

The primary statistical-endpoint was the evaluation of the influence of appropriate versus inappropriate antimicrobial-therapy on in-hospital-mortality. Multivariate-logistic regression-analysis was performed. The statistical analysis was performed using SPSS-version-20 (SPSS-Inc, Chicago, Illinois). Data were expressed as mean  $\pm$  standard deviation(SD) for normally distributed variables and median and range for others. All statistical tests were 2-sided and  $p < 0.05$  was considered statistically significant. No correction for multiple-testing was done. Wilcoxon-Mann-Whitney-test was used to compare numeric variables between the main-groups of patients. Ordinal-variables were analyzed using Chi-square-test and via binary-logistic regression-analysis. A multivariate-logistic regression-analysis was performed by forward binary-logistic-regression including all relevant nominal-variables, in which the significant variables were selected.