Reviewer's report

Title: A systematic review protocol to evaluate the psychometric properties of functional assessments used with adults who have upper limb spasticity.

Version: 1 Date: 20 February 2015

Reviewer: Anand Pandyan

Reviewer's report:

I am going to attach some comments on the PDF

Major revision:

1. I am of the view that this is a sequel paper to a previous paper - this should be made explicit in the introduction

2. It is clear that the authors have decided to selectively review a small subset of measures from this paper - they need to explicitly articulate the selection with a justification within the context of an ICF framework (at this stage the measures presented in the supplementary material is not a complete list of the measures of activity)

3. The method followed does suggest that there is already a selection bias in this review. The methods of measurements identified in the previous paper may not be the best on offer. There is a need to make this bias explicit.

4. With respect to the review process

a. There is a need for two people to cross check each paper in the various screening and extracting stages

b. A mixture of scales and methods of measurement are being reviewed. These methods can then be direct, indirect or simulated methods of measurement. Given that the measures are already known it will be better to explicitly identify which of the COSMIN processes will be followed. Please be aware that the COSMIN is a guideline that has flaws.

c. Some of the methods of measurement have already been comprehensively reviewed - it may help for the authors not to duplicate good work that is already in the published domain. It may be better to put in a process to avoid duplication within this review.

5. I am still puzzled by the various arguments linking this review to measures of activity and participation in people with spasticity (making the assumption that spasticity was measured with any degree of accuracy) as opposed to people undergoing neurological rehabilitation.

6. A significant limitation in the current literature is the sampling frame used in most studies of psychometric properties of methods of measurement do not study a relevant population (for example the studies that have validated ARAT often use patients who can do the ARAT and in many of the rehab studies the patients are unlikely to be ever complete the ARAT). The authors need to
consider at this stage how they going to check for the external validity.

**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 have received honarium payments from Allergan, IPSEN and Biometrics Ltd
I have received unrestricted educational support from Allergan and Biometrics Ltd