Abstract: Background: Acinetobacter baumannii is a gram-negative coccobacillus that is widely distributed in the hospital environment and is an important opportunistic pathogen responsible for a variety of nosocomial infections, comprising bacteremia, urinary tract infection, secondary meningitis, surgical-site infection, and ventilator-associated pneumonia, especially in intensive-care-unit (ICU) patients and unfortunately resistant to most available antibiotics. Thus, there is concern is ever increasing towards multi drug resistant A. baumannii. Till last five years carbapenems were the drug of choice towards this organism, however, emergence of resistance towards these drugs has lead to determine effectiveness of other drugs.

Aim: To detect susceptibility of carbapenem resistant Acinetobacter baumanii collected from high risk group patients admitted in high risk wards of Sina hospital towards pipercilin/tazobactam.

Materials and Methods: Sixty one non duplicated clinical isolates collected over a period of 11 months from patients, and initially identified with phenotypic methods like morphology (Gram negative coccobacilli), oxidase test (negative), TSI agar reaction (alkaline/alkaline), ability to grow at 37ºC and 42ºC and citrate utilization (positive), were confirmed at species level by oxa-58 and then studied for their resistance pattern toward pipercillin/tazobactam, meropenem, imipenem along with other antibacterial agents. Antibiotic susceptibility was performed by disk diffusion method and later carbapenem resistance was confirmed in isolates by performing PCR using carbapenamase genes.

Results: All isolates were found resistant to meropenem. Around 72.13% and 49.18% of them showed resistance pattern toward imipenem and pipercillin/tazobactam respectively. Around 44.27% and 49.18% of Acinetobacter baumannii that are resistance toward pipercillin/tazobactam are resistance toward imipenem and meropenem respectively as depicted on MIC test.

Conclusion: According to a survey conducted by the arbitrary use of antibiotics should be avoided.

Presentation: Poster