Introduction:
Sepsis is an everyday challenge for the intensivist and biomarkers are useful tools for identification and treatment of this syndrome. We sought to validate presepsin as a biomarker of sepsis in comparison to PCT (procalcitonin) and Interleukins (IL-6,IL-8).

Methods:
We enrolled 25 patients, 18 men and 7 women average age 58 (39.5-74) years old, APACHE II 16 (13.5-20.5), SAPS II 48(40.5-58.5), SOFA 8 (6.5-9).
11 patients were septic on admission (according to Surviving Sepsis Campaign : International guidelines for Management of Sepsis and Septic Shock: 2016), 9 had a septic episode during their hospitalization in the ICU while 5 patients never endured sepsis. We measured presepsin, procalcitonin, IL-6,IL-8 during sepsis and on remission.

Results:
All septic patients had increased values of presepsin, PCT, IL-6 and IL-8 during sepsis with a cutoff value for presepsin 800pg/ml, while the values of these biomarkers were significantly decreased during remission or in comparison to non-septic patients(presepsin p = 0.002, PCT p≤ 0.001, IL-6 p≤ 0.001, IL-8 p= 0.004. All patients who were not septic survived while among septic patients 8 died (40% mortality). Presepsin correlated significantly with PCT, IL-6 and IL-8 (p<0.05).

Conclusion:
Presepsin is a valid biomarker of sepsis and correlates significantly with all the other values of PCT, IL-6 and IL-8.