USAID FROM THE AMERICAN PEOPLE | KNCV TUBERCULOSIS FOUNDATION | CHALLENGE TB

Severity grading scale of QT prolongation and management

Prolonged QT interval
Possible anti-TB drug causes: Mfx, Cfz, Bdq, Dlm
Other causes: Hypokalemia, hypothyroidism, other drugs (e.g., clarithromycin, quinidine, fluconazole, antipsychotics: haloperidol, chlorpromazine, anti-emetics: ondansetron and domperidone, etc.) Refer to https://www.crediblemeds.org/healthcare-providers/

Normal Value	Grade 1 Mild	Grade 2 Moderate	Grade 3 Severe	Grade 4 Potentially Life-Threatening
Male (M): <450 **Female (F): <470**	M: QTcF 450 – 480 ms F: QTcF 470 – 480 ms	QTcF 481 – 500 ms	> 500 ms on at least two separate ECGs (>30 min apart) without signs and symptoms of arrhythmia	> 500 ms and life-threatening consequences (Tdp or polymorphic ventricular tachycardia or signs/symptoms of serious arrhythmia)
Action	• Check electrolytes and replete as necessary. • Check TSH and Hgb and manage accordingly. • Monitor ECG more closely; at least weekly until QTcF has returned to < Grade 1.	• Check electrolytes and replete as necessary. • Check TSH and Hgb and manage accordingly. • Monitor ECG more closely; at least weekly until QTcF has returned to grade 1 or less.	• Consider hospitalization and replete electrolytes as necessary. • Stop the QT-prolonging agents sequentially starting with ancillary drugs, DR-TB drugs with the shortest half-life: Mfx/Lfx, then Cfz, Dlm, then Bdq. • Check TSH and Hgb and manage accordingly. • Repeat ECG after 24 hours but <48 hours.	• Hospitalize and replete electrolytes as necessary. • Stop all suspected causative drugs. • Check TSH and Hgb and manage accordingly. • Repeat ECG after 24 hours but <48 hours.

Modified from the endTB Clinical and Programmatic Guide for patient management with new TB drugs, version 4.0, January 2018