

Enhanced Tuberculosis Screening of Military Personnel

SGROCC Sponsor: AETC

<p><u>Capability Gap Identification</u></p> <ul style="list-style-type: none">▪ Per AFMC, CONOPS supports AFMS capability gaps 6.1.2, 6.1.3, 6.1.4▪ Difficult to obtain accurate Tuberculosis diagnosis due to human errors in placement and reading the TST (frequent false positives)▪ Current TST is labor intensive to administer/read the test and record results▪ Cannot obtain Tuberculosis diagnosis in less than 48 hours▪ Controversial results require repeating entire test	<p><u>Key Performance Parameters</u></p> <ul style="list-style-type: none">▪ Must be an automated method of reading results.▪ Must support automated export of results to military medical record.▪ Test results within 48 hours▪ Enhance the specificity by 30% or more compared to current TST standards while retaining a sensitivity of 80% for active TB
<p><u>Desired Capability</u></p> <ul style="list-style-type: none">▪ Utilization of blood tests eliminates human error associated with administering and reading the skin test▪ Reduces the frequency of false positives▪ Automated ELISA reading and medical record data entry software eliminates labor intensive manual data entry and potential for errors▪ Results are available within 24 hours▪ Sample analysis can be delayed for up to two months while maintaining accuracy	<p><u>Potential Solution and Alternative Solutions</u></p> <ul style="list-style-type: none">▪ Propose COTS solution using the automated QFT-GIT test as manufactured by Cellestis for TB screening among DoD members.▪ The QFT-GIT is a blood test which can be automated using the Triturus (a COTS device manufactured by Grifols) to read the ELISA results▪ Enables automatic export to CHCS for entry into the military medical records.▪ Recommend a 10 month parallel test of current practice (TST) with proposed solution (QFT-GIT/Triturus) using 2400 basic military trainees

Date Received by SGRR: