Reviewer's report

Title: Local Erythropoietin and Endothelial Progenitor Cells Improve Regional Cardiac Function in Acute Myocardial Infarction

Version: 1 Date: 6 June 2010

Reviewer: Nassos Manginas

Reviewer's report:

In this detailed article the authors document the antiapoptotic, proinflammatory and angiogenic effects of EPO on eEPCs, but more importantly, show the incremental benefit of adding EPO on eEPC delivery, leading to improved regional wall motion in MI borders.

Major Compulsary Revisions:
1. The protocol is a little confusing and needs clarification, with regards to the number of experiments divided between EPO/eEPC/EPO+eEPC in each group of I/R or ligation. Are the experiments' number sufficient to demonstrate differences within the I/R group?

Minor Essential Revisions:
1. The figure 3d is missing
2. The authors should provide their insight on the discrepancy between improved regional contractility and unaltered global LVEF. Is this a result of relatively preserved EFs included? Could remote wall differences play a role?

Level of interest: An article of importance in its field

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