Early change in organ failure scores predicts survival in acute on chronic liver failure
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Results

- A total of 280 patients were included and 48 patients with ACLF ≥ 1 were included.
- Mortality at 7, 28, and 90 days was 164/833 (20%), 306/892 (35%), and 361/875 (42%).
- The best predictive model proved to be difference in CLIF-SOFA (delta CLIF-SOFA) scores between D2 and D5 or D7.
- Mean delta CLIF-SOFA D2-D5 was -2.25 +/- 1.49 and mean delta CLIF-SOFA D2-D7 was -3.36 +/- 2 for survivors compared to 0.19 +/- 1.73 for non-survivors and 0.1 +/- 2.80 for deceased at 90 days, with area under curve (AUC) of 0.839 and 0.835 respectively.
- Other prognostic scores at a single time point on D7 predicted survival at D18 and D90 with AUC of CLIF-SOFA D2 to D5, MELD (0.730 ± 0.73), UKELD (0.735 ± 0.84), ACLF (0.730 ± 0.58), and CLIF-SOFA (0.750 ± 0.89).

90 day survival is predicted best by Δ CLIF-SOFA D5 - D2 and D7 - D2

AUC 0.839 for CLIF-SOFA D5 - D2
AUC 0.835 for CLIF-SOFA D7 - D2

Conclusions

- The evolution in CLIF-SOFA score between D2 and D90/7 is superior to evolution in other scores and scores assessed at single time points when predicting 90-day survival.
- The delta C-SOFA at D5 and D7 are comparable, thus further research into utility of delta C-SOFA D5 - D7 to guide therapeutic decisions is justified.

References
