Reviewer's report

**Title:** Comparison of anchorage reinforcement with temporary anchorage devices or a Herbst appliance during lingual orthodontic protraction of mandibular molars without maxillary counterbalance extraction

**Version:** 3  **Date:** 11 May 2015

**Reviewer:** Urban Hagg

**Reviewer's report:**

General comment. The topic of the paper is of interest, but according my opinion the concept seems to work with Herbst in combination with Lingual orthodontics - and that is of interest to publish. The authors have reported in an earlier publication that the anchorage loss of lower incisors is much less with this concept compared to the conventional Herbst. Later tooth/wire based versions of Herbst appliance such as Forsus results in even larger proclination of the lower anteriors (Pancherz and Ruf, 2009). The concept used in the present paper allows to move teeth along rectangular wires, while having the Herbsts attached on the buccal surface of the lower canines, while the conventional Herbst comprises usually of 4 casted splints, one in each posterior segment extended from 7/6 to 4/3. Subsequently only the anterior teeth can be moved with bracket appliances while the conventional Herbst is place. This means that the finding of this paper cannot be extrapolated to those of conventional Hersbt and labial orthodontics.

Introduction. Should be more concise. Some statements are not supported by references e.g. 'molars' are quite common lost to caries'....' how common is it? Which age group?

The presentation of results should be consistent, preferably one digit only. At present one or two digits are used in the text while motly 3 digits are used in the tables

The paper should be focused on the two concepts investigated TADs and Herbs, respectively, in combination with a specific version of lingual orthodontics - Incognito.

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

**Quality of written English:** Acceptable

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

**Declaration of competing interests:**

I declare I have no competing interests.