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## TB NAAT RESULT INTERPRETATION GUIDANCE

TB NAAT result must always be interpreted in conjunction with the AFB smear result. Questions concerning appropriate use of TB NAAT and interpretation of results should be directed to the expert TB clinicians at the RISE Clinic 401-793-2427/2433. Always use clinical judgment regarding airborne infection isolation and whether to begin anti-TB treatment while awaiting culture results. For additional guidance, refer to the linked documents below.

NAAT	SMEAR	Interpretation
Positive	Positive	Diagnosis of TB is highly likely.
Positive	Negative	Consistent with smear-negative TB. Submit a second specimen for AFB smear and NAAT (collected at least eight hours after the first). The patient can be presumed to have TB if two or more specimens are NAAT positive, pending culture results.
Negative	Positive	Not consistent with active TB. Send a second specimen for AFB smear and NAAT (collected at least eight hours after the first). A patient can be presumed to have an infection with nontuberculous mycobacteria (NTM) if a second specimen is smear positive and NAAT negative and no inhibitors are detected.
Negative	Negative	TB is not likely. Submit a second specimen for AFB smear and NAAT (collected at least eight hours after the first). Infectious TB is not likely if both primary and repeat tests are negative, pending culture results.
NAAT Invalid		An invalid result represents a failure of the assay; this is a rare event. If an invalid result is reported, the laboratory has repeated the test and the presence or absence of <i>Mycobacterium tuberculosis</i> complex cannot be determined. If TB is still clinically suspected, submit a new specimen for repeat testing.

### References:

CDC. Updated Guidelines for the Use of Nucleic Acid Amplification Tests in the Diagnosis of Tuberculosis, MMWR 2009; 58(01):7-10 [https://www.cdc.gov/mmwr/preview/mmwrhtml/mm5801a3.htm?s\\_cid=mm5801a3\\_e](https://www.cdc.gov/mmwr/preview/mmwrhtml/mm5801a3.htm?s_cid=mm5801a3_e)

APHL Consensus statement on the use of Cepheid Xpert MTB/RIF assay in making decisions to discontinue airborne infection isolation in healthcare settings.

[http://www.tbcontrollers.org/docs/resources/NTCA\\_APHL\\_GeneXpert\\_Consensus\\_Statement\\_Final.pdf](http://www.tbcontrollers.org/docs/resources/NTCA_APHL_GeneXpert_Consensus_Statement_Final.pdf)