Author’s response to reviews

Title: First clinical experience with the Kora pacemaker system in congenital complete heart block in newborn infants

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Author’s response to reviews:

Dear reviewer,

Thank you very much for reviewing our manuscript again and your valuable input and improvements to our manuscript “First clinical experience with the Kora pacemaker system in congenital complete heart block in newborn infants”. We appreciate your comments and suggestions as they add important value to our paper and improve its quality significantly.

We addressed all remaining points raised by you and provide a concise item based reply. Below please find detailed information on our response and all corrections made in the manuscript.

Reviewer #1:
No comment.

Reviewer #2:
1. „The main question addressed by the authors - adequate growth and development - is highly relevant and interesting not only for the pediatric cardiology expert. The question is: what is adequate???

Authors argue: All three infants were at the 10th percentile at birth and continued to grow along the 10th percentile curve. With a close look to percentile curves this is clearly not understandable:

Fig 2   length  10th -> < 10th perc.; Weight  10th -> 10th perc.
Fig. 3 length 10th -> < 10th or 3rd perc.; Weight  50/25 th -> 10th perc.
Fig 4   length 10th -> < 10th perc.; Weight  25 th -> 10th perc.

That means that growth is not adequate, by definition patients suffer underweight, and there is a drop in percentile curves - either in length or in weight! Thus authors should state that growth is limited (see above) whereas development is adequate. This statement should be in the conclusion part as well as in the discussion.“

We agree that this statement must be made clear. We therefore inserted appropriate paragraphs within the manuscript in the discussion and conclusion part.

2. „¾ of discussion are dealing with the advantages of MV sensor, although there is not a single publication that this mechanism works with epicardial leads. Even if this mechanism would work the limitation would be the same: a limitation of stimulated heart rate to 95/min. So it’s unfair to compare the Kora device directly with the Microny system using the argument, that the acceleration sensor is not working in infants. The main advantage of the Microny systems is the stimulation rate, which is significantly higher!“

We shortened the discussion part about the MV sensor and excluded the comparison with the St. Jude device. We agree that this comparison might not be appropriate.

3. „In accordance with the proven limited growth of all 3 patients (see Fig.) authors should clearly state in the discussion that a higher heart rate might have a significant clinical benefit.“

We agree that higher heart rates might have a significant clinical benefit and included an appropriate statement in the discussion section.