Sample 2 WB

STOP. HIV infection confirmed
Report to participant as HIV-infected

STOP. Report to participant as HIV-uninfected

- or ind

Consult the MTN Network Laboratory for further testing and follow up
HIV Testing During Follow-Up

- Start with rapid test(s)
- If one or more rapid tests positive, report as requiring additional testing, request WB (sample 1)
  - If WB negative or indeterminate → HIV RNA PCR
    - If PCR negative, i.e., result is below the limit of detection for the test, report as uninfected, no further testing required
HIV Testing During Follow-Up

START
Sample 1 rapid test

+ Requires additional testing.

Sample 1 WB

+ - or ind

Sample 1 HIV viral load

- or ind

Sample 2 WB

+ STOP. HIV infection confirmed
Report to participant as HIV-infected

- or ind

Consult the MTN Network Laboratory for further testing and follow up

STOP. Report to participant as HIV-uninfected
HIV Testing During Follow-Up

- Perform rapid test(s)
- If one or more rapid tests positive, report as requiring additional testing, request WB (sample 1)
  - If WB negative or indeterminate ⇒ HIV RNA PCR
    - If PCR positive, i.e., any detectable amount of HIV, report as requiring additional testing, collect sample 2 and request WB
      - If sample 2 WB positive ⇒ seroconversion confirmed, no further testing required
      - If sample 2 WB indeterminate ⇒ status unknown, consult MTN NL
Procedures for (Possible) Seroconverters

*** currently under review ***

- Per protocol Section 7.5.3, additional procedures must be performed while seroconversion is being confirmed:
  - CD4 cell count
  - HIV RNA PCR
  - Plasma archive for confirmatory HIV testing at the MTN NL and for resistance testing at the MTN NL
  - PBMC archive

- All done when blood is collected [each sample] for Sample 2
Sample 2 Tips and Reminders

- Collect sample 2 at visit when participant receives her sample 1 WB and PCR results
- Collect approximately 15 mL of whole blood *** currently under review ***
- In the lab, aliquot blood needed for WB, HIV RNA PCR, and CD4 cell count from one tube
- Then process all remaining blood for plasma archive
Procedures for Seroconverters

- Per protocol Section 7.6.1, seroconverters will be offered the option to continue follow-up until their originally scheduled study exit date.
- For those who continue follow-up, all procedures continue except:
  - HIV serology
  - Provision of study product and other product-related procedures
- HIV/STI risk reduction counseling will be modified to address primary and secondary prevention for infected women.
Procedures for Seroconverters

*** currently under review ***

- Per protocol Section 7.6.1, seroconverters will be offered enrollment in MTN-015
- Participants who delay or decline enrollment in MTN-015 undergo the following as part of VOICE:
  - CD4 cell count, HIV RNA PCR, plasma archive, PBMC archive
  - At Months 1, 3, 6, and q6 months post-seroconversion
  - Plasma and PBMCs will be shipped to the MTN NL for resistance testing, testing of TDF and FTC levels, and long-term archive and possible future research testing
Procedures for Seroconverters

- For the above-listed “post-seroconversion” procedures, the date of seroconversion is the specimen collection date of Sample 1
  - This sets a new scheduling calendar for these procedures
  - But all other VOICE visits and procedures remain on the VOICE monthly visit schedule

- If Month 1 post-seroconversion has passed by the time seroconversion is confirmed, the Month 1 procedures may be omitted
What Are Your Questions?