

## Peer Review File

Article Information: <https://dx.doi.org/10.21037/ales-23-21>

### Review comment

Congratulations to the authors on presenting this review on minimally invasive Coronary artery bypass grafting surgery.

I have the following comments:

**Comment 1:** Would change the statement regarding endovascular approaches to percutaneous coronary intervention on page 3.

#### Reply 1:

Please specify what needs to be changed? Nonetheless, the section has deleted that section.

**Comment 2:** Line 97 on page 3 – Need to provide reference.

**Reply 2:** Reference provided.

**Comment 3:** Page 3 lines- 101 to 103 – ‘Adding cardiopulmonary bypass allows for induction of cardioplegia 101 and therefore more flexibility in the number of grafts that can be constructed’ – This statement is incorrect. More than one bypasses can be performed on the beating heart with the stabilizer.

**Reply 3:** The statement has been removed.

**Comment 4:** Page 4 – line 118 – “total thoracoscopic CABG was 118 performed without the need for any open surgery. However, these practices have been 119 largely abandoned due to poor outcomes and inefficiency”- This statement is incorrect. Authors need to do more accurate literature review. There are centers who are performing arrested heart thoracoscopic CABG with acceptable outcomes.

**Reply 4:** This section has been deleted. However, we would argue that thoracoscopic CABG has no role in the future of cardiac surgery.

**Comment 5:** Page 6 – line 169 – “Hybrid coronary revascularization (HCR) 169 includes a surgical bypass for the left main disease” – Even though they state later for other diseased artery locations. It is not very clear. They need to state in what types of coronary artery disease would hybrid revascularization be beneficial.

**Response 5:** The statement has been added.

**Comment 6:** .Page 6 – line 193 – “to have an increased mortality 193 benefit over single IMA and vein harvest comparisons” – This sentence needs to be revised. It states increase mortality. It should be increased survival.

**Response: 6:** Sentence Revised

**Comment 7:** Page 7 – line 223 – “severe peripheral artery disease” this is not a contraindication to minimally invasive CABG.

**Response 7:** Severe peripheral artery disease has been removed.