Introduction:
We investigated the effect of hypernatraemia (defined as a sodium level > 145 mmol/l) recorded within the first 24 hours of admission on the overall length of stay (LOS; days) in our critical care unit.

Methods:
We retrospectively analysed data for 1666 patients collected over a 3-year period. We used an unpaired Wilcoxon ranked sum test to compare the LOS between the two groups.

Results:
The hypernatraemia group consisted of 189 patients with mean age 64.3 (SD 19.0) years, mean sodium 149.9 (SD 5.6) mmol/l and median LOS 4.0 (IQR 1.9 – 8.4) days. The eunatraemia (defined 135-145 mmol/l) group consisted of 1477 patients with mean age 64.3 (SD 17.8) years and mean sodium 139.8 (SD 2.8) mmol/l with a median LOS of 3.8 (IQR 1.9 – 7.1) days. We found no statistically significant difference (p = 0.0636) between the two groups when comparing the length of stay (figure 1).

Conclusion:
Darmon et al demonstrated prognostic consequences of an admission sodium greater than 145, eliciting hypernatraemia as a factor independently associated with 30-day mortality [1]. In contrast, our study suggests that hypernatraemia (as defined) is not associated with the length of stay, however this result is limited by the unbalanced design of this small study.

References: