

L0004 Impact of a rapid diagnostic system on the management of septic shock patientsPaola Maria Placanica*¹, Paolo Carfagna², Silvia Lauri¹, Mariarosca Gaudio¹¹ UOC Patologia Clinica, A.O. San Giovanni-Addolorata, Roma, Italy, ² UOSD Medicina 2, A.O. San Giovanni-Addolorata, Roma, Italy

Background: In patients affected by septic shock, prompt diagnosis and initiation of appropriate antimicrobial therapy can reduce mortality. Rapid diagnostic tests that accurately identify infection-causing pathogens and the effective antimicrobials against these pathogens can increase the likelihood that patients are treated appropriately. Rapid diagnostic tests can also be used to help clinicians discontinue unnecessary antibiotics or de-escalate broad-spectrum antimicrobial therapy to a narrower-spectrum option. The Accelerate Pheno™ system is a new diagnostic device that can provide rapid microbial identification and antimicrobial susceptibility results.

Materials/methods: . At San Giovanni Hospital in Rome, we implemented a protocol for the management of patients with septic shock using Accelerate Pheno™ system. The aim of this study was to explore the role the Accelerate Pheno™ system in the management of 18 patients in septic shock, consecutively enrolled from May 2018 to January 2019.

Results: Accelerate Pheno™ system results were obtained from the microbiology laboratory after an average of 1.09 days versus an average of 3 days using conventional methods. No identification errors or discrepancies in AST report were observed when compared to conventional methods. In 63.6% of cases, it was possible to establish a targeted therapy, and in 18.2% of cases a de-escalation could be performed.

Conclusions: . For septic shock patients, the Accelerate Pheno™ proves to be very effective to obtain not only a rapid and accurate microbiological diagnosis, but also to optimize antimicrobial therapy within the context of antimicrobial stewardship principles.

