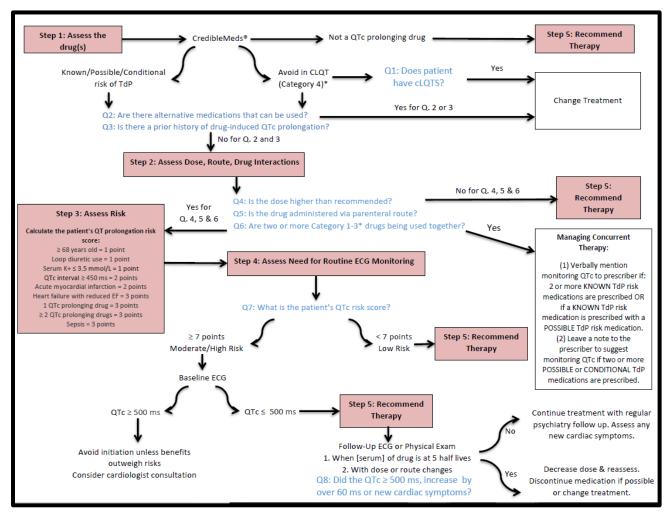
Supplementary materials

Appendix 1

Schematic representation of the stepped-based QTc Interval Prolongation Algorithm



Legend: QTc=corrected QT interval; TdP=torsades de pointes; CLQT=congenital long QTc prolongation; Q=Question; cLQTS=congenital long QTc prolongation syndrome; K=Potassium; EF=ejection fraction; ECG=electrocardiogram;

*As per CredibleMeds® (available online. URL: <u>https://crediblemeds.org</u>)

Appendix 2

Semi-Structured Interview Guide

Interview number: _____

Interviewer: _____

General demographics:

- a. Gender:
- b. Age:
- c. Professional title:
- d. Level of education:
- e. Graduating year:
- f. Clinical Specialty:
- g. Years in practice in cardiology:
- h. Site:
- i. Current position at your site:

Questions before orientation to the algorithm:

- 1. How do you assess QTc prolongation?
- 2. What references do you use when prescribing drugs with QTc prolongation? *Probing questions:*
 - a. Is there any particular protocol that you follow at your institution?
 - b. Are there any particular drug references that you refer to?
 - c. Do you contact the pharmacist to gather drug information?
 - d. Have you ever heard of the CredibleMeds® website
- 3. If you want to prescribe a drug with a known risk of QTc prolongation, what drug factors do you consider?

Probing questions:

- a. Do you consider drug dose, route or drug interactions
- 4. If you have a patient on a QTc prolonging drug, what patient/clinical factors do you consider?

Probing questions:

- a. Do you assess for a history of QTc prolongation?
- b. Do you use any particular risk scoring for assessing the QTc prolongation risk?
- c. In which patients do you consider ECG monitoring? Physical exam?
- d. If you check ECG monitoring, do you assess the baseline ECG?

Appendix 3

Online Survey

General Demographics:

- a. Gender:
- b. Age:
- c. Professional title:
- d. Level of education:
- e. Graduating year:
- f. Years in practice in cardiology:
- g. Country:
- h. Site:
- i. Current position at your site:

Likert-Scale Questions:

1) How do you evaluate the appropriateness of each step in the algorithm?

Decision Statement/Step	1 = not reliable	2 = unable to assess reliability without revision	3 = reliable but needs minor alteration	4 = very reliable
1. Assessing the drug using CredibleMeds®				
2. Assessing the drug dose, route, and drug interactions				
3. Assessing the risk by calculating the patient's QTc prolongation score				
4. Assessing the need for ECG monitoring based on the QTc risk score				
5. Recommending therapy if the risk score ≤ 7 points				
 6. Assessing baseline ECG if risk score ≥ 7 points 				
 7. If ECG shows QTc ≥ 500 ms, avoid therapy and consider cardiac consultation 				
8. If ECG shows $QTc \le 500 \text{ ms}$, recommend therapy with follow up				

ECG and physical exam at specified		
cases		

2) How do you evaluate the safety of each step in the algorithm?

Decision Statement/Step	1 = not reliable	2 = unable to assess reliability without revision	3 = reliable but needs minor alteration	4 = very reliable
1. Assessing the drug using CredibleMeds®				
2. Assessing the drug dose, route, and drug interactions				
3. Assessing the risk by calculating the patient's QTc prolongation score				
4. Assessing the need for ECG monitoring based on the QTc risk score				
5. Recommending therapy if the risk score ≤ 7 points				
 6. Assessing baseline ECG if risk score ≥ 7 points 				
 7. If ECG shows QTc ≥ 500 ms, avoid therapy and consider cardiac consultation 				
 8. If ECG shows QTc ≤ 500 ms, recommend therapy with follow up ECG and physical exam at specified cases 				

3) How do you evaluate the reliability of the reference used in each step in the algorithm?

Decision Statement/Step	1 = not reliable	2 = unable to assess reliability without revision	3 = reliable but needs minor alteration	4 = very reliable
1. Assessing the drug using CredibleMeds				
2. Assessing the drug dose, route, and drug interactions				

3. Assessing the risk by calculating the patient's QT prolongation score		
4. Assessing the need for ECG monitoring based on the QTc risk score		
 Recommending therapy if the risk score ≤ 7 points 		
 6. Assessing baseline ECG if risk score ≥ 7 points 		
 If ECG shows QTC ≥ 500 ms, avoid therapy and consider cardiac consultation 		
8. If ECG shows QTC ≤ 500 ms, recommend therapy with follow up ECG and physical exam at specified cases		

Open-ended Questions:

- 1. What are the strengths of this algorithm?
- 2. What are the weaknesses of this algorithm?
- 3. What concerns do you have regarding the safety of using this algorithm?
- 4. How do you feel about having pharmacists utilize this algorithm?
- 5. What comments do you have regarding changes you would make to this algorithm?
- 6. What are the barriers for implementing this algorithm in your setting?
- 7. What do you think can be done to address some of the barriers you described above?