**Reviewer’s report**

**Title:** Onchocerca - infected cattle produce strong antibody responses to excretory-secretory proteins released from adult male Onchocerca ochengi worms.

**Version:** 1  **Date:** 27 Jan 2018

**Reviewer:** Ben Makepeace

**Reviewer’s report:**

The authors have improved the manuscript significantly, but some relatively minor issues (and a more substantial issue with figures 2 and 3) remain that should be addressed before publication.

IMPORTANT: Figs 2 and 3 are very low-quality screenshots. Please improve in resolution (to be like figures 4 and 5) before publication.

1. The authors have shortened the introduction and in general, this is welcome. However, a current prevalence estimate for human onchocerciasis should be included. The latest figure is 15.5 million (see doi: 10.1016/S0140-6736(16)31678-6).

2. "Heterologous" is spelled incorrectly (bottom of p. 4).

3. Remove hyphen from the "the-research group" top of p. 7.

4. On p.7, "...were mixed with a little amount of liquid nitrogen and grinded straight forward using a mortar" should be rewritten as "...were mixed with a small volume of liquid nitrogen and ground using a mortar". Also, "After defreezing" should be "After defrosting".

5. On p. 8, "Nodule burden ranked form 1 to 350/cattle (median: 47) 11 microfilariae/mg of skin were counted at 36 month post-infection cattle" needs an "and" preceding "11 microfilariae...".

6. On p. 8, "Concerning the serological analysis, ELISA tests were performed in parallel when transition the batches and the the comparability verified" should be ""Concerning the serological analysis, ELISA tests were performed in parallel when transitioning between antigen batches and comparability between them was verified."

7. On p. 11, "In total, 28 cattle were included in the longitudinal analysis comparing sera from cow exposed 4 or 36 months" should be "In total, 28 cattle were included in the longitudinal analysis comparing bovine sera from animals exposed for 4 or 36 months." Similar corrections are required later in the paragraph.

8. On p. 13, discussion text is inappropriately included in the Results as follows "It is striking, that the indices tended to increase with time in those animals which had low indices at 4 months, but fall, when the indices were already high at this young age. There must be an optimum (or undulating) distribution for the index of individual animals, with a maximum at any time-point
before, in between or after 4 to 36 months. More detailed studies on the longitudinal dynamics of the IgG levels over the full course of infection (more than 6 years) and at higher frequencies (bi- or three-monthly intervals) are still under course." This text should be moved to the Discussion accordingly.

9. "Cows" are referred to repeatedly in the manuscript when cattle (mixed sex) is actually meant.

10. The abbreviation "SX" is not used consistently. It should be removed and "somatic extracts" can be used in full, as it usually is anyway.

11. On p. 15/16. this sentence is too long to be easily readable. "Thus, like Cho-Ngwa et al., in the present study we also found prominent protein bands between 40-70 and 90 kDa, in particular for ES from male filariae (Fig. 1b) which may comprise the dominant protein OV1CF of 62.4 kDa reported by Cho-Ngwa et al. indicating that these proteins may be released from living males or females in the nodule." After the Cho-Ngwa citation, start a new sentence beginning, "This indicates that these proteins...".

12. On p. 16, "diverse" is spelled incorrectly. "The present results depict the diverse pattern of immune reactivity of cattle sera with proteins arising from male vs. female worms."

13. The abbreviation: "BSA: Bovine serum albumin" is spelled incorrectly.

14. Alarminly, on p. 26 (figure legends), private notes to co-authors are still present!

15. In general, the English remains a painful read in places. Please be considerate of your readership!

Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

Yes

Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.

Yes

Are the conclusions drawn adequately supported by the data shown?
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