Reviewer's report

**Title:** Clinical and Economic Consequences of Long-Term Use of Benzodiazepines in Patients with Generalized Anxiety Disorder

**Version:** 1  **Date:** 11 June 2012

**Reviewer:** Clement Francois

Reviewer's report:

**Overall/General points**

In this article, the authors set out to analyze the costs of long term use of benzodiazepine in patients with GAD in a large population of privately-insured individuals. To do so, the authors utilize administrative claims data and find that the mean annual medical costs increased by $2334 between the pre and post index period. While there has been a lot of literature on the issue with long term use of benzodiazepine, to my knowledge no articles have looked at benzodiazepine use in GAD and costs, which is a worthwhile contribution.

The comments below are Discretionary Revisions, given in approximate order importance-also reviewer must admit a lack of time to carefully review the paper, as such comments are more provided on “high-level” and not on details of the paper, tables and figures- apologies for this.

1. Methods- Study sample

It is not clear why a 6 months period was chosen, and not one year has done by the same authors in a related paper (Healthcare utilization and costs in patients beginning pharmacotherapy for generalized anxiety disorder: a retrospective cohort study. Berger A, Edelsberg J, Bollu V, Alvir JM, Dugar A, Joshi AV, Oster G. BMC Psychiatry. 2011 Dec 12;11:193.) or other studies in GAD and database (Anxiety disorders, major depressive disorder and the dynamic relationship between these conditions: treatment patterns and cost analysis.François C, Despiégel N, Maman K, Saragoussi D, Auquier P. J Med Econ. 2010 Mar;13(1):99-109). This would make comparison with these other papers in GAD easier

Discussion

2.1 The increase is pre and post is something observed in GAD studies (Berger 2011, François 2010) who reported increase between $4812 during pretreatment to $7182. However in this case the index case is if I read correctly the prescription of benzodiazepine, so the episode of GAD could have started before. It would be interesting to see how the prescription of benzodiazepine contributes to the increase of the post treatment phase of GAD

2.2 A higher proportion of patients had co morbid depression compared to the
other author’s study in GAD (45.3 vs. 37.8%). Authors should discuss how the high proportion of co-morbid depression may have influenced the results.

2.3 Also but this may be outside the scope of the analysis, but it would have been helpful to have some kind of control group of GAD on long term use of SSRI or SNRIs—this would have helped to the interpretation of the results—here the increased may have been triggered by a more severe population of GAD that needs long term treatment—so a control group with some kind of propensity matching will really add value to the analysis.

**Level of interest:** An article whose findings are important to those with closely related research interests

**Quality of written English:** Acceptable

**Statistical review:** Yes, but I do not feel adequately qualified to assess the statistics.

**Declaration of competing interests:**

I'm working for Lundbeck, who commercialised escitalopram, approved in GAD.