PEER REVIEW HISTORY

BMJ Open publishes all reviews undertaken for accepted manuscripts. Reviewers are asked to complete a checklist review form (http://bmjopen.bmj.com/site/about/resources/checklist.pdf) and are provided with free text boxes to elaborate on their assessment. These free text comments are reproduced below.

ARTICLE DETAILS

TITLE (PROVISIONAL)	Lactogenic hormones in relation to maternal metabolic health in
	pregnancy and postpartum: protocol for a systematic review
AUTHORS	Rassie, Kate; Giri, Rinky; Melder, Angela; Joham, Anju; Mousa,
	Aya; Teede, Helena

VERSION 1 – REVIEW

REVIEWER	Ruth, Chelsea University of Manitoba College of Medicine, Community Health Sciences
REVIEW RETURNED	08-Nov-2021
GENERAL COMMENTS	This is a very well written and clear proposal, and once the review is completed will be extremely beneficial to the literature. I have only a few points:

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Please provide justification for excluding conference abstracts from the review As there is recognized issues with older studies I would recommend a priori either a sensitivity or a subgroup analysis by age, rather than 'only if'

REVIEWER	Kampmann, Ulla
	Aarhus Univ Hosp
REVIEW RETURNED	19-Nov-2021

GENERAL COMMENTS	The protocol by Rassie et al. adresses a relevant and interesting research question with potential clinical implications. There is a need for more knowledge in the area and a systematic review is warranted. I only have a few comments: 1. Regarding search strategy: There should be a comment on whether grey literature is included or not.
	2. In the discussion the use of different assays measuring hPL and PRL should be addressed.

VERSION 1 – AUTHOR RESPONSE

Reviewer 1

Please provide justification for excluding conference abstracts from the review.

Thank you. We intend to conduct an in-depth synthesis of a large body of research spanning several decades, and as such only peer-reviewed published data with all results available will be considered

eligible for inclusion (thus excluding conference abstracts). A statement clarifying this has now been incorporated (page 12 of manuscript with tracked changes).

As there is recognized issues with older studies I would recommend a priori either a sensitivity or a subgroup analysis by age, rather than 'only if'.

Thank you. We have expanded on our approach to older studies in the revised version of the manuscript, making clear our requirements for diabetes definitions and detailing our intentions to extract clear extra data on diagnostic thresholds and assay methodology. Your comment regarding a subgroup analysis for older studies has been noted (page 20 of the manuscript with tracked changes) and will be helpful for the preparation of the review manuscript.

Reviewer 2

Regarding search strategy: There should be a comment on whether grey literature is included or not.

Thank you. As per the response to Reviewer 1's first comment, our intention is to synthesise a large body of research spanning several decades. Based on the volume of available data, and the desire to draw clear evidence-based conclusions, we have collectively decided that only peer-reviewed published data with all results available will be considered eligible for inclusion. This will not include a grey literature search. A statement clarifying this intention has been incorporated on page 12 of the manuscript (when viewed with tracked changes).

In the discussion the use of different assays measuring hPL and PRL should be addressed.

Thank you. We agree that this is an important point, particularly given that many of the older studies use radioimmunoassay techniques whereas more recent data uses enzyme-linked immunoassay methodology (across a range of different commercially-available kits and platforms). As such, variable assay methodology becomes another important factor contributing to study heterogeneity, and will be important to recognise in the review process. We will extract data on assay methods from each study in our extraction process, and your comments will be heeded when we synthesise and report our results. The assay issue has now been added to the discussion (page 20 of the manuscript with tracked changes).