

**P2397 Differences in risk factors, presentation and outcomes among bacteraemias and candidaemias in critically ill patients**

Matthaios Papadimitriou Olivgeris<sup>1,2</sup>, Fevronia Kolonitsiou<sup>1</sup>, Adamantia Aretha<sup>1</sup>, Lora Tanaseskou<sup>1</sup>, Vasileios Karamouzos<sup>1</sup>, Myrto Christofidou<sup>1</sup>, Evangelos Anastassiou<sup>1</sup>, Fotini Fligou<sup>1</sup>, Iris Spiliopoulou<sup>1</sup>, Markos Marangos<sup>1</sup>

<sup>1</sup> University Of Patras, Patra, Greece, <sup>2</sup> CHUV Centre hospitalier universitaire vaudois, Lausanne, Switzerland

**Background:** Bloodstream infections (BSIs) due to bacteria and *Candida* spp. are associated with different risk factors. The aim of the present study is to compare patients that developed candidaemia with those with bacteraemia.

**Materials/methods:** During a 2 year period (August 2016 to July 2018), all bloodstream infections among patients hospitalized at the University General Hospital of Patras, Greece were included. Antimicrobial resistance of isolates was interpreted according to EUCAST guidelines.

**Results:** During the study period, 210 BSIs were reported among the 593 hospitalized patients corresponding to 2.6 BSI episodes per 100 patients-days; 174 (82.9%) were bacteraemias (71 *Klebsiella pneumoniae*, 43 *Acinetobacter* spp., 28 *Pseudomonas aeruginosa*, 18 staphylococci, 14 other bacteria), while the remaining 36 (17.1%) candidaemias (18 *Candida parapsilosis*, 9 *C. albicans*, 9 other species). Carbapenem resistance was present in 132 gram-negative pathogens. Primary BSIs represent the majority of BSIs (47.1%) followed by catheter-related (26.2%). 30-day mortality was 31.9% (31.0% of bacteraemias vs 36.1% of candidaemias; *P* 0.560). Results of multivariate analysis of comparison among patients that developed candidaemia and those with bacteraemia are shown in Table.

**Conclusions:** We found a high burden of BSI, especially due to carbapenem resistant gram negative bacteria. Candidaemia, as compared to bacteraemia, provoked more severe infections (as depicted by development of septic shock and SOFA score upon BSI onset) and was associated with higher rates of appropriate empiric treatment. The combination of aforementioned factors can explain the absence of mortality difference.

Characteristics	<i>P</i>	OR (95% CI)
SOFA score upon BSI onset	0.024	1.2 (1.0-1.5)
Number of antibiotics administered	<0.001	1.5 (1.2-1.8)
Catheter related BSI	<0.001	8.3 (3.0-22.7)
Non breakthrough BSI	0.001	6.9 (2.3-20.8)
Septic shock	0.006	6.4 (1.7-23.6)
Appropriate empiric treatment	0.005	5.6 (1.7-18.7)

