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Review Comments:

This is a well written and clear manuscript with little concerns.
However, several minor questions arose:

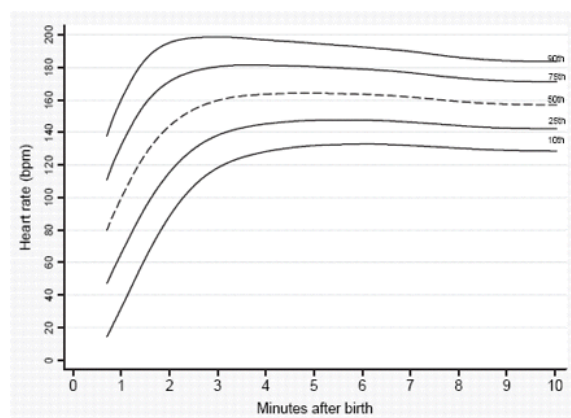
1) Why was caesarean section performed in these well babies, at which or who's indication? Might the indication have affected the values in general, or would the results be similar in vaginal born infants? Did the mothers receive relevant medication that may have reached their infants, and was this evenly distributed over the sexes? Please elaborate.

Reply 1: The caesarean section was performed because of gynecological reasons. We applied the measurements in these neonates after caesarean section, because they were routinely observed at the resuscitation table for at least 10 minutes by the neonatologist after caesarean section. The mothers have received epidural anesthesia, which should not affect the neonates.

Changes in the text: We added this information in the revised version of the manuscript. See page 5 line 107-110

2) Was temperature measured after birth as another potential confounder for HR and CO? Would the authors agree with the interpretation that HR was relatively high so soon after birth? If so, what would have caused this?

Reply 2: The supportive care after birth was given at the neonatal unit of medical university of Graz, where the surrounding/room temperature is kept at a level of around 26 degrees Celsius, whereby this temperature is controlled regularly. The body temperature is not measured routinely in these well doing term neonates, because they are discharged to the parents after 10 minutes. We measure body temperature routinely, if they are admitted to the NICU.



Changes in heart rate in the first minutes after birth; [JA Dawson et al.](#)
Published in ADC in fetal and neonatal

Regarding the heart rate level, as other study groups have observed the similar heart rate levels in term neonates directly after birth without any need for medical support, we think our study population had heart rates among the 50th percentile.

Changes in the text: We added this information in the corrected version of the manuscript. See page 6

line 131-134.

3) Were any adverse reactions observed from placing all these probes on these healthy infants?

Reply 3: We applied these probes for the measurements during the process of drying the neonates and the tactile stimulation. Afterwards the neonates do not get any manipulation anymore, so we do not believe, that there will be any adverse reaction or effect of our measurement.

Changes in the text: We added this information in the revised version of the manuscript. See page 7, line 157-159.

4) Would it be possible for the various measurements to interfere with each other?

Reply 4: According our experiences of the last years, the measurements mentioned in our study are compatible each other and we did not observe any interferences.

Changes in the text: We added this information in the revised version of the manuscript. See page 7, line 159-160.

5) Would the authors consider the difference found in CO between the sexes as clinically relevant? Please elaborate.

Reply 5: As it was an observational study, it should be hypotheses generating. We think, it is too early to construe a clinical relevance from our findings. It is a milestone for other studies, which should be performed to rule out clinical relevance.

Changes in the text: We changed the wording in the revised version of the manuscript. See page 9 line 206.

6) I assume the investigators and treating physicians were not blinded to the infants' sex. This may in theory have affected care and introduced bias, please discuss.

Reply 6: The neonatologists who were caregiver for these neonates were not blinded to the neonates' sex. But during the first 15 minutes, we have our treatment guidelines, according the heart rate and spO₂ values, which is independent from the neonates' sex. We do not believe there might be a bias during our observation period of 15 minutes after birth.

7) Is 'transducer' an appropriate term for the NIRS probe? And maybe change the word resuscitation, which might imply the need for cardiorespiratory support, which these infants by inclusion did not need.

Reply 7: Thank you for mentioning. The word "transducer" was replaced by "probe".
And the word "resuscitation" at relevant position was replaced by "support of neonatal transition"

Changes in the text: We have modified our text as advised (see page 2, line 53/ page 5 line 117/118/ page

5 line 126)