Reviewer's report

Title: Towards the implementation of personalized pharmacotherapy for bipolar disorder

Version: 1 Date: 6 December 2013

Reviewer: John Nurnberger

Reviewer's report:

Salloum et al provide a comprehensive overview of genetic variants that impact on drug response in bipolar disorder. This should be a useful review for the psychiatric community. This is timely, and it should provide the basis for design of controlled trials, which is the logical next step.

The review is well written, and I don't have too much to comment on. However there is one issue that I think should be addressed.

Minor Essential Revisions:

There is now a company that provides this sort of information for clinicians on a commercial basis. It is AssureX (www.assurexhealth.com) and they have defined panels for mood and anxiety related medications, mood stabilizing medications, and others. They use their data to provide lists of medicines to 1) use preferentially, 2) use cautiously, or 3) use very cautiously, if at all. They are now receiving reimbursement from a number of insurance companies, Medicare, and Medicaid (in some states). (Full Disclosure - they have approached me to participate in a multicenter trial). They base their findings on the literature (as in this paper) and they have now published several controlled trials that are promising. Salloum et al reference Hall-Flavin et al, 2012, but they should also be aware of Hall-Flavin et al (2013 Pharmacogenetics and Genomics available online or in press) and Winner et al, 2013 (Translational Psychiatry). I would suggest that this should be discussed, as a number of practitioners and patients may already be receiving these reports.

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:

As noted above, I have had discussions with AssureX regarding our site's participation in a trial that would include compensation.

I would suggest that the authors of this article discuss the AssureX tests, because 1) they are currently available and used, 2) they are quite pertinent to this subject area, and 3) they have resulted in three peer-reviewed published
articles based on controlled trials. If they have good criticisms of the AssureX practices, I for one would be very interested in reading them.