Introduction:
Acute pulmonary injury is a frequent income pathology to the intensive care unit (ICU). The patients with ALI/ARDS course with pulmonary edema because of alterations in the alveoli – capillary membrane. Frequently these kinds of patients require aggressive hydric management and positive hydric balance meanwhile the sickness.

Methods:
to determine association between the magnitude of positive hydric balance and the mortality. Calculated APACHE II and SOFA, verify use and maximal doses of vasoactive drugs, hydric incomes and outcomes in 48 hours of length of stay, VM days and patient status at 28 days. Divided the sample in two groups, high/low hydric balance for the analysis.

Results:
Included 90 patients, 61% were men, mean age 48.9 ± 16.56 years, APACHE II 17 (RIC 12-24), SOFA 8 (RIC 6-10) 61% of patient’s ARDS 48% die, 30 with ARDS and 12 with LPA. 82% length of MV was 14 (RIC 9-19) days, ICU LOS 13 (RIC 10-18 days). The most frequent cause of ICU income was Pneumonia 49% (44 patients), mean 48 hours’ hydric balance was 1,391.5 (572 - 2,438) ml, 1433 ml positive hydric balance was identified as cutoff by ROC. High hydric balance RR 3.126 (IC 95% 1.177 - 8.355, p= 0.022) and ARDS RR 3.37 (IC 95% 1.220 - 9.309, p= 0.019) were identified as independently mortality risk factors.

Conclusion:
A ≥ 1433 ml hydric balance at 48 hours of ICU stay and ARDS, is an independently mortality risk factor.

References: