



# Poison HOTLINE

1-800-222-1222

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*Did you know .....*

CredibleMeds® is the recognized authority on drugs that increase the risk for prolonging the QT interval on the electrocardiogram and thereby developing the potentially life-threatening heart arrhythmia known as torsades de pointes (TdP). The CredibleMeds online QTdrugs database and its mobile compatible app lists over 130 high-risk QT-prolonging medicines and another 85 that carry risk under certain clinical conditions.

CredibleMeds® analyzes all available clinical evidence and places drugs into categories based on the risk for prolonging the QT interval on electrocardiogram and thereby developing TdP. Categories include known risk, possible risk, and conditional risk.

## QT Prolonging Drugs

The QT interval represents the duration of time for the ventricles to depolarize and repolarize. It is measured on an EKG from the beginning of the QRS complex to the end of the T wave.

The QTc is the measured QT interval corrected to a heart rate (HR). If the HR is 60, then the QTc will be equal to the QT. However, if the HR is >60, then the QTc will be longer than the QT and if the HR is <60, then the QTc will be shorter than the QT. Normal QTc values are 430-450 mSec in men and 450-470 mSec in women.

Many medications can cause QT prolongation (QTc >450 in men and >470 in women), especially following an overdose or when combined with other QT prolonging drugs.

Common medications with known risk of QT prolongation include:

**Antiarrhythmics:** Amiodarone, sotalol, quinidine, procainamide, dofetilide, ibutilide, flecainide.

**Antipsychotics:** Haloperidol, aripiprazole, quetiapine, thioridazine, ziprasidone, chlorpromazine.

**Antidepressants:** Amitriptyline, desipramine, imipramine, doxepin, fluoxetine, sertraline, venlafaxine, citalopram, escitalopram.

**Antimicrobials:** Levofloxacin, ciprofloxacin, clarithromycin, erythromycin, azithromycin, fluconazole, hydroxychloroquine.

**Others:** Donepezil, methadone, ondansetron.

**Herbal supplements and plants:** Aloe vera, bitter orange, echinacea, ginkgo biloba, ginseng, guarana, hawthorn, horny goat weed, licorice, lily of the valley, night-blooming cereus, oleander, rhodiola, St. John's wart.

A full list of QT prolonging drugs can be found at [www.crediblemeds.org](http://www.crediblemeds.org).

Complications of a prolonged QT include ventricular arrhythmias, Torsades de Pointes, ventricular fibrillation, unexplained fainting, seizures and sudden death. The treatment for QT prolongation includes identifying and stopping the offending medication. Checking potassium, calcium and magnesium, and correcting abnormalities. Monitoring 12-lead EKG and electrolytes until QTc is back to normal. Cardiac monitor and watch for arrhythmias. For more information about QT prolongation or for help managing a patient with QT prolongation, call the Iowa Poison Control Center at **1-800-222-1222**.

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**POISON  
Help**  
1-800-222-1222

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