Evolution of antibiotic resistance

Acinetobacter baumannii is a common causative agent of hospital-acquired infections and a leading cause of infection in burns patients. Carbapenem-resistant A. baumannii is considered a major public-health threat and has been identified by the World Health Organization as the top priority organism requiring new antimicrobials. In this study, the authors sampled 20 A. baumannii isolates from a patient with extensive burns, and characterized the evolution of carbapenem resistance over a 45 day period via Illumina and Oxford Nanopore sequencing.

Suitable No: Long timeframe;

sample availability

Organism Acinetobacter

baumannii

Substrate DNA

Full Genome Yes

Genome size ~ 4 Mb

Reference available Yes

