Author's response to reviews

Title: Use of real time continuous glucose monitoring and intravenous insulin in type 1 diabetic mothers to prevent respiratory distress and hypoglycaemia in infants

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Dear Editor
Thank you for your e-mail containing the reviewer’s reports of the manuscript:

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Use of real time continuous glucose monitoring and intravenous insulin in type 1 diabetic mothers to prevent respiratory distress and hypoglycaemia in infants
Dario Iafusco, Fabrizio Stoppoloni, Gennaro Salvia, Gilberto Vernetti,
Patrizia Passaro, Goran Petrovski and Francesco Prisco

We would like to give our response to the comments enclosed.

- The comments of the two referees are very different reflecting two different ways of considering our study. In our opinion, the Reviewer Dr. JW Dudenhauen correctly interpreted the meaning of our paper which is not based on statistical evidence but on a logical evaluation of the fetal and neonatal risk in diabetic women.

A rise of blood glucose levels for two days after betamethasone administration has been described by the other referee, the colleague Dr. KJ Buhling in non-diabetic pregnant women. This finding is even more relevant in diabetic pregnant as shown in Fig 1 D and 1E of our paper together with the good results of intravenous insulin therapy. A statistic based discussion would be very difficult due to the fact that not all newborns from diabetic mothers are fated to experience respiratory distress or hypoglycemia at birth. As a consequence, a very high number of cases is needed to statistically prove the effectiveness of the
procedures described in the paper. On the other hand we think that even an anecdotal description may be very useful to diffuse the use of Real-time CGMS during some crucial phases of gestation such as the prevention of respiratory distress and the labour, thus improving the prognosis of the newborn from diabetic mother. The procedure is not hazardous to the health of both the mother and the fetus and is only minimally invasive. Why not to extend its use and prove its effectiveness on a large scale?

For all the above mentioned reasons we published only some graphics as an example of the potentiality of the procedure.

• The Medtronic equipments are property of the Department of Pediatrics of the Second University of Naples. As stated in the manuscript, there is not conflict of interest

• As stated in the manuscript the ethical committee approved the study.

• We shortened the part concerning the problems of type 1 diabetes and pregnancy and labour as requested by Dr. JW Dudenhausen

• We included in the references the study of Dr. KJ Buhling concerning the rise of blood glucose after betamethasone administration in non-diabetic pregnant women

Sincerely,

Dario Iafusco

Naples, 4th April 2008