Introduction:
Sepsis is a frequent reason for admission in the Emergency Department (ED) and its prognostic mainly relies on early diagnosis. In addition, no validated prognostic tool is currently available. Therefore, identification of patients at high risk of worsening in the ED is key. The TRIAGE objective was to assess the prognostic value of a blood marker panel to predict early clinical worsening of patients admitted in the ED with suspected sepsis.

Methods:
TRIAGE was a prospective, multicenter (11 sites in France and Belgium) study on biological samples conducted in partnership with bioMérieux S.A. Patients admitted in the ED with suspected or confirmed community-acquired infection for less than 72h were included. Exclusion criteria were: admission in the ED for more than 12 hours, septic shock at admission, immunodepression, sepsis syndrome 30 days prior to admission. The protocol included 5 clinical and biological time points (H0, H6, H24, H72, D28). Patients were classified in 3 groups at admission (infection, sepsis, severe sepsis) and divided into 2 evolution/prognosis groups depending on worsening or not from their initial condition to severe sepsis or septic shock and SOFA score’s evolution. The evolution criteria were centrally evaluated by an independent adjudication committee of sepsis experts including emergency physicians and intensivists. Patients were followed up to day 28 for mortality.

Results:
The study duration was 3 years with 600 patients included (102 excluded). The centralized analysis is in progress to select the combination of biomarkers with the best prognostic performance comparing both evolution/prognosis groups. Currently, 125 patients have been classified as worsening and some results will be available in 2018.

Conclusion:
TRIAGE is the largest prospective multicenter study assessing the prognostic value of a panel of blood markers in EDs which could help identification of septic patient at risk of worsening at time of admission in the ED and develop specific management.