

## Sensibilité des tests rapides sur sang capillaire.

INSTI est le test le plus sensible sur sang capillaire.

INSTI est le seul test à détecter une des 2 séroconversions sur sang capillaire

**Table 2.** Sensitivity of five rapid HIV tests in 200 HIV-infected patients, using either oral fluid (OF) or finger-stick whole blood (FSB).

	Oraquick OF	Oraquick FSB	Vikia FSB	Determine FSB	INSTI FSB	Determine 4G FSB
Invalid test	0	0	0	4	2	33
Negative test	27	11	3	10	2	7
Weakly positive test*	10	6	1	1	4	7
Positive test	163	183	196	185	192	153
Overall sensitivity % of valid tests [95% CI]	86.5% [81-90.5]	94.5% [90.4-96.9]	98.5% [95.6-99.5]	94.9% [90.8-97.2]	99% [96.3-99.7]	95.8% [91.6-97.9]

Sensitivity was calculated by dividing the sum of positive and weakly positive tests by the number of valid tests. Tests without a visible control line were considered invalid.

\*only a faint band was visible, but the test was considered positive.

doi:10.1371/journal.pone.0011581.t002

## Sensibilité des tests rapides sur sérum.

INSTI est le seul test à conserver le même niveau de sensibilité quelque soit la matrice.

**Table 3.** Sensitivity of five rapid HIV tests in 200 HIV-infected patients, combining the results for finger-stick whole blood and, when the latter was negative, for serum.

	Oraquick FSB	Vikia FSB	Determine FSB	INSTI FSB	Determine 4G FSB
Positive test in serum	6/11	3/3	10/10	1/2	7/7
Overall serum sensitivity % [95% CI]	97.5% [94.2-98.9]	100% [98.1-100]	100% [98.1-100]	99.5% [97.2-99.9]	100% [98-100]
P	0.04	0.25	0.004	1	0.02

Differences in sensitivity between whole blood and serum were analyzed with the Mc Nemar test for paired samples.

doi:10.1371/journal.pone.0011581.t003



## Spécificité des tests rapides sur plasma.

INSTI est le test rapide le plus spécifique sur plasma.

**Table 3.** Performance of HIV assays evaluated, indeterminate result samples included.

HIV assay	HIV Total <sup>a</sup>		HIV positive	HIV negative	True positive	False negative	True negative	False positive	Sensitivity % (95% CI) <sup>b</sup>	Specificity % (95% CI)	Efficiency % (95% CI)
<i>Simple/rapid</i>											
Retrocheck HIV	490	187	303	176	11	297	6	94.1 (89.8-96.7)	98.0 (95.7-99.1)	6.5 (94.5-98.0)	
SD Biotline HIV 1/2 3.0	490	187	303	182	5	275	28	97.3 (93.9-98.9)	90.8 (87.0-93.5)	3.3 (90.7-95.2)	
HIV(1+2) Rapid Test Strip	490	187	303	182	5	298	5	97.3 (93.9-98.9)	98.4 (96.2-99.3)	8.0 (96.3-98.9)	
Determine HIV-1/2	490	187	303	187	0	236	67	100.0 (98.0-100.0)	77.9 (72.9-82.2)	6.3 (83.0-89.1)	
ImmunoComb II HIV 1&2	490	187	303	187	0	239	64	100.0 (98.0-100.0)	78.9 (73.9-83.1)	6.9 (83.7-89.6)	
<i>ELISAs</i>											
Enzygnost HIV Integral II	490	187	303	186	1	273	30	99.5 (97.0-99.9)	90.1 (86.2-93.0)	3.7 (91.2-95.5)	
Murex HIV Ag/Ab-Combo	490	187	303	185	2	284	19	98.9 (96.8-99.7)	93.7 (90.4-96.0)	5.7 (93.5-97.2)	

<sup>a</sup>Total number of samples included in the calculations.

<sup>b</sup>95% confidence intervals.

<sup>c</sup>General population HIV prevalence reported in Cameroon in 2004.

doi:10.1371/journal.pone.0007702.t003

<b>INSTI **</b>	<b>488</b>	<b>181</b>	<b>307</b>	<b>179</b>	<b>2*</b>	<b>305</b>	<b>2*</b>	<b>98.9 (97.9-99.8)</b>	<b>99.3 (98.6-100)</b>
-----------------	------------	------------	------------	------------	-----------	------------	-----------	-------------------------	------------------------

\* dont 1 indéterminé

\*\* selon rapport d'évaluation du test rapide INSTI VIH 1/2 - Dr Avelin AGHOKENG - Décembre 2011

