SUPPLEMENTARY DATA

Supplementary Table 1. Mortality according to metabolic parameters on admission among patients presenting with hyperglycemic crises

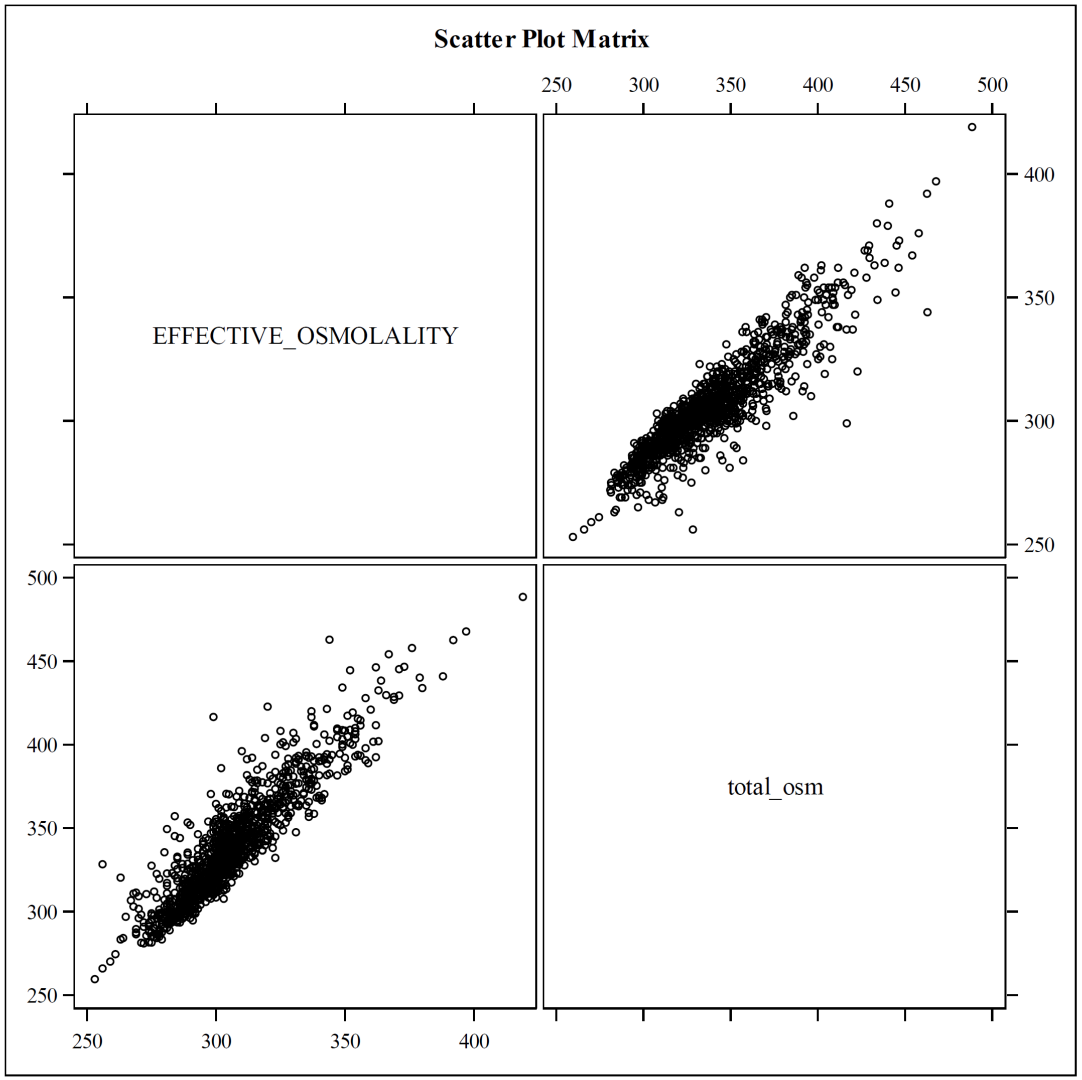
	OR (95% CI)	Adjusted OR[a]	Adjusted OR[b]
Glucose			
Q1 (lowest BG)	1.00 (Reference)	1.00 (Reference)	1.00 (Reference)
Q2	2.23 (0.99,5.01)	1.81 (0.75,4.37)	1.87 (0.76,4.58)
Q3	1.71 (0.74,3.98)	1.21 (0.47,3.14)	1.14 (0.43,3.01)
Q4	2.1 (0.93,4.75)	1.66 (0.67,4.08)	1.63 (0.65,4.09)
Osmolality			
Q1 (lowest osmolality)	1.00 (Reference)	1.00 (Reference)	1.00 (Reference)
Q2	0.83 (0.35,1.96)	0.59 (0.24,1.47)	0.6 (0.23,1.53)
Q3	0.99 (0.44,2.25)	0.66 (0.27,1.58)	0.68 (0.28,1.66)
Q4	2.52 (1.25,5.08)	1.12 (0.5,2.51)	1.11 (0.49,2.52)
HCO3			
Q1 (highest HCO3)	1.00 (Reference)	1.00 (Reference)	1.00 (Reference)
Q2	2.03 (0.92,4.51)	3.62 (1.44,9.13)	3.40 (1.33,8.72)
Q3	2.60 (1.15,5.9)	3.17 (1.24,8.08)	3.40 (1.31,8.86)
Q4	1.31 (0.55,3.1)	3.09 (1.11,8.62)	3.55(1.25,10.09)

[a] Model adjusted for age, gender, BMI, race

[b] Model adjusted for age, gender, BMI, race, and Charlson Comorbidity Index. Analysis conducted including all categories of hyperglycemic crises, since metabolic parameters are part of the diagnostic criteria and analysis of subgroups is not feasible.

SUPPLEMENTARY DATA

Supplementary Figure 1. Correlation between effective osmolality and total osmolality among patients with hyperglycemic crises. Pearson Correlation Coefficient: 0.91. p<0.0001 (N = 1211). Effective osmolality values of 300, 320, and 350 mOsm/kg



SUPPLEMENTARY DATA

Supplementary Figure 2. Age and Hyperosmolality as Predictors of Case Fatalities in Patients with Hyperglycemic Crises. A) Age > 50 and Effective Osmolality ≥ 300 mOsm/kg (c-statistic: 0.70); B) Age > 60 and Effective Osmolality ≥ 300 mOsm/kg (cstatistic: 0.71); Age > 65 and Effective Osmolality ≥ 300 mOsm/kg (c-statistic: 0.71).