Author’s response to reviews

Title: First trimester ultrasound measurements and maternal serum biomarkers as prognostic factors in monochorionic twins: a cohort study

Authors:

Fiona Mackie (fionamackie@doctors.org.uk)

Rebecca Whittle (r.l.whittle@keele.ac.uk)

R. Katie Morris (r.k.morris@bham.ac.uk)

Jon Hyett (jon@fetalmedicine.org)

Richard Riley (r.riley@keele.ac.uk)

Mark Kilby (m.d.kilby@bham.ac.uk)

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Authors responses to reviewers comments

Reviewer reports:

Reviewer #1: The authors showed careful consideration for my previous comments and had reasonable justifications when my suggestions were not implemented.

Thank you very much

Reviewer #3: Thank you for the rebuttal letter. Although you have commented our comments, I do not agree with one specific answer:

We did not convert to MoM because…

Again the calculation of MoMs represents a standardized practice in obstetrics for a specific reason. It takes the level changes during the gestation into account. The example of T21 Screening and use of MoMs clearly illustrate that using MoMs results in increased detection rate (just one of many examples: DOI: 10.5582/bst.2018.01232). This implies the correction of MoMs for other factors such as ethnicity (example: https://doi.org/10.1371/journal.pone.0182538). If the authors choose not to use MoMs they need to acknowledge this as a flaw of the study.
The use of MoMs is not clear cut, and some researchers have raised concerns regarding their use (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1682205/). We have included additional text in the methods (lines 209-213) justifying why we chose not to use MoMs.

“Results were analysed on their original scale, as opposed to multiples of the median (MoMs), as all centres used the same method of measurement. Some researchers prefer using MoMs to deal with different measurements and case-mix in each centre, but concerns have been raised (Bishop 1993). Here, all centres used the same measurement method, and we adjusted for case-mix via standard prognostic factors.”