



Quantiferon TB Gold:- Updated

- *The Quantiferon TB Gold (QTBG) blood test is an Interferon Gamma Release Assay (IGRA) and it measures the amount of interferon released by T cells sensitised by specific TB antigens.*
- *It has advantages over Mantoux testing in that it is logistically easier to administer, and is more specific as it is not affected by BCG vaccination.*

As GPs have become more familiar with this assay, we are seeing, as expected, an increase in test numbers for diagnostic purposes. Generally the testing has been appropriate and justified. However more recently there have been some requests which do not fall under the current recommended indications for QTBG testing in the community setting (see below). These include using the assay as a first line screen for the exclusion of respiratory TB, and the use of the test in the initial investigation of PUOs or night sweats.

The QTBG test only has a sensitivity of approximately 80% for picking up cases of active respiratory TB. Therefore a negative result is not particularly good at excluding the diagnosis of TB. Along the same lines, because the Quantiferon Gold test can be positive in both latent and active TB infection, it has low specificity and positive predictive value for diagnosis of the latter.

For investigation of possible respiratory TB, sputum culture for mycobacteria and CXR remain the mainstay of diagnosis. The QTBG test may be considered if the diagnosis is unclear after these initial investigations, and TB remains a possibility. Consultation with an ID physician, respiratory physician or clinical microbiologist is recommended in these cases.

There have also been a few requests for QTBG in patients presenting with PUO or “night sweats”. We do not recommend the QTBG test as a first line screen in these types of patients. Such testing in a low prevalence cohort is of low positive predictive value and may lead to false positive results.

Here are the current indications for QTBG testing in the community setting:

- **Pre-employment screening for latent TB infection.** *This is the most widely used and well established indication for the Quantiferon Gold test. (patient paid)*
- **When travelling to a country where endemic rates of TB are high.** *Particularly if working in a healthcare setting. Consultation with a travel doctor is recommended.(patient paid)*
- **When there is a suspicion of extra-respiratory TB.** *Should usually only be ordered for this indication after discussion with an appropriate specialist.*
- **When there is strong clinical suspicion of respiratory TB but sputum culture is negative.** *In this and related scenarios, QTBG testing may be indicated. Consultation with a specialist is recommended.*

As with all laboratory requests, it is very important to include clinical details, both as a justification for the test, and to optimise result reporting. For any situations where it is unclear whether the Quantiferon Gold test is indicated, don't hesitate to contact me on **027 389 0464**.

Michael Addidle
Clinical Microbiologist
Pathology Associates
(07) 571 7014

CLINICAL UPDATE