



What is TB?

Tuberculosis (TB) is a bacterial infection caused by *Mycobacterium tuberculosis* (MTB). It usually affects the lungs, but it can also affect other parts of the body. TB is treated with antibiotics, but if left untreated, it can be fatal.

Why is TB a problem?

The major concern for TB is the multidrug-resistant form that can emerge when the frontline antibiotic treatment, rifampicin, isn't properly used. When this occurs, the antibiotic treatment options are very limited.



Highly Infectious – spread by airborne particles



Long and complex treatment (6+ months of antibiotics)¹



Risk of noncompliance to treatment leads to high risk of transmission

According to UKHSA, the cases of TB in England are rising, and a TB action plan has been put in place to improve prevention, detection, and control.^{2,3}

Who should be tested?

Asymptomatic people who are at high risk of infection should be screened for TB through active case-finding:⁴



- People who have been in contact with an infected person
- People who are immunocompromised
- People travelling from a high TB prevalence country
- People who have not completed treatment

TB is a notifiable disease in the UK. Suspected and confirmed cases must be notified to UKHSA within 3 days.¹




How to test?

NICE recommends rapid diagnostic tests if there is a clinical suspicion of TB.⁵ The WHO recommends the use of rapid molecular diagnostic tests.⁶




Why test with fast PCR?

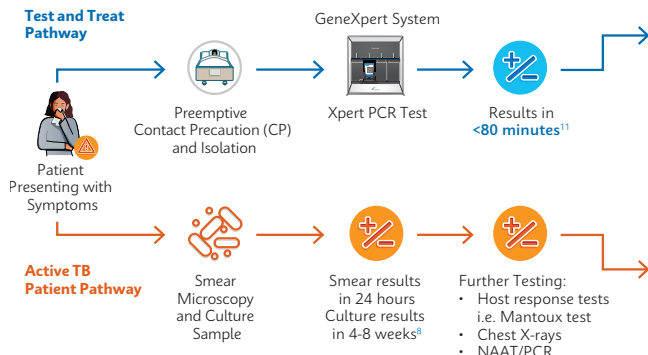
Fast and accurate PCR testing with the GeneXpert® system and Xpert® MTB/RIF Ultra test improves active case management, is more cost-efficient,⁷ and could potentially reduce the relative rate of transmission.

Right Patient, Right Bed, Right Time

-  Faster access to the most appropriate treatment⁹
-  Help limit community transmission¹⁰
-  Superior performance enables more people to be detected and treated earlier⁹

Poorer Patient Outcomes

-  Non-specific, further testing/investigations needed
-  Delays in appropriate antibiotic treatment⁸
-  Risk of missing a positive TB patient due to the lack of sensitivity and specificity¹²



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Beyond resistance to rifampin, extensively drug resistant (XDR) TB is a major contributor to antimicrobial resistance worldwide and continues to be a public health threat.¹³

The Xpert MTB/XDR test is a qualitative, real-time PCR test for the detection of extensively drug-resistant TB.



Scan or click to learn more

CE-IVD. *In Vitro* Diagnostic Medical Device. Not available in all countries.

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CORPORATE HEADQUARTERS

904 Caribbean Drive
Sunnyvale, CA 94089 USA

TOLL FREE +1.888.336.2743
PHONE +1.408.541.4191
FAX +1.408.541.4192

EUROPEAN HEADQUARTERS

Vira Solehl
81470 Maurens-Scopont France

PHONE +33.563.82.53.00
FAX +33.563.82.53.01
EMAIL cepheid@cepheideurope.fr

www.Cepheidinternational.com

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