Introduction:
Patients aged 80 years or older presently account for approximately 10-15% [1] of all Intensive care unit (ICU) admissions in Europe. The major challenge nowadays is to admit those elderly patients who will benefit from ICU treatment. The objective of this study is to describe the characteristics and outcomes of patients ≥80 years old admitted to the ICU.

Methods:
Retrospective observational study of all patients aged ≥80 years admitted for >24h in 2016. Demographic data, admission diagnosis, APACHE II and SAPS II scores, use of ICU resources and mortality were collected.

Results:
152 patients (25%) were included, with a mean age of 85.06. Female gender was more prevalent (51.3%). Mean length of stay was 4.48 days with mean SAPS II and APACHE II scores of 40.23 and 38.82 respectively. The most prevalent type of admission was medical, 70.4% (n=107) and from these the main reasons for admission were respiratory disease (n=45; 29.6%) and sepsis (n=32; 21%). ICU Mortality rate was 29.6% (n=45), whereas 6-month mortality was 31.5% (n=48). Survival rate was often related with cardiovascular (23 [15.1%], \(P<.001\)) and respiratory diseases (32 [21%], \(P=.01\)), whereas non-survivors were admitted due to sepsis and neurologic causes. Mortality rate was independent from the mean length of stay, noninvasive ventilation and renal replacement therapy, but dependent for previously comorbidities. Mechanical ventilation was an independent predictive factor of ICU mortality (\(P<.001\)) and 6-month mortality (\(P=.008\)).

Conclusion:
Nearly 70% of patients aged ≥80 years were discharged alive from ICU, and less than 50% survived 6 months after ICU admission. Our study revealed a better prognosis for admissions due cardiovascular and respiratory diseases. Efforts should be done to identify earlier septic and neurological patients that benefit ICU treatment, and reevaluate the critical patient pathway, in this special population.

References: