



## LETTERS TO THE EDITOR

### Z-Score: Fenton 2013. Ten-year update ☆☆☆



### Escore Z: Fenton 2013. Atualização de dez anos

Dear Editor,

We read with great interest the article by Lima et al.<sup>1</sup> on the determination of extrauterine growth restriction (EUGR) in very low birth weight infants, as well as the effect several perinatal variables had on this outcome. They define EUGR as weight Z-score or head circumference Z-score less than or equal to -2. Also, they classify the newborns as adequate for gestational age (AGA) or small for gestational age (SGA) based on the birth weight Z-score. It is important to denote here that the calculated Z-scores were based on Fenton's growth chart of 2003.<sup>2,3</sup>

In 2013, the Fenton 2003 Preterm Growth chart was updated by a rigorous meta-analysis which included 3,986,456 births from Germany, United States, Italy, Australia, Scotland, and Canada.<sup>4,5</sup> By doing so, they updated the Z-scores for length, head circumference, and weight; these new Z-scores can be easily calculated using the online calculators at: <http://www.ucalgary.ca/fenton/>.

We do not know whether the results of the study would have been the same if the Z-scores of the study had been based on the 2013 Fenton Preterm Growth Chart. However, it was impossible for Lima et al. to base their study on the updated Z-scores, since Fenton's new growth chart was published a month after their study was submitted to the *Jornal de Pediatria*. We would like to know whether it would be possible to revise the study using the new and updated growth chart to see if the results are different.

We must add that Fenton's 2013 growth chart is the best reference we have until now. Nevertheless, we are looking forward to the new results of the INTERGROWTH-21<sup>st</sup>

Project, which will give us better international growth standards for preterm infants.<sup>6</sup>

### Conflicts of interest

The authors declare no conflicts of interest.

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