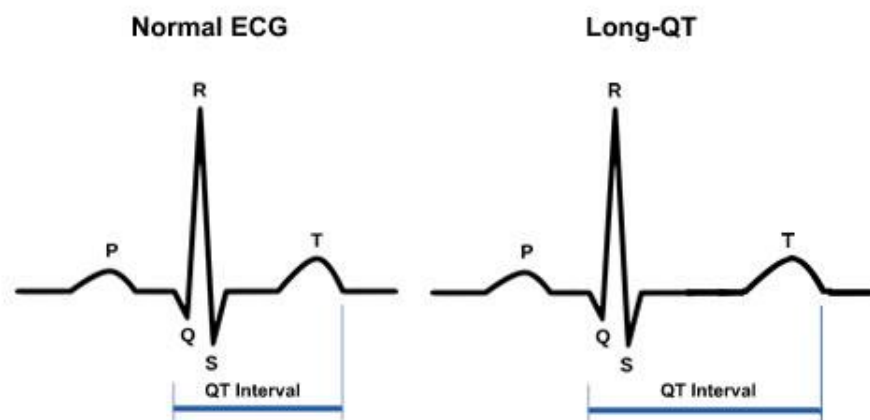


Ondansetron and QT Interval Prolongation

Background: Ondansetron, a selective 5-HT₃ receptor antagonist indicated for prevention of nausea and vomiting caused by cancer chemotherapy, radiation therapy and surgery.

What is a normal QTc interval?

Published literature reflects differences of opinion regarding what constitutes normal QTc values. Generally, QTc intervals of <440 msec in men and <460 msec in women are considered normal.¹



What is the issue?

QT interval prolongation may lead to ventricular tachycardia, including Torsades de Pointes (TdP), a potentially fatal heart rhythm. Patients with underlying conditions such as long QT syndrome, hypokalemia and hypomagnesemia and those taking other medications that cause QT prolongation are also at risk of development of TdP.

Although QT prolongation have been observed with ondansetron use, **in most patients, these changes are not clinically relevant.**

Recommendations:

1. QT prolongation occurs in a dose dependent manner → **Maximum single dose should not exceed 16mg**
2. Electrolyte abnormalities should be corrected prior to infusion
3. Oral dosing regimens have been left unchanged including single oral dose of 24mg for chemotherapy included nausea and vomiting