Matrix-assisted laser desorption/ionization time-of-flight mass spectrometry (MALDI-TOF) has been effectively used as a rapid method for microbial identification.

In a case report Brunetti et al. identified A. baumanni by MALDI-TOF technique directly from the CSF drawn from the external ventricular drainage of a patient with severe confusional state and signs of meningism. Simultaneously the antibiotic susceptibility test was performed by automated method from the pellet of the broth-enriched sample. The MALDI-TOF technique allowed microbial identification in less than 30 minutes, and the susceptibility test result was available in eight hours, thus allowing a fast diagnosis ready for prompt and targeted antimicrobial therapy [1].

1)
Brunetti G, Ceccarelli G, Giordano A, Navazio AS, Vittozzi P, Venditti M, Raponi G. Fast and reliable diagnosis of XDR Acinetobacter baumannii meningitis by matrix-assisted laser desorption/ionization time-of-flight mass spectrometry. New Microbiol. 2017 Nov 7;40(4). [Epub ahead of print] PubMed PMID: 29112767.