Reviewer's report

Title: Changes in the flexion-relaxation response induced by hip extensor and erector spinae muscle fatigue.

Version: 1 Date: 6 April 2010

Reviewer: Bernadette Murphy

Reviewer's report:

1. Is the question posed by the authors well defined? Yes the authors state “the objectives of this study were 2-fold: [1] to quantify the effect of hip and back extensor muscle fatigue on FRP parameters, and [2] to determine if such changes are triggered by modifications of lumbopelvic dynamics. We hypothesized that hip extensor muscle fatigue will lead to reduced pelvic flexion and an increased myoelectric silence period (FRP) during a flexion-extension task in association with changes in lumbopelvic rhythm.”

2. Are the methods appropriate and well described? Yes

3. Are the data sound? Yes

4. Does the manuscript adhere to the relevant standards for reporting and data deposition? Yes

5. Are the discussion and conclusions well balanced and adequately supported by the data? Yes

6. Are limitations of the work clearly stated? Yes, the authors point out that they didn’t measure deep muscle properties and any possible change in the mechanical properties of the lumbar musculature.

7. Do the authors clearly acknowledge any work upon which they are building, both published and unpublished? Yes

8. Do the title and abstract accurately convey what has been found? Yes

9. Is the writing acceptable? Yes except for a few minor typos

I would recommend Minor Essential Revisions Specifically on page 12 the following paragraph needs to be corrected as indicated in the attachment.

Level of interest: An article of importance in its field

Quality of written English: Needs some language corrections before being published

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

Declaration of competing interests:
I declare that I have no competing interests