Absolute eosinophils count as a marker of mortality in patients with severe sepsis and septic shock in an intensive care unit

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Introduction: Eosinophils in the circulating blood undergo apoptosis during sepsis syndromes induced by the action of certain cytokines. Objective: The aim of the study was to evaluate the absolute eosinophils count (EC) as a marker of mortality in severe sepsis and septic shock. Patients and Method: A prospective cohort study of patients with a diagnosis of sepsis or septic shock admitted to the intensive care unit (ICU) of the Dr Gustavo Fricke Hospital between January 2008 and December 2009 was conducted. Daily EC in all patients was analyzed. Receiver operating characteristic curve analysis was used to assess the performance of the diagnostic test. Results: We studied a total of 240 patients. The median age was 62 years (interquartile range [IQR], 48-72 years), and 67 (27.9%) died. The median EC in patients who died was 43 (IQR, 14-121), whereas in surviving patients, it was 168 (IQR, 98-292) (P < .001). When the EC on the fifth day of hospital stay was assessed, an area under the