

# Guidelines for the Management of QTc Prolongation in Adults Prescribed Antipsychotics

## When to do an ECG:

- History of CVD, family history of CVD
- Where clinical examination reveals irregular pulse
- If patient taking certain medicines which are known to cause ECG abnormalities (e.g. erythromycin, fluconazole, tricyclic anti-depressants, methadone, domperidone, anti-arrhythmics – see BNF or <https://crediblemeds.org> for further information)
- The patient is on high dose antipsychotic therapy (HDAT)
- The patient has factors which may predispose to arrhythmias including:
  - Electrolyte abnormalities – hypokalaemia, hypocalcaemia, hypomagnesaemia;
  - Systemic disease – liver disease, renal disease, hypothyroidism.

## Notes for consideration:

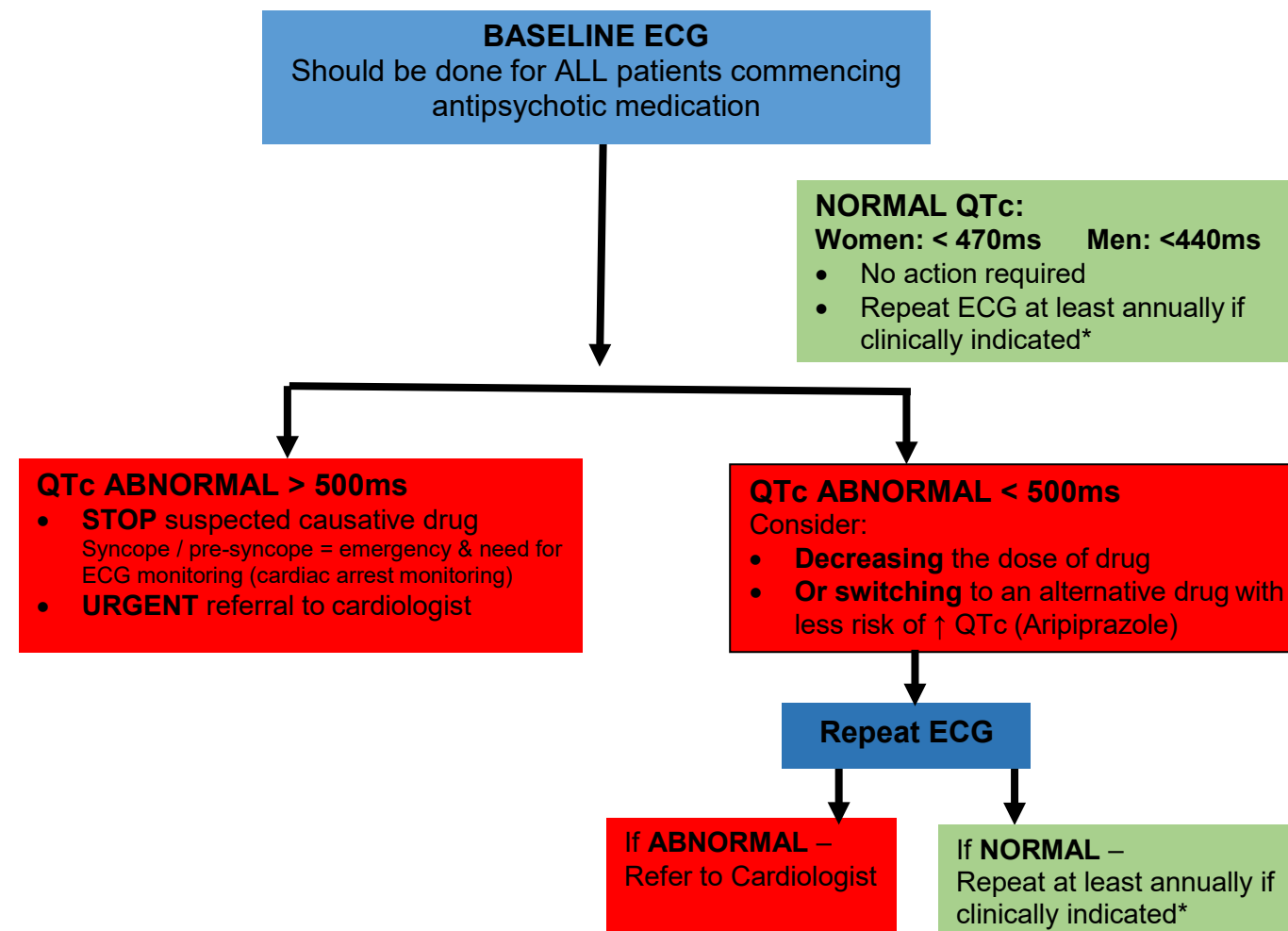
- Stress/anxiety can affect an ECG & it may be necessary to manage the patient's anxiety and repeat the ECG
- Electrolyte imbalances may need correcting
- Consider the risks associated with switching antipsychotics
- Patients should be warned to avoid other QTc prolonging medications (prescribed or over-the-counter types)

## For specialist cardiology advice contact your local on call cardiologist

It is recommended that you have the following information prior to seeking advice:

1. What medications have been prescribed for the patient's mental health condition?
2. What other medications is the patient taking (comprehensive list)?
3. Has the patient experienced any faintness, near collapse or collapse episodes?
4. Is the patient known to have any cardiac history / conditions?
5. What was the patient's heart rate and QTc (rate corrected QT-interval from the automatic report at the top of the tracing) before starting therapy?
6. What is the patient's latest heart rate and QTc measurement?
7. Biochemistry results (within last two weeks): sodium, potassium, urea, creatinine, eGFR [+ magnesium level if potassium (< 3.5mm/L)]; FBC results
8. Do you have alternative medication options open to you if the current regime needs to be changed because of excessive prolongation in the QT-interval?

**The cardiologist will need to have a copy of the relevant ECG(s) for the discussion**



## References

- The Maudsley Prescribing Guidelines 2015
- Summary of Product Characteristics available at [www.medicines.org.uk](http://www.medicines.org.uk)
- NICE Guidelines CG178 – Psychosis and Schizophrenia in Adults - March 2014
- Lester UK Adaptation Positive Cardiometabolic Health Resource 2016
- Psychotropic Drug Directory 2016

Effect of antipsychotics on QTc			
No effect (at therapeutic doses)	Low	Moderate	High
<ul style="list-style-type: none"> <li>• Aripiprazole (note: yellow card reports of torsade de pointes and QT prolongation)</li> <li>• Zuclopenthixol</li> <li>• Lurasidone</li> </ul>	<ul style="list-style-type: none"> <li>• Clozapine</li> <li>• Flupentixol</li> <li>• Olanzapine</li> <li>• Prochlorperazine</li> <li>• Risperidone</li> <li>• Sulpiride</li> <li>• Paliperidone</li> <li>• Fluphenazine</li> <li>• Asenapine</li> </ul>	<ul style="list-style-type: none"> <li>• Chlorpromazine</li> <li>• Quetiapine</li> <li>• Amisulpride</li> </ul>	<ul style="list-style-type: none"> <li>• High Dose Antipsychotic Therapy (HDAT)</li> <li>• Haloperidol</li> <li>• Pimozide</li> </ul>