Do all antidepressants cause QT prolongation—how good is the evidence?

Recently Medsafe’s Medicines Adverse Reactions Committee (MARC) published an assessment of QTc prolongation and antidepressants, and concluded that “QT prolongation… is a risk of treatment with most of the antidepressants approved for use in NZ”.

Good quality data to support these conclusions are available for citalopram and escitalopram. For the remaining drugs, data are of poor quality, or have to be inferred from unusual circumstances (e.g. associated with very high blood levels after overdose, which may also involve ingestion of other drugs). Ideally, statements on QTc prolongation would be based on data generated in a Thorough QT study, which is methodologically demanding. Alternatively, large simple trial designs can be used to evaluate cardiac safety of drugs. Inference of QTc prolongation from \textit{in vitro} HERG binding data may be less than ideal, as some drugs which are potent HERG inhibitors have no clinical cardiac safety signals, or have negative Thorough QT data.

Realistically, the relationship between therapeutic use of most antidepressants and changes in QTc cannot be assessed at this time, and MARC’s statement in Prescriber Update appears to be unnecessarily alarming. If unchallenged, we are concerned that this might unnecessarily influence doctors’ prescribing habits, or dissuade patients from valuable therapeutic options for depression or anxiety.

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\textbf{Competing interests:} In the last 3 years, Professor Glue was on the Scientific Advisory Board of Demerex Pharmaceuticals, and attended scientific advisory boards for Janssen. Dr Gale has been on speakers’ bureaux for Lilly and Janssen, and has had travel costs supported by Lilly.

\textbf{References:}

2. \url{http://www.medsafe.govt.nz/profs/adverse/Minutes151.htm} Accessed 4/2/13
