Reviewer's report

Title: Native cardiac reserve predicts survival in acute post infarction heart failure in mice

Version: 1 Date: 12 October 2007

Reviewer: Rosa Sicari

Reviewer's report:

A large body of evidence demonstrate that patients with inotropic reserve during dobutamine stress echocardiography have a better outcome, both in idiopathic dilated cardiomyopathy and in ischemic heart disease. The present experimental study tries to assess the inotropic reserve during dobutamine stress echocardiography in normal hearts and relates it to the outcome after myocardial infarction. There are several issues that authors should address:

1. please define cardiac reserve
2. the difference among the three groups seems to be casual and the only significant parameter is chronotropic reserve. Please comment
3. A major limitation of the study is the absence of histologic assessment of myocardial necrosis extent. This may account for the different outcome among the three groups. Moreover, a pathologic assessment may explain a potential underlying disease in non-responders mice.
4. Please provide the pathophysiologic explanation of this finding and its potential clinical impact.

What next?: Unable to decide on acceptance or rejection until the authors have responded to the major compulsory revisions

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

Quality of written English: Needs some language corrections before being published

Statistical review: Yes, and I have assessed the statistics in my report.