Dear Editors,

I write to you representing myself and my coauthors, in order to submit the manuscript entitled “Gene expression analysis in peripheral blood of first episode psychosis patients from the Genetics and Psychotic Disorders (GAP) Study” for consideration in Biological Psychiatry.

In this paper we report analysis done on novel transcriptomic data from 163 first episode psychosis patients and 150 controls. The work covers differential expression in whole blood between psychosis patients and controls, as well as network analysis. We highlight pathways and genes associated to the psychosis group. We find evidence for pathways associated to Glutamate and NMDA Receptor based signalling, and provide analysis explaining why these signals may be detectable in peripheral blood.

We believe this will be interesting to readers, as it introduces to our knowledge, the largest blood gene expression dataset collected for psychosis to date. The raw data will be made public, which will allow it to be merged with similar datasets in the future. In addition it expands on the previous literature, by identifying pathways that are deregulated in the blood of psychosis patients, and identifying genes implicated in psychosis.

All Authors have contributed to the work, and agree with the presentation. This work has not previously been published, and neither has the data. It is not under consideration in another journal.

Thank you for considerating this manuscript.

Yours Sincerely,

Daniel J. Leirer

Guy's and St'Thomas Charity PhD Student, MRC SGDP Centre, Institute of Psychiatry, Psychology and Neuroscience, King's College London.