Reviewer’s report

Title: Effect of exercise training and dopamine agonists in patients with uremic Restless Legs Syndrome: a six-month randomized, partially double-blind, placebo-controlled comparative study

Version: 3 Date: 8 February 2013

Reviewer: Kirsten Johansen

Reviewer’s report:

Major Compulsory Revisions

1. This revision does a slightly better job of focusing on the between-group comparisons in some areas (e.g., sleep, RLS symptoms), but there are still some sections where there is an inappropriate emphasis on the within-group differences (e.g., MCS, PCS, physical performance, body composition). Given that there can be placebo effects (or practice effects for physical performance), a treatment can only be considered to be effective if it is better than placebo/control. For the physical performance tests, for example, the correct interpretation of the data is that neither exercise nor ropinirole improved physical performance compared to placebo. This is also true for the body composition and muscle size and composition. (This is consistent with your power calculations, which show that effect sizes need to be close to 2.0 to have adequate power to detect differences, and the effect sizes for these outcomes are considerably less than 1.0.) The result of this is that the beginning of the discussion gives equal weight to the improvements in RLS symptoms and (which were different from placebo) and physical performance and quality of life (which were not).

Overall, this is a nice paper showing that exercise and ropinirole improved symptoms of RLS. However, it was underpowered to detect changes in QOL or body composition, and no significant effects were detected compared to placebo in those outcomes. The discussion just needs to be changed to convey this message.

Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: Yes, and I have assessed the statistics in my report.

Declaration of competing interests:

I declare that I have no competing interests.