Reviewer's report

Title: ORCHID: Open reduction and internal fixation versus casting for highly comminuted intra-articular fractures of the distal radius in elderly patients - A randomized clinical multi-center trial

Version: 2 Date: 9 July 2010

Reviewer: Carolyn Levis

Reviewer's report:

Major

Outcome Measures:

1. The method or instrument of measuring wrist function is not stated. A validated instrument should be used/specified in the protocol and standardized across all 15 centres. An injury-specific assessment tool (Patient Rated Wrist Evaluation – PRWE) has been validated for the use in hand/wrist injuries specifically, distal radius fractures and should be considered as a specific instrument to be used. (MacDermid JC, Turgeon T, Richards RS, Beadle M, Roth JH. Patient rating of wrist pain and disability: a reliable and valid measurement tool. J Orthop Trauma. 1998;12:577–586

2. The protocol does not state clearly who will do the assessment of wrist function as discussed in point 1 above and the range of motion at 3 and 12 months. To eliminate bias, this would have to be someone who is blinded to the treatment arm and all patients must wear something such as a sleeve on the hand/distal forearm to avoid disclosing the treatment arm.

Minor

Eligibility:

1. This may be an issue of language; however, it is unclear what is meant by “virtual elective intervention”

2. Authors should clearly specify the definition of “extreme obesity”, specifically what Body Mass Index (BMI) should be used to exclude patients.

Evaluation, clinical follow-up:

1. It is unclear from the submission as to the relevance of recording falls, and fear of falling as part of patient characteristics.

2. The language should be amended to clarify that the employment status will be recorded with the EuroQol-5D. Presently, the submission says that the patients (typographical error – should be patients’) self employment with be recorded
retrospectively. Furthermore, self-employment in the elderly isn't clear and therefore again, may be an issue of translational incompatibility

**Level of interest:** An article of importance in its field

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

**Statistical review:** Yes, but I do not feel adequately qualified to assess the statistics.

**Declaration of competing interests:**

'I declare that I have no competing interests'

please note that my answers to the above questions assume that the questions apply to the trial submission only