Reviewer's report

**Title:** No sex-specific difference in disease trajectory in multiple sclerosis patients of pre- and post-menopausal ages.

**Version:** 2  **Date:** 1 February 2013

**Reviewer:** jacqueline bernard

**Reviewer's report:**

This is an important question, and thus needs to be more completely studied and defined. This paper has four major limitations:

1. No clear definition of menopause (see J Clin Endocrinol Metab; April 2012, 97(4):1159-1168 for typical definitions).
2. The two groups C1 and C2 seem arbitrary (i.e. 38-46 and 54-62, because mean age in Western societies is 49-52).
3. Duration of study of two years is too short to comment on disease course around a hormonal event that typically has a duration of more than one year.
4. Patient reported outcomes (PROs) are by definition non-objective and therefore should not be used as objective evidence in primary analysis. Perimenopausal women did report lower physical functioning than men (p=0.002), so that could be looked at in a quality of life study, for example.

Minor revisions: BPF might be better evaluated on DTI.

Other medical conditions and co-morbidities were not discussed i.e: osteoporosis, OCP use, HRT use etc.

**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.