Dear reviewer:

Thanks for your efforts and comments. We have revised the manuscript accordingly. Please see our point to point responses below.

Comments of reviewer:
1. The reviewer suggests moderate English changes in this manuscript.
Response:
Thanks for the comments. The manuscript has been edited by the MDPI English editing service.

2. This paper has been improved but still has a lot of limitations. I suggest they change the title to: MiR-146a-5p Expression in Peripheral CD14+ Monocytes from Patients with Psoriatic Arthritis Induces Osteoclast Activation, Bone Resorption, and Correlates with Clinical Response
Response:
Per the reviewer’s suggestion, we change the title of this manuscript to ‘MiR-146a-5p Expression in Peripheral CD14+ Monocytes from Patients with Psoriatic Arthritis Induces Osteoclast Activation, Bone Resorption, and Correlates with Clinical Response’
Psoriatic Arthritis Induces Osteoclast Activation, Bone Resorption, and Correlates with Clinical Response. Please refer to Line 5.

2. The reviewer does not see data from RA and AS.

Response:
During the one-week time limit for the last revision, we only had a chance to repeat the experiment in a small scale from 3 patients with rheumatoid arthritis (RA) and 3 patients with ankylosing spondylitis (AS). The results showed that the expression of miR-146a-5p in patients with RA and AS was similar to that in the NC group but significantly lower than that in PsA (as in the figure below). Since the numbers of RA and AS were small and the patients with osteoarthritis (OA) were not taken into consideration, we did not incorporate the data from these two groups (RA and AS) in the manuscript. Please refer to the Figure below, showing the selective increase of miR-146a-5p level in patients with PsA.
3. The numbers are small. Look at figure 2. Most of the PsA patients do not have an elevated marker. What distinguishes those who do? This is very preliminary data and should be treated as such.

Response:

In Figure 2, it is true that some, but not most, of the patients with PsA do not have the elevated marker. In fact, using the average value of miR-146a-5p in normal controls as the cut point, the expression of miR-146a-5p is increased in 80% of PsA patients (28/34) but only in 23% (8/34) of the normal controls. Although the subject numbers are not big (n=34 each), based on the statistical comparisons between PsA and normal controls, and computer-assisted support vector machine analysis, there are significant differences in miR-146a-5p expressions between the two groups. For sure the expression of miR-146a-5p is not a perfect 100% diagnostic marker to distinguish PsA from normal controls, however, its accuracy to distinguish PsA and healthy controls (auROC level) is 0.78, indicating that miR-146a-5p expression is able to distinguish PsA patients from NCs in 78% of the cases. In parallel, our result also showed that miR-146a-5p expression was reduced in CD14+ cells from PsA patients during clinical remission, indicating its expression could reflect the disease severity in PsA. Please refer to Line 198-202.

To investigate if miR-146a-5p levels could distinguish PsA patients from NCs, we used support vector machine (SVM) learning [29,30] to calculate the discrimination power of miR-146a-5p. We generated a SVM model with an area under the receiver operating curve (auROC) of 0.78 (Figure 2B), indicating that miR-146a-5p expression could distinguish PsA patients from NCs in 78% of the cases.

4. There are still areas where they use the word ‘predictor’ eg the heading on page 182

Response:

We discarded the word ‘predictor’ in Line 182 according to your comment. In addition, the heading of "qPCR Coupled with Machine Learning Identified miR-146a-5p as An Early Predictor for PsA" is replaced to the heading of "The Expression of miR-146a-5p was Significantly Increased in CD14+ Monocytes from PsA Patients compared to PsO Patients and NCs". Please refer to Line 190~191.
The Expression of miR-146a-5p was Significantly Increased in CD14+ Monocytes from PsA Patients compared to PsO Patients and NCs

In the discussion section (Line 303~304), the sentence of "Our study identifies miRNA-146a-5p in CD14+ monocytes as an easily accessible marker for prompt computer-aided diagnosis of PsA (with an auROC value 0.78 by SVM model)" using the term "marker" has been deleted.

We hope that the revised manuscript in its current form is of general interest for the readers and is appropriate for publication in *Journal of Clinical Medicine*.

Best regards,

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