Reviewer's report

Title: Comparison of endothelial progenitor cell function in type 2 diabetes with good and poor glycemic control

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Reviewer: Georg Schlieper

Reviewer's report:

The authors investigate EPC numbers and function in 36 diabetic patients and find both in-vivo and in-vitro a negative impact of high glucose levels on EPC. Despite the relative low number of patients the findings are interesting. However, the authors should indicate treatment modalities of the patients as antidiabetic treatment such as PPAR-gamma-agonists may also influence EPCs.

Methods: Please describe isolation and quantification of EPCs in more detail as the cited reference seems to be from a different working group.

Discussion, page 12: Should be deleted completely as this page deals with results and introduction but not a discussion of the author’s results.

Conclusion: “EPC dysfunction … could be improved by strict glycemic control”: As the authors did not perform an intervention study this sentence should be deleted.

Figure 1: What is the difference between 1a and 1c and 1b and 1d? Please indicate in the legend.

Figure 1e: which markers have been used? Please indicate!

Figure 1: Could you delete the suggestive correlation line rather report on r2.

Figure 2: What is the difference of a1 and a2 and a3 and a4? Please refer to.

Figure 3: Please discuss 3d where diabetic cells have less percent of inhibition than non diabetic cells (3c)!

Figure 4: 1e and 1f: I would prefer a graph with 10 days of culture because the figure 1f with no numbers at day 14 indicate no apoptosis but according to the authors they were no cells alive thus there could be 100% apoptosis.

Table: Please indicate anti-diabetic treatment.

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Acceptable
Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:

I declare that I have no competing interests.