

INDICATION

Provides 3-month mortality predictions in patients ≥ 12 years of age with chronic liver disease. It should be repeated at intervals to assess disease trajectory

ADDITIONAL INFORMATION

Mortality scores were originally calculated from an American cohort of 2271 patients added to the transplant waiting list between 1999-2001.

The major aetiology of liver disease was hepatitis C which is a limitation of the data given the decrease in this as a cause for progressive liver disease.

This score has been updated from the original MELD score with studies showing the addition of sodium improves its predictive value.

INTERPRETATION

SCORE	3 MONTH MORTALITY (%)
≤ 9	1.9%
10–19	6.0%
20–29	19.6%
30–39	52.6%
≥ 40	71.3%

CALCULATION

$$\text{MELD(i)} = 0.957 \times \ln(\text{Creatinine}) + 0.378 \times \ln(\text{Bilirubin}) + 1.120 \times \ln(\text{INR}) + 0.643$$

Then, round to the tenth decimal place and multiply by 10.

If $\text{MELD(i)} > 11$ additional MELD calculation:

$$\text{MELD} = \text{MELD(i)} + 1.32 \times (137 - \text{Na}) - (0.033 \times \text{MELD(i)} \times (137 - \text{Na}))$$

Additional points:

- Creatinine and Bilirubin in mg/dL / Na in mEq/L
 - If Creatinine / Bilirubin / INR is < 1.0 , use 1.0
 - If any of the following is true use Creatinine 4.0:
 - Creatinine > 4.0
 - ≥ 2 dialysis treatments within the prior 7 days
 - 24 hours of continuous veno-venous hemodialysis (CVVHD) within the prior 7 days
 - If Na < 125 mEq/L use 125
 - If Na > 137 mEq/L use 137
- Maximum MELD = 40