Multi-Biomarkers Panel in Cardiac Surgery Patients

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Dear Colleagues,

We are grateful for your great interest in our recent article and for the valuable suggestions provided. Unfortunately, we are not in a position to answer your questions as the biological samples are no longer available. We tried to collect the plasma values of CRP, troponin, and BNP/Nt-pro-BNP from our informatics system, but they were not evaluated in 48 h after the surgical procedure in most patients.

We considered presepsin and procalcitonin as innovative biomarkers for the development of adverse postoperative complications and mortality in patients undergoing cardiac surgery. According to our data and recent literature, we strongly believe that these novel biomarkers should be available in the common laboratory platforms and included in the routine laboratory tests, particularly in case of critically ill patients, such as cardiac surgery patients.

Certainly, single biomarkers cannot be considered specific and predictive for different clinical conditions and outcomes. Hence, in the light of our clinical experience, we think it would be appropriate to create a multi-biomarkers panel that includes cardiac, renal and respiratory outcome markers to obtain a global patient evaluation. This system would be more specific and predictive compared to the single biomarkers evaluation system.