

Response to Reviewer #1:

1. Table 5 should be revised. The expression of the paracrine factors should be presented as the presence of paracrine factors in the total preparations using different techniques. The present Table 5 could be given as supplementary.

The absolute content of cytokines in the PRP prepared by different methods is very important information that could influence further clinical effect of PRP treatment. The total volume of PRP obtained for each set is shown in the table 1 in the row titled "Final amount of PRP". Anyone interested can easily calculate the total concentration of paracrine factors by multiplying their concentration by the volume obtained (e.g. "4 x" for Arthrex ACP, "3 x" for Biomet Mini GPS III, etc.). In our opinion, presenting the result as an absolute total amount of paracrine factors obtained in each preparations can lead to confusion. This is due to the fact that many researchers and clinicians use different volumes of PRP in the treatment of various conditions. In the case of intra-articular administration, the volume used could be greater (>4 ml) than that for tendon attachments treatment (2-3 ml). In everyday clinical practice, in some cases a smaller volume than that obtained by the system will be used, and in others, two sets could be used. Additionally, presenting the results as a concentration per ml enables easier comparison with the results of other researchers who presented them in this way (Oh JH et al.[10], Kushida S et al.[20], Sundman EA et al.[31], and only Magalon J et. al. presented results with both concentrations per ml and total doses). To make reading more attractive, I decided to present this results as a graphical form (new Figures 3-4) and to move the table 5 to supplementary, as suggested. I hope that this solution and the presented arguments will be convincing enough.

2. Table 3-5 should be revised. Because they do not reflect the differences in the correlations in the different preparations.

The idea behind presenting the collective correlation between cytokines and cellular content in PRP is to answer the question whether the information about the PLT, WBC, RBC content in the sample is sufficient to estimate the potential level of cytokines in it. However, large samples are needed to obtain reliable information. 12 samples in each system is not enough to obtain meaningful results for most cytokines and growth factors. The correlations presented together for all samples appear to provide more relevant information due to the sample size. The differences in the correlation between the different systems are listed in manuscript only for statistically significant ($P < 0.05$) results and were presented in the Table 6. We agree that the results presented in this way do not sufficiently show the differences between the systems. Therefore, Figures 3-5 have been replaced with the graph presenting correlations between PLT and growth factors among various protocols and combined (new Figure 5). Figures 3-5 and table 6 have been moved to supplements.

3. Table 6 can be added as supplementary as it is the tabular presentation of figures 3-5.

The table shows statistically significant ($P < 0.05$) correlations across the various systems as opposed to Figures 3-5 which show the collective correlations, so they present different data. The changes presented above (#2) have been made, according to Reviewer's suggestions.

4. Further English editing by a professional editor could improve the readability of this manuscript.

The manuscript was sent back to the translation agency for further English editing.

Response to Reviewer #2:

1. The limitation of the study is not mentioned.

The limitations of the study are listed at the end of the Discussion section, pages 17-18.