Introduction:
A recent study suggested that weekend admission is associated with higher risk of mortality in Austrian intensive care units (ICU) [1]. We investigated if this association holds true for emergency admissions of patients with intracerebral hemorrhage (ICH) in our neurological ICU (NICU).

Methods:
Prospectively collected data from 256 consecutive ICH patients, admitted to our tertiary care hospital were retrospectively analyzed. Weekend admission was defined from Friday 5 PM to Monday 8 AM. We used COX Regression and multivariate analysis to identify risk factors including admission time for hospital mortality and 3-month outcome with poor outcome defined as modified Rankin Scale score (mRS) >3.

Results:
31% of patients (79/256) were admitted on the weekend. Patients presented with a median GCS of 13 (IQR 5-15), hematoma volume of 24 mL (IQR 9-45), SAPS Score of 29 (IQR 24-36) and were 72 years old (IQR 64-80). Median time from symptom onset until NICU admission was 3 hours (IQR 2-7). There was no difference between groups based on admission time concerning these factors and in addition, surgical treatment, decision to withdraw/withhold therapy, intubation, use of nasogastric tube or infectious complications were similar. Incidence of hydrocephalus requiring external ventricular drainage (p=0.027) was higher in the weekend group. Hospital- and 3m-mortality was 25% and 32% and did not differ based on admission time (p=0.35, p=0.7). In contrary, known contributors for poor outcome were significantly associated: increased age (p=0.037), increased ICH Volume (p=0.001) and lower GCS at admission (p<0.001) or infratentorial location of ICH (p=0.011).

Conclusion:
Weekend admission did not result in a higher mortality rate in ICH patients admitted to our NICU with 24-7 neuro-intensivist staffing. Due to the different SAPS on admission (lower in our group) an age and severity matched comparison of neurological and non-neurological patients is needed.

References: