

IMPLEMENTATION OF EXTENDED INFUSION BETA LACTAM THERAPY IN THE INTENSIVE CARE UNIT (B3), Denise Gin, Nga Huynh. Stanford Hospital and Clinics, Stanford, CA (degin@stanfordmed.org) IRB approval received.

Beta lactam antibiotics are time dependent drugs in which the best predictor of microbiological response depends upon the time free drug concentration exceeds the minimum inhibitory response (MIC). Studies have shown that traditional dosing regimens (e.g. 30 minute infusion) often result in a low probability of achieving the optimal time above the MIC. Stanford Hospital has recently implemented the use of an extended infusion dosing regimen. Each dose of piperacillin/tazobactam and meropenem are infused over 4 and 3 hours, respectively, in any critically ill patients admitted to the intensive care unit (ICU). The purpose of this retrospective cohort study is to determine the pre and post implementation efficacy of such dosing regimen as well as to describe the implementation process in an academic teaching institution. All patients admitted to the ICU initiated on these antibiotics were converted to the extended infusion regimen based on renal function. Patients were included in data analyzation if cultures were definitive for gram negative organisms that reported sensitivities to piperacillin/tazobactam or meropenem, and at least 48 hours of antibiotic use. Primary outcomes include length of hospitalization and 14 day mortality. It is expected that the data obtained will provide information to help better identify critically ill

populations that would benefit from such dosing regimen.
Preliminary results will be presented.