**Reply to the Letter to the Editor**

**Reply to Athappan and Subramanian**

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We are very pleased by the interest shown in our paper. Impact of number of vessels disease on outcome of patients with stable coronary artery disease: 5-year follow-up of medical, angioplasty and bypass surgery study [1] by these distinguished authors [2]. We further analyzed our data as suggested:

First question: When PCI was compared to CABG, new revascularization procedure was performed in 29.4% on PCI versus 2.4% on CABG group ($p < 0.01$) and 23.3% on PCI versus 3.4% CABG ($p < 0.01$) in 2VD and 3VD, respectively. Indeed, the need for further revascularization increases health cost at the same survival benefits, as we have shown previously [2].

Second question: To rule out the selection bias, we found no statistical difference among the main characteristics (gender, age, hypertension, diabetes, smoking, previous MI, cholesterol, HDL, LDL, triglycerides levels, and positive treadmill test) stratified by groups (5VD, 2VD and 3VD) in each of the allocated treatment. So, there was a balance of the traditional risk factors among groups.

Third question: We compared the number of patients alive (A) versus cardiac related (CRD) vs non-cardiac related death (NCRD) on SVD (200, 9, 5), 2VD (222, 21, 10) and 3VD (294, 44, 20). We found higher cardiac related deaths on 3VD group ($p = 0.004$). However, we would like to highlight that the higher risk for death found in 3VD patients were adjusted for age and other comorbid variables, and consequently, the 3VD itself is an independent risk for death. When the 3VD group was stratified by treatment allocation, no statistical differences were noted among PCI ($A = 101$, CRD = 15, NCRD = 4), CABG ($A = 96$, CRD = 12, NCRD = 10), and MT ($A = 97$, CRD = 17, NCRD = 6) ($p = 0.43$). The main cause of death in PCI and MT was cardiac related, while in CABG group, cardiac and non-cardiac causes were balanced.

Finally, around 80% of our patients were under lipid lowering drugs and the values achieved after 60 months follow-up regarding cholesterol (PCI = 209 [46], CABG = 213 [46], MT = 212 [47], $p = 0.52$) LDL (PCI = 131 [40], CABG = 136 [38], MT = 136 [39], $p = 0.31$), HDL (PCI = 43 [11], CABG = 43 [11], MT = 42 [10], $p = 0.29$), and triglycerides (PCI = 173 [93], CABG = 162 [91], MT = 186 [162], $p = 0.35$) were balanced respectively, without being statistically different among treatment groups.

We would like to stress that along the period of study follow-up, the lipid targets were different than currently used. Thus, we cannot make any conclusion based on the benefits of lipid treatment, since the values were similar and above the expected target. Thank you, indeed the correct cholesterol unit is mg/dl.

**References**


**Letter to the Editor**

**Clinical impact of heparin-bonded circuits: when a meta-analysis does not clear out the clouds**

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**Keywords:** Heparin-bonded circuits; Clinical Impact

We read with interest the systematic review and meta-analysis of Mangoush and co-workers [1] recently published in the European Journal of Cardiothoracic Surgery, addressing the clinical impact of heparin-bonded circuits (HBCs) on clinical outcome following cardiac operations. The authors retrieved 41 randomized control trials (RCTs) and could demonstrate that patients treated with HBCs experienced a better outcome, namely in terms of reduced incidence of allogeneic blood product transfusions and resternotomy. Within the exclusion criteria, the authors considered the use of auto-transfusion techniques to manage postoperative bleeding. Of course it is in the right of the authors to decide which criteria should be applied to include RCTs in their meta-analysis. However, the reason for excluding studies...