Abstract
This study verifies and compares the performance of three different scores obtained in the Glasgow Coma Scale (GCS) in the first 72 hours post trauma in predicting in-hospital mortality. The studied scores included those obtained after initial care was provided at the hospital, and the worst and best scores obtained in the scale in the first 72 hours post trauma. The scales predictive ability was assessed by the Receiver Operator Characteristic (ROC) curve. A total of 277 victims with different severity levels of blunt traumatic brain injuries were studied. The performance of the three scores that were analyzed to predict hospital mortality was moderate (0.74 to 0.79) and the areas under the curve did not present statistically significant differences. These findings suggest that any of the three studied scores can be applied in clinical practice to estimate the outcome of victims with blunt traumatic brain injuries, taking into consideration the instrument's moderate discriminatory power.

Keywords
Brain Injuries, Trauma Severity Indices, Glasgow Coma Scale, Prognosis, Mortality