

Type of test	Name on the lab test results	Definition
NAAT/PCR	<i>GenXpert MTB/RIF</i>	<ul style="list-style-type: none"> ❖ Specifically for <i>M. tuberculosis</i>. ❖ Rapid test conducted solely on the first of the four samples initially provided by the person suspected of having active TB. ❖ Includes detection of <i>M. tuberculosis</i> DNA, as well as a rapid test for rifampicine sensitivity. ❖ A positive result is confirmation of active TB. ❖ Do not repeat the test if active TB confirmed over the past 24 months, to avoid the risk of a false positive result.
Smear	<i>Auramine AFB</i>	<ul style="list-style-type: none"> ❖ Microscopic analysis of the sample on a slide. ❖ Search for the presence of acid-fast bacilli (AFB) by staining. ❖ Staining techniques: Auramine (more sensitive). If Auramine generates a suspect or positive result, proceed to stain with Kinyoun or Ziehl-Neelsen (more specific). ❖ Final result: neg., suspect, +, ++, +++ or ++++
NAAT/PCR	<i>TB PCR</i>	<ul style="list-style-type: none"> ❖ Systematically performed on raw sputum if a positive smear. ❖ NAAT/PCR not specific for <i>M. tuberculosis</i>. ❖ Rapid test for identifying the type of Mycobacterium detected. ❖ Replicates the bacteria's RNA so more sensitive than a DNA probe test. ❖ If TB PCR is negative, it could be an atypical mycobacterium (e.g., <i>Avium</i>, <i>Fortuitum</i>, <i>Gordonae</i>, etc.). ❖ If TB PCR is positive, the macobacterium is from the tuberculosis complex (e.g., <i>M. tuberculosis</i>, <i>M. africanum</i>, <i>M. bovis</i>, etc.).
Culture		<ul style="list-style-type: none"> ❖ Specifically for <i>M. tuberculosis</i>. ❖ Growth of the microorganism in solid media. This can be objectivized as of the third week. A culture is considered negative on a sample after 6 to 8 weeks.
NAAT/PCR	<i>DNA probe test (= accuprobe)</i>	<ul style="list-style-type: none"> ❖ DNA probe test (= accuprobe) is systematically performed on a culture that is growing. ❖ NAAT/PCR not specific for <i>M. tuberculosis</i>. ❖ Allows for identifying the type of Mycobacterium detected. ❖ Detects without replicating the bacteria thus less sensitive than the TB PCR. ❖ If DNA probe test is negative, it could be an atypical mycobacterium (e.g., <i>Avium</i>, <i>Fortuitum</i>, <i>Gordonae</i>, etc.). ❖ If DNA probe test is positive, the macobacterium is from the tuberculosis complex (e.g., <i>M. tuberculosis</i>, <i>M. africanum</i>, <i>M. bovis</i>, etc.).
Antibiogram	<i>Antibiogram</i>	<ul style="list-style-type: none"> ❖ TB treatment sensitivity test.
MIRU-VNTR characterization		<ul style="list-style-type: none"> ❖ Specifies the <i>M. tuberculosis</i> strain's genetic profile. ❖ Takes around 3 to 4 months.
Whole genome sequencing (WGS)		<ul style="list-style-type: none"> ❖ Specifies the <i>M. tuberculosis</i> strain's genetic profile. ❖ Higher resolution than MIRU-VNTR. ❖ Allows for drawing a distinction between a reinfection and a relapse, and helps identify the source of new TB cases.