TCS/16/06 - Antihypertensives as repurposed treatments for mood disorders: Scottish national linkage and UK Biobank investigation.

Mood disorders (including depression and bipolar disorder) are among the most common and most debilitating conditions in the world today. They are caused by the interaction of genetic and non-genetic factors and, to date, developing new treatments has been complex and expensive. However, recent research suggests an important biological overlap between mood disorders and hypertension (high blood pressure) and there is evidence that medications used to treat hypertension may be useful as new, or 'repurposed', treatments for mood disorders. The main goal of this project is to use large-scale data linkage to assess whether treatment with antihypertensive medication (and different classes of anti-hypertensives) is effective in preventing mood disorder episodes or hospital admissions for mood disorders. This will be done using Scottish national prescribing data linked to hospital admissions data. We will also use information on over half a million individuals from the UK Biobank cohort. This work will help with the future design of clinical trials of anti-hypertensives as new (and potentially highly cost-effective) treatments for depression and/or bipolar disorder.