

SUPPLEMENTARY FIGURE LEGENDS

Figure 1. IL-1 β gene expression, FACS plot for monocyte subsets and comparative analysis of intensities of monocyte markers between preoperative and postoperative CAD patients. (A) In vitro IL-1 β gene expression in LPS stimulated THP-1 (monocytic cell lines) with different doses of selenium. (B) Representative FACS plot for monocyte differentiating into classical, intermediate and non-classical subsets based on CD14 and CD16 markers. (C) Intensities of CX₃CR1 on classical monocytes (M1) between postoperative CAD patient and controls. (D) Comparative analysis of total blood monocytes frequencies and intensities of CCR2 markers on classical (M1) monocytes and intensities of CCR1 markers on classical (M1), intermediate (M2) and non-classical (M3) monocytes, between preoperative and postoperative CAD patients. Statistical analyses were performed by non-parametric Kruskal-Wallis test (overall differences between analyzed groups, in red) with Dunn's multiple comparison test or Mann-Whitney test (differences between each group, in black). The vertical lines in scatter plot with bar represents the median with range.

Figure 2. Plasma pro-inflammatory cytokines between preoperative and postoperative CAD patients. (A) Plasma levels of TNF- α between preoperative and postoperative CAD patients and controls. (B) Plasma levels of GM-CSF, IL-6, IL-1RA, IL-4, IL-5, IL-10 between preoperative and postoperative CAD patients. Statistical analyses were performed by non-parametric Kruskal-Wallis test (overall differences between analyzed groups, in red) with Dunn's multiple comparison test or Mann-Whitney test (differences between each group, in black). The vertical lines in scatter plot with bar represents the median with range.

Figure 3. Association between plasma cytokines and monocyte migration marker and clinical parameters among preoperative and postoperative CAD patients. (A) Positive correlation between cytokines, IL-10 and GM-CSF and troponin; positive tendency between IL-6 and CRP; and positive correlation and tendency between CCR1 migration marker expressed on M1 and M2 and M3 monocyte subsets and leukocytes, respectively, among preoperative CAD patients. (B) Positive correlation between the cytokine TNF- α and troponin, creatinine, glucose, lipase and BMI and positive correlation between IL-1 β and leukocytes, among postoperative CAD patients. Statistical analyses were performed by non-parametric Spearman's correlation co-efficient rank test.

Figure 4. Effect of selenium on IL-1RA and IL-10 among preoperative and postoperative CAD patients. The cell supernatant levels of IL-1RA and IL-10 cytokines from PBMCs of preoperative (A) as well as postoperative (B) CAD patients, when incubated (24hrs at 37°C) with two different concentrations of selenium, 100nM and 5 μ M. Statistical analyses were performed by non-parametric Kruskal-Wallis test (overall differences between analyzed groups, in red) with Dunn's multiple comparison test (differences between each group, in black). The vertical lines in scatter plot with bar represents the median with range.