



TB can strike the most vulnerable

Research indicates that QuantiFERON®-TB Gold may provide more accurate detection of TB infection in haemodialysis and ESRD patients.

QuantiFERON-TB Gold Plus
The most accurate test for TB infection

Sample to Insight

Kidney disease and tuberculosis: a growing epidemic

The detection of latent TB infection (LTBI) in haemodialysis patients and individuals with End Stage Renal Disease (ESRD) is of the utmost importance, enabling informed risk management and targeted prophylaxis (1–3).

Haemodialysis (HD) patients and individuals with ESRD are at greater risk for TB infection:

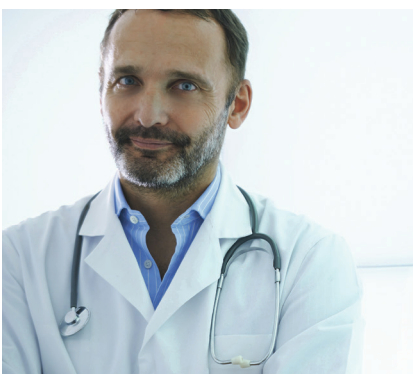
- ESRD patients are **50-fold** more likely to develop active TB infection (4)
- HD patients are at greater risk for LTBI – as many as 28% are LTBI positive where TB is endemic (1)
- HD patients are at greater risk of LTBI progression as a result of immunosuppression (2)

The World Health Organization strongly recommends systemic testing and treatment for LTBI in patients receiving dialysis (5).

Research indicates that QFT[®] may provide more accurate detection of TB infection in haemodialysis and ESRD patients

QuantiFERON-TB Gold (QFT) is a simple blood test for the detection of TB infection. Two recent systematic reviews have demonstrated that Interferon- γ Release Assays (IGRAs), like QFT, are:

- More accurate than the tuberculin skin test (TST) in HD and ESRD populations (1–3)
- Better able to predict the future risk of developing active TB infection in these populations (1–3)



“...compared to the TST, ELISA IGRA positivity [QFT] was associated more strongly with clinical risk factors for latent TB in end-stage kidney disease and therefore is likely to be a more accurate diagnostic tool for latent TB in end-stage kidney disease.” (3)

“We suggest that QFG-IT [QFT] positivity is more sensitive than TST... hence, LTBI diagnosis using QFG-IT in HD patients and prophylactic treatment of QFG-IT positive ones is recommended.” (1)

These systematic reviews suggest that the clinical practice of using the TST for screening patients in renal distress should be reexamined in favor of IGRAs like QFT (3).

Research identifies many potential benefits of QFT in haemodialysis and ESRD populations

✓ Accurate

- QFT is more accurate than the TST for testing HD and ESRD patients (1–3)
- Pooled test sensitivity for the TST is as low as 31% in HD patients (2)
- QFT is unaffected by prior BCG vaccination (1, 6)

✓ Reliable

- QFT is an objective test and is less prone to human error (7–8)
- QFT performance in HD and ESRD patients is strong, unlike the TST (1–3)
- QFT positive results are strongly correlated to risk factors for LTBI in HD and ESRD patients (1–3)

✓ Convenient

- Requires only a single blood draw
- Results available in as little as 24 hours

✓ Cost-effective

- QFT is the most cost-effective test for TB infection detection in haemodialysis patients (9)

✓ Leads to better care for HD and ESRD patients

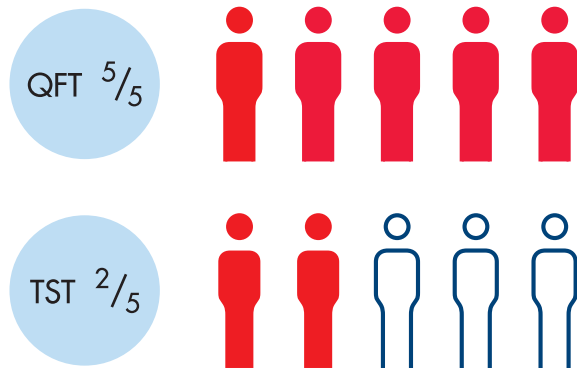
- A positive QFT result is associated with evidence of TB infection, unlike the TST or ELISPOT IGRA (3)
- A positive QFT result is associated with recent active TB contact, unlike the TST or ELISPOT IGRA (3)
- Fewer false positives with QFT – less unnecessary radiography and treatment for patients (10–11)

QuantiFERON-TB Gold Plus – four tubes, one clear result

- Highest accuracy of any test for TB infection
- Single patient visit and unaffected by prior BCG vaccination
- Automatable and scalable for high-throughput testing laboratories



When accuracy matters, trust QFT



In a recent study, four HD patients and one healthy control progressed to active TB disease within a 5-year follow-up period. **All five patients were correctly identified as TB positive by QFT. Only two had tested positive with the TST (1).**

Ask your QIAGEN sales representative for more information, or visit www.QuantiFERON.com/Plus.

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