the sets by Bender Medsystems, CanAg and Brahms PCT-Q. Data are presented as mean ± standard deviation.

**Results**
All patients registered the increased level of hsCRP, without significant difference between the two groups. At the point after the operation, the rate of hsCRP was significantly higher for the group AHD. Correlations were noted between levels of hsCRP and the frequency of occurrence of criteria for SIRS (r = 0.22 for the group of IHD, P = 0.03; r = 0.39 for the group AHD, P = 0.01). The odds ratio (OR) likelihood of SIRS complications on hsCRP was 2.4 in the group with CHD and 3.9 in the group with AHD. There was no significant difference between the rates of PCT for the corresponding points of comparison groups. The highest predictive value (OR = 2.9, P = 0.03) has a PCT in relation to the severity of SIRS in patients with AHD (infectious endocarditis and rheumatic heart disease). The STREM-1 level was higher compared with the postoperative period (55.5 ± 8.8 vs. 77.8 ± 9.1 pg/ml, P = 0.005; 49.9 ± 6.7 vs. 87.5 ± 8.9 pg/ml, P = 0.004). We studied the correlation between the level of STREM-1 and the frequency of occurrence of symptoms SIRS (r = 0.77 for the group of IHD, P = 0.002; r = 0.79 for the group AHD, P = 0.04). The OR STREM-1 probability of SIRS complications was highest in comparison with all of the markers.

**Conclusions**
STREM-1 has the greatest diagnostic significance in relation to non-infectious SIRS in ischemia/reperfusion.

**References**

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**P422**
The normobaric oxygen paradox: does it increase haemoglobin?

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**Introduction**
A novel approach to increase erythropoietin (EPO) using oxygen has been reported in healthy volunteers. The purpose of this study is to investigate whether the EPO increase is sufficient to induce erythropoiesis.

**Methods**
We compared exposure to daily versus every other day oxygen administration on haemoglobin variation during a 12-day period. Each subject underwent the two protocols at a 6-week interval period to achieve the same baseline values.

**Results**
See Figure 1. Nine subjects underwent the study. We observed a significant increase in haemoglobin values in the every other day group compared with the each day group and with baseline. At the end of each day period, haemoglobin values increased to achieve a significant difference as compared with baseline. There was a significant rise of reticulocytes in the every other day group as compared with the each day group (182 ± 94% vs. 93 ± 34%, P < 0.001). These data provide demonstration of an enhanced production of erythrocytes.

**Conclusions**
The normobaric oxygen paradox seems effective to increase haemoglobin in non-anaemic healthy volunteers assuming there is a sufficient time interval between the two oxygen applications. This could permit interesting clinical applications in perioperative medicine as an adjunct therapy to EPO for blood predonation.

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**P423**
Transfusion of red blood cells does not increase transcutaneous oxygen tension

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**Introduction**
We investigated the skin oxygen tension (tcpO2) of critically ill patients before, during and after transfusion (XF) of packed red blood cells (RBC).

**Results**
Nineteen critically ill patients (11 men, age 67 ± 15 years, SAPS II 60.1 ± 19) who received 2 U RBC due to hemoglobin (Hb) <8 g/l underwent measurement of tcpO2 (TCM400; Radiometer Ltd,