study, was to test for antibacterial activity of a green alga, Caulerpa sertularioides from the Persian Gulf.

Methods: The extract from C. sertularioides was prepared by 20 minutes boiling of alga in 20% glycerine solution and it was then sterilized using the filtration. A bacterial concentration of 500000 colony forming units (CFU)/ml of Staphylococcus epidermidis (ATCC 14990) as a gram positive or Escherichia coli (ATCC 25922) as a gram negative bacterium were tested with different concentrations of the extract in Mueller-Hinton broth for evaluation of antibacterial effect. Controls without the extract were treated by the same way. Results. The extract showed antibacterial activity against S. epidermidis and E. coli in the concentrations of 34 mg/ml and 27.2 mg/ml, respectively.

Conclusion: C. sertularioides could be a suitable source for isolation of antibacterial compounds and further in-vivo investigations.

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66.018
Clinical and Microbiological Efficacy of Continuous Versus Intermittent Administration of Meropenem in Critically Ill Patients
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Background: Beta-lactam antibiotics efficacy depends on the duration of time in which serum concentration exceeds MIC. The aim of open prospective randomized study was to compare clinical and microbiogical efficacy of continuous infusion versus intermittent administration of meropenem in critically ill patients.

Methods: Patients admitted to interdisciplinary ICU suffering from severe infection indicated to meropenem therapy (body temperature below 38.3 °C, white blood cell count <10000/mm3 or decrease below 25% of maximal value, C-reactive protein - CRP ≤100 mg/l). Microbiological efficacy was evaluated as success (eradication or presumed eradication) or failure (resistance or resistance development). The age, gender, APACHE II score, SOFA score, length of ICU stay, length of mechanical ventilation, type of infection were assessed. Success, failure and length of meropenem therapy and total dose of meropenem were evaluated. Mann-Whitney, unpaired t-test and Chi-squared test were used accordingly; p < 0.05 was considered statistically significant.

Results: A total of 84 patients (55 men and 29 women) were enrolled and randomized in CONTINUOUS (n = 42) and INTERMITTENT (n = 44) group. No significant differences between CONTINUOUS and INTERMITTENT group in assessed parameters were found except for total dose of meropenem.

Conclusion: Continuous infusion and intermittent administration of meropenem in critically ill patients provided equivalent clinical and microbiological outcome. Compared with intermittent application, continuous infusion significantly decreased the total dose of meropenem. Grant acknowledgment: This study is supported by the Czech Ministry of Education (project MSM0021620819)

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66.019
Longitudinal Analysis of Tigecycline Activity against US isolates of Enterobacteriaceae and Acinetobacter spp. Based on Patient Location and Specimen Source
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Background: In 2005, tigecycline (TIG) a novel glycyclcline was approved in the US for treatment of complicated skin and skin structure infections (cSSSI) and complicated intra-abdominal infections (cIAI). As such, it is important to continue to monitor TIG activity against target pathogens for these indications. This study reports the in vitro activity of TIG against Enterobacteriaceae (EN) and Acinetobacter spp. (AC) as observed during development ('01—'04), and during the years following its approval for use ('05, '06 and '07). The results were further stratified to determine whether any potential variability in TIG activity against EN and AC exists according to patient location (PL) and specimen source (SS).

Methods: EN and AC isolates were collected from multiple locations across all nine US Bureau of Census regions during the following years (Y): '01—'04 (EN: 1330, AC: 224), '05 (EN: 1151, AC: 77), '06 (EN: 958, AC: 255), and '07 (EN: 599, AC: 114). Isolates were centrally tested using broth microdilution according to current CLSI standards. TIG activity was analyzed by patient location (PL; outpatient [OP], intensive-care unit [ICU], and inpatient non-ICU [IP]) and by specimen source (SS; blood [BL], respiratory [RP], urine [UR; EN only], and skin and skin structure [SSST]). EN FDA breakpoints (BPs) were used to interpret all TIG MIC results (as BPs for TIG against AC do not currently exist).

Results: Against EN overall, TIG had an MIC90 of 1 mg/L in each study period ('01—'04, '05, '06, and '07), and EN isolates were ≥99% susceptible (S) to TIG throughout. The activity of TIG for each study period was consistent by MIC90, regardless of PL (MIC90 = 1 mg/L against OP, ICU, and IP) or SS (MIC90 = 1 mg/L against BL, RP, and SST, 0.5—1 mg/L for UR isolates). In the most recent period evaluated ('07), EN isolates were ≥99% S to TIG for all PL and SS evaluated. Against AC overall, TIG had an MIC90 of 2 mg/L in '01—'04 and '07 and 1 mg/L in '05 and '06. The % of AC went from 97% in '01—'04 to ≥99.5% in '05, '06 and '07. For each study period, little variation in TIG MIC90 was observed either by PL or SS (1—2 mg/L). In '07, 100% of tested acinetobacter were susceptible to TIG (EN BPs were utilized for AC).

Conclusion: Little to no alteration in the in vitro activity of TIG against EN and AC was apparent by MIC90 over the