WHO consolidated guidelines on tuberculosis. Module 3: diagnosis – rapid diagnostics for tuberculosis detection

Web Annex A. List of studies included in systematic reviews

Third edition

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WHO consolidated guidelines on tuberculosis. Module 3: diagnosis – rapid diagnostics for tuberculosis detection, third edition. Web Annex A. List of studies included in systematic reviews

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1.1 Xpert MTB/RIF and Xpert Ultra

Population, Intervention, Comparison, Outcome (PICO) question 1: Among adults with signs and symptoms of pulmonary tuberculosis (PTB), seeking care at health care facilities should Xpert MTB/RIF / Xpert Ultra be used as an initial test for diagnosis of PTB and rifampicin resistance (RR)?

What is impact of Xpert MTB/RIF on patient-important outcomes (cure; mortality; time to diagnosis; time to start treatment)?

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What is diagnostic accuracy of Xpert MTB/RIF for PTB and RR in children, as compares with MRS and composite reference standard (CRS)?

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What is diagnostic accuracy of Xpert Ultra for PTB and RR in children, as compares with MRS and CRS?

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PICO 3: Among adults with signs and symptoms of extra-pulmonary (EP) TB, seeking care at health care facilities should Xpert MTB/RIF / Ultra used as an initial test for diagnosis of EP TB and RR?

What is diagnostic accuracy of Xpert MTB/RIF for EP TB and RR in adults, as compares with MRS and CRS?

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PICO 5: Among people with signs and symptoms of pulmonary TB, seeking care at health care facilities does repeated Xpert (Ultra) tests on subsequent samples provide any increase in sensitivity/specificity as an initial test for diagnosis of pulmonary TB and RR?

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PICO 6: Among adults either with signs and symptoms of TB or chest radiograph with lung abnormalities suggestive of PTB or both, should Xpert MTB/RIF or Xpert Ultra alone, be used to define the case of active TB disease (19)?

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1. FIND. Multicentre Clinical Trial to Assess the Performance of Culture-free, End-to-end Targeted NGS Solutions for Diagnosis of Drug Resistant TB. Registered at ClinicalTrials.Gov NCT04239326 (Manuscript in progress)
2. Data from the Beijing Chest Hospital provided via personal communication by ShenTing Biotech, Beijing, China .
3. Data from Eritrea Communicable Diseases Control Division and National Health Laboratory, Ministry of Health, Asmara, Eritrea, provided via personal communication by Emerging Bacterial Pathogens Unit, IRCCS San Raffaele Scientific Institute, Milan, Italy (Dataset is linked to a published paper, PMID: 33384044).
4. Data provided via personal communication by Emerging Bacterial Pathogens Unit, IRCCS San Raffaele Scientific Institute, Milan, Italy.
5. Data provided via personal communication by Infectious Diseases Division, International Centre for Diarrhoeal Disease Research (iccdr,b), Dhaka, Bangladesh.
6. Data provided via personal communication by National Institute for Communicable Diseases, National Health Laboratory Service, South Africa.
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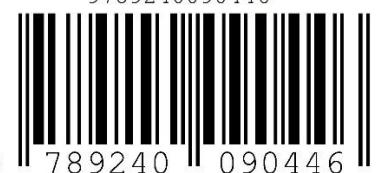
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1. FIND. Multicentre Clinical Trial to Assess the Performance of Culture-free, End-to-end Targeted NGS Solutions for Diagnosis of Drug Resistant TB. Registered at ClinicalTrials.Gov NCT04239326 (Manuscript in progress)
2. Data provided by personal communication by Genoscreen, France.

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