

Point-of-care testing for HIV

Daniel Dalcin MD, Isaac I. Bogoch MD MS

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1 Point-of-care testing for HIV provides results in minutes

Point-of-care testing for HIV, in which finger-prick blood or saliva samples are analyzed, provides preliminary results at the same patient encounter that testing is performed. It is useful in settings where patients may have challenges attending subsequent appointments or when a rapid HIV diagnosis would change clinical management. Point-of-care HIV tests are used worldwide and were first approved by Health Canada in 2005.¹

2 Point-of-care HIV tests licensed for clinical use in Canada have high sensitivity and specificity

Point-of-care HIV tests have variable sensitivities and specificities depending on the individual assay. For example, the test licensed for use in British Columbia has a sensitivity and specificity of 99.6% (95% confidence interval [CI] 98.9%–99.9%) and 99.7% (95% CI 99.4%–99.8%), respectively. Point-of-care HIV tests are less sensitive than laboratory-based testing for detecting acute HIV infection.²

3 Point-of-care testing for HIV should be followed by laboratory-based testing

Depending on the result of the point-of-care HIV test, further laboratory testing may be required (Box 1).^{3,4}

4 Point-of-care testing increases rates of HIV testing among those at high risk for HIV infection

A recent meta-analysis found that point-of-care testing for HIV was associated with increased rates of testing for HIV and delivery of HIV status results to patients, compared to conventional laboratory-based HIV testing.³

5 Clinicians should consider the unique aspects of point-of-care testing for HIV before implementation

Requirements for pre- and posttest counselling, linkage to HIV care (when appropriate) mandatory reporting to public health, as well as documentation and follow-up of preliminary results, vary depending on country, state or province and institution of practice, and should be considered before performing point-of-care testing for HIV.⁵

Box 1: Point-of-care testing for HIV and further investigations³

Test result	Further investigations
Any	Consider testing for non-HIV infections based on exposure risk
Negative	None, if patient has not had HIV exposure risk within the past three months*
Positive	Confirmatory HIV testing at an approved HIV testing laboratory is required†
Indeterminate	Test result cannot be considered either preliminarily positive or negative; repeat point-of-care HIV testing or HIV testing at an approved HIV testing laboratory is required

*Some jurisdictions may require parallel laboratory testing to confirm some or all negative results from point-of-care HIV testing.

†The proportion of false preliminary positive results vary by individual point-of-care HIV assay. The likelihood of false preliminary positive tests results is increased in patients with a low pretest probability of HIV infection.

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Affiliations: Department of Medicine (Dalcin), University of Calgary, Calgary, Alta; Department of Medicine (Bogoch), University of Toronto; Divisions of General Internal Medicine and Infectious Diseases (Bogoch), University Health Network, Toronto, Ont.

Correspondence to: Isaac Bogoch, isaac.bogoch@uhn.ca