Reviewer's report

Title: Lessons learned from the use of 1,977 in-situ bilateral internal mammary arteries: a retrospective study

Version: 1  Date: 22 July 2014

Reviewer: Themistokles Chamogeorgakis

Reviewer's report:

The question posed by the authors is not new but is well defined. The use of bilateral mammary arteries has been previously extensively discussed. However, the shared experience from the above high volume institution on this topic is valuable.

The methods are appropriate and well described.

The data are sound and well controlled.

The manuscript adheres to the relevant standards for reporting and data deposition.

The discussion and conclusions are well balanced and adequately supported by the data.

The title and abstract accurately convey what has been found.

The writing is acceptable.

The authors conclude that the revascularization strategy with both mammary arteries does not impact short and long term survival. However, advanced age, chronic obstructive pulmonary disease and insulin treated diabetes have a negative impact on late survival in patients with bilateral mammary arteries. Their conclusions have an important role in clinical practice.

I have only three minor revision suggestions:

1. On page 9 of the discussion section, second paragraph it is stated that BMI was similar among the two groups. In table 1, however, although the Body Mass Index value between BIMA and single IMA is practically the same (27.2±3.7 vs 27.9 ± 4.6), p <0.0001. Please explain or rectify p value.

2. Page 8 of the discussion section, second paragraph is stated: "the increase in risk of sternal reconstruction in diabetic patients has to be balanced....". Perhaps the word:'reconstruction" could be replaced with:"infection"?

3. Page 6 of the results section, second paragraph:"In this model, no statistically significant effect modification was identified between BIMA and the other predictors of DSWI". Could you further elaborate on this statement

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