Author’s response to reviews

Title: UTERINE AND PLACENTAL BLOOD FLOW INDEXES AND ANTINUCLEAR AUTOANTIBODIES IN UNEXPLAINED RECURRENT PREGNANCY LOSS: SHOULD THEY BE INVESTIGATED IN PREGNANCY AS CORRELATED POTENTIAL FACTORS? A RETROSPECTIVE STUDY

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There are still too many abbreviations for me, especially in the "Results", "Discussion" and "Conclusion" chapters, which makes reading really difficult and challenging. The "Discussion" chapter is still too long, should avoid digressions and be more targeted, forgetting any hypothetical extrapolation not based on available evidence.

Answer: We have now improved the manuscript, by following the reviewer’s indications.

I remain persuaded, despite the arguments of the authors, that the interpretation of small series should systematically, even if they are close to Gaussian distributions, based on non-parametric tests. But I know this is a frequent matter of debate between the purists and the pragmatists. The representation of so few data data by their mean value and their standard deviation is misleading, not showing the full distribution of the obtained values. A complete box-and-whiskers plot representation, also including extreme values, is more honest for me.

Answer: We are convinced that the statistical analysis we performed, by applying Anova + multiple comparison test, is the most correct test to be conducted, especially since we have small samples and it is generally accepted that Anova is the most "robust" test among the parametric tests in the presence of Gaussian distributions, even if slightly distorted. Furthermore, if a small sample adapts to a Gaussian distribution, as demonstrated in our case, we can be even more confident that the distribution of the population is Gaussian, especially since it is more
frequently distorted in those cases. For this reason and also for a coherence matter, we have decided to describe data as mean and standard deviation and thus, graphics are reported as error-bar. Despite these assumptions, we also accepted the advice of the reviewer to conduct a non-parametric test (Kruskal Wallis), that, in fact, gave the same results as the above mentioned Anova test.

Concerning the ROC curve analysis: what are the corresponding positive predictive value and negative predictive value? Do they really reach a level allowing medical decision? The real medical meaning should be detailed.

Answer: Concerning the "positive predictive value and negative predictive value" generated by the ROC curve, they were declared respectively as "sensitivity and specificity". However, a sensitivity of 85% and a specificity of 67% cannot be accepted as a diagnostic tool, but our results remains an informative contribution within the RPL item, to potentially plan further RCT to investigate the possible clinical application of this parameter. This has been made clear in the discussion of the revised article.