Reviewer's report

Title: Minimal clinically important change for pain in patients with nonspecific neck pain.

Version: 1 Date: 17 July 2007

Reviewer: Julie Fritz

Reviewer's report:

General

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Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)

1. The authors propose to examine the construct of minimum clinically important change, but one analytic method used is to determine minimally detectable change. These constructs are fundamentally different in their interpretation. The authors appear to consider minimally detectable change as synonymous with minimum clinically important change and anticipate that the results of the analysis should be equivalent to the methods used for calculating minimally important change. The authors should consider revising the manuscript (including the title) to indicate that they are examining both minimally detectable change and minimally important change.

2. The authors do not adequately describe the recruitment process and likely generalizability of the results. How many potentially-eligible patients were considered for inclusion over the recruitment time period? What were the reasons for exclusion?

3. Background (first paragraph, first sentence) - The MCIC relates to changes in scores that may measure pain, disability, impairment etc., The MCIC is not related to "variation of symptoms" as stated in the manuscript.

4. Background (second paragraph, first sentence) LBP patients do not have MCIC values. Instruments used with LBP patients have MCIC values (e.g, Oswestry, ROland Morris, numeric pain rating, etc.) Please change the wording of this sentence.

5. Methods, (study population, second paragraph) The meaning of this paragraph is not clear. How does the protocol of patients with neck pain relate to individuals with subacute/chronic LBP? Do the authors intend to say that all subjects in this study received neuroflexotherapy? What does "post-marketing surveillance" have to do with this study? Please clarify this paragraph?

6. Methods, (study population, second paragraph) - Please describe the neuroflexotherapy that these patients apparently received.
7. Methods (external criterion) - Studies examining the responsiveness of various outcome measures have frequently used 7-point or 15-point scales for patient self-assessment. This study uses a 4-point scale. It is unclear if this scale is likely to provide adequate discrimination to permit identification of patients who report meaningful improvement. Can the authors provide any support for the use of this external criterion? Has its use been described elsewhere or has this 4-point scale been validated for this purpose?

8. Methods (Analysis) - In the analysis of optimal cut-point - did the authors actually select the cut-off point where sensitivity and specificity were equal? Typically the cut-off point selected is the one that maximizes the specificity and sensitivity, not necessarily the point at which these values are equal. Please clarify.

9. Methods (Analysis) In the text in this section the authors state that they will analyze all patients and those patients with arm pain as a separate analysis. In the results (for example Table 4) it appears that the authors examined all patients and those with neck pain only as a separate analysis. Please clarify.

10. Results (first paragraph) - The text in this paragraph reports that 487 patients (74%) had AP. Table 1 appears to indicate that 487 patients (74%) had NP only. Please clarify this discrepancy.

11. Results (second paragraph) - The text in this paragraph reports that Table 3 include those patients with "NP only in patients who also reported AP". This statement is unclear. It appears that Table 3 includes all subjects included in the analysis. Please clarify.

Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)

1. Abstract (conclusion) - Stating that the size of the MCIC was consistent for NP or AP and for patients with or without AP seems redundant. Please clarify.

2. Background (first paragraph, last sentence) - I am not certain how defining MCIC values "makes it easier to take into account patients' perceptions...". Please clarify this statement.

3. Methods (study population, paragraph 3) What is meant by "widespread neurology" as an exclusion criterion?

4. Results (fourth paragraph) - What does the abbreviation "RP" stand for? This has not been used previously in the text.

5. Patients over age 55 were apparently excluded from the study. This should be acknowledged as limiting the generalizability of the results.
Discretionary Revisions (which the author can choose to ignore)

1. Methods - I would imagine that the number of inhabitants covered by the Ib-Salut varies over time. The authors may wish to round off the figure (916,453 inhabitants) since the actual number likely changes on a daily basis.

**What next?:** Unable to decide on acceptance or rejection until the authors have responded to the major compulsory revisions

**Level of interest:** An article of limited interest

**Quality of written English:** Not suitable for publication unless extensively edited

**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