Introduction:
The aim of this study was to compare factors associated with the ICU mortality for VAP due to multidrug-resistant (MDR) *Klebsiella spp.* in case of monobacterial (MO) vs polibacterial (PO) origin.

Methods:
Retrospective data analysis of patients treated in ICU with MDR *Klebsiella spp.* strains as pathogens of VAP during three year period was carried out.

Results:
Data of 71 patients were evaluated. MO vs PO of MDR *Klebsiella spp.* VAP cases was found to be 35 (49.3%) vs 36 (50.7%), p = 0.906. The ICU mortality was 9/35 (25.7%) in MO, and 17/36 (47.2%) in PO one, p = 0.060. Statistical significant differences of survivors vs non-survivors in MO and PO VAP due to MDR *Klebsiella spp.* were found in medians of neutrophilosis 78.1% (IQR 72.4 – 82.2) vs 84.2% (IQR 79.7 – 93.3), p = 0.011 and 83.1% (IQR 80.0 – 86.2) vs 87.9% (IQR 83.0 – 89.3), p = 0.029; in proportions of septic shock on diagnosis day 9/26 (34.6%) vs 8/9 (88.9%), p = 0.005 and 1/19 (5.3%) vs 6/17 (35.3%), p = 0.023, renal failure 12/26 (46.2%) vs 8/9 (88.9%), p = 0.026 and 8/19 (42.1%) vs 13/17 (76.5%), p = 0.037. Differences were found in proportions of severe hypoxaemia 1/26 (3.8%) vs 3/9 (33.3%), p = 0.044 only in MO VAP, and RRT 2/19 (10.5%) vs 7/17 (41.2%), p = 0.034, also cardiovascular disease 9/19 (47.4%) vs 16/17 (94.1%), p = 0.002 only in PO one.

Conclusion:
The ICU mortality was almost twice higher in polybacterial than monobacterial origin of VAP due to MDR *Klebsiella spp.* Septic shock, renal failure and neutrophilosis were found to be associated with the ICU mortality in both mono/polybacterial origin; severity of hypoxaemia in case of monobacterial, but comorbidities in polybacterial onset.