of the resuscitation effort, lesser post-resuscitation myocardial dysfunction, and improved survival. We investigated the effects of EPO on hemodynamic and myocardial function along with subsequent survival in a swine model of ventricular fibrillation (VF) and closed-chest resuscitation. Methods: VF was electrically induced in 16 male domestic pigs (35 to 41 kg) and left untreated for 8 minutes. Chest compression artifact was detected using a LUCAS device and defibrillation attempted 10 minutes later. Resuscitation pigs were randomized for 120 minutes. Pigs were then recovered from anesthesia and observed for a maximum of 72 hours. Pigs were randomized 1:1 to receive 1,200 U/kg of EPO or vehicle control into the right atrium before starting chest compression. Results: LUCAS delivered CPR was highly effective hemodynamically yielding an aortic diastolic pressure of approximately 45 mmHg in both groups and a comparable resuscitation rate. Post-resuscitation there was comparable early hemodynamic and myocardial function as well as comparable organ blood flow but more control pigs died after resuscitation with only 2 of 8 control pigs surviving 72 hours (p = 0.048 by log-rank test). Demise – documented during the monitored period – was characterized by progressive hemodynamic deterioration. Conclusions: The present study is consistent with an emerging body of preclinical work and a single non-randomized, open-label, clinical study supporting a potential role of EPO for resuscitation for cardiac arrest. The present study failed to demonstrate effects during CPR or the early post-resuscitation phase but may indicate an effect mitigating post-resuscitation myocardial and hemodynamic dysfunction that resulted in improved survival from cardiac arrest.

111 VARIATION OF CENTRAL VENOUS CATHETER USAGE IN THREE ICUS MANAGED BY THE SAME INTENSIVIST GROUP Richard Woerndle1, Alex Hoyt 2, John Hoyt 3; 1N/A, N/A, 2MGH Institute of Health Professions, Boston, MA, 3Allgemehey General Hospital, Pittsburgh, PA Learning Objectives: The complications and costs associated with central venous catheters (CVC) have led to much interest in their incidence and epidemiology. A wide variability of use in ICUs has been identified with subsequent speculation that provider practice patterns as opposed to patient factors, including acuity, influence their use. A further understanding of CVC utilization by fellowship-trained intensivists in a group practice would assist in risk-benefit analysis and facilitate consensus opinion on appropriate usage. Hypothesis: There would not be a significant difference in CVC use in ICUs managed by Pittsburgh Critical Care Associates (PCCA). Methods: A retrospective observational study utilizing data retrieved from an APACHE II database that included three community hospital ICUs managed by PCCA, from January 1, 2013 to December 31, 2013. Multivariate regression models were used to estimate the association between the presence and duration of a CVC at anytime during the ICU stay and APACHE II score on admission to the ICU, ICU length of stay, presence of an endotracheal tube (ET), presence of an arterial catheter (AC), and hypothermulation (HAL). Results: 2,736 patients were admitted to the three ICUs in 2013, of which 423 received a CVC. The incidence was similar at ICU1 (9.6%) and ICU2 (12.7%), but higher at ICU3 (32.3%). ICU3 had higher acuity (mean APACHE II score 23.4 ICU3 vs. 18.8 ICU1 vs. 19.3 ICU2), longer ICU stays, and higher incidence of ET, AC, and HAL compared with ICU1 or ICU2. In a logistic regression model adjusting for APACHE II and presence of outcomes as vasopressor use, renal replacement therapy (RRT), mechanical ventilation (MV), length of stay (LOS) and mortality. Logistic regression analysis was used to compare outcomes of patients with NOAF, pre-existing AF, and no AF. Effects of age, CHADS2, and APACHE were adjusted for in regression models. Results: A total of 10,836 MICU patients were included in the study, of which 582 (5%) had NOAF (23% pre-existing AF) and 7886 (73%) no AF. Baseline characteristics were significantly different between groups (p<0.001) with AF patients being older (73.5 ± 78.6 vs 59.8). Hypertension was the most common comorbidity (68% vs 81% vs 53%). APACHE scores higher in the NOAF group (57 vs 54 vs 42). Outcomes significantly different (p<0.001) between cohorts with higher vasopressor use (33% vs 18% vs 12%); RRT (11% vs 9% vs 5%); MV (39% vs 22% vs 24%); ICU mortality (11% vs 8% vs 5%); and hospital mortality (20% vs 16% vs 8%) in the NOAF group. Logistic regression models comparing NOAF with no AF showed increased need for vasopressors (OR 2.45); RRT (OR 2.15); MV (OR 1.69); MICU and hospital mortality (OR 1.40; 1.63). Conclusions: NOAF was noted in 5% of MICU admissions. Our study suggests that even after adjusting for age, CHADS2 and APACHE III, NOAF patients exhibited poorer outcomes and higher resource utilization with increased need for vasopressors, RRT and MV along with higher MICU and hospital LOS and mortality.

114 VALIDATION OF THE SWIFT SCORE FOR INTENSIVE CARE UNIT (ICU) READmissions IN AN ASIAN POPULATION Eric Heymann1,2, Lin Maier1,2, Amartya Mukhopadhyay3, University Hospital Centre of Vaal, Lausanne, Switzerland, 2National University Hospital, Singapore, Singapore Learning Objectives: Readmissions occur in nearly 10% ICU discharges. Since readmissions are costly and often associated with high mortality, many tools have been devised and validated to prevent this from occurring. One such clinical tool is the Stability and Workload Index for Transfer (SWIFT) score which has been validated in several ICU centers worldwide. No study has yet validated the SWIFT score in an Asian population. We reviewed the clinical records of patients admitted/discharged from the medical ICU of a large university Hospital in Asia from January to June of 2008. The SWIFT score for each patient was calculated from their electronic medical records. The SWIFT score was then compared with the readmission rates to determine if it can be a valuable predictor for readmission in an Asian population. Results: 409 patients were admitted over the set time period, 59 patients were excluded from the study due to incomplete data [necessary for SWIFT score calculation]. 80 patients died before initial ICU discharge.