**Supplementary Table 2. The performance of the MELD score, MELD-Na score and CLIF-AD score in ruling out ACLF development within 4 weeks**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | ≤1 organ dysfunction | MELD<12 | MELD-Na<15 | CLIF-C AD<42 |
|  | Derivation cohort | Validation cohort | Derivation cohort | Validation cohort | Derivation cohort | Validation cohort | Derivation cohort | Validation cohort |
| True positive (n) | 44 | 113 | 45 | 116 | 45 | 115 | 45 | 104 |
| False positive (n) | 175 | 361 | 453 | 945 | 358 | 742 | 436 | 676 |
| True negative (n) | 452 | 910 | 174 | 326 | 269 | 529 | 191 | 595 |
| False negative (n) | 2 | 4 | 1 | 1 | 1 | 2 | 1 | 13 |
| Sensitivity (%) | 95.7 | 96.6 | 97.8 | 98.3 | 97.8 | 96.6 | 97.8 | 87.2 |
| Specificity (%) | 72.1 | 71.6 | 27.8 | 25.6 | 42.9 | 41.6 | 30.5 | 46.8 |
| Positive Predictive Value (%) | 20.1 | 23.8 | 9 | 10.9 | 11.2 | 13.4 | 9.4 | 13.3 |
| Negative Predictive Value (%) | 99.6 | 99.6 | 99.4 | 99.7 | 99.6 | 99.6 | 99.5 | 97.9 |
| Rates of ruling out patients (%) | 67.5 | 65.9 | 26.0a | 23.6b | 40.1a | 38.3b | 28.5a | 43.8b |
| Negative likelihood ratio | 0.06 | 0.05 | 0.08 | 0.07 | 0.05 | 0.08 | 0.07 | 0.27 |
| Pre-ACLF missing rate% (missed/total) | 4.3(2/46) | 3.4(4/117) | 2.2(1/46) | 0.9(1/117) | 2.2(1/46) | 1.7(2/117) | 2.2(1/46) | 11.1(13/117) |

a P<0.001, Compared with the rates of ≤1 organ dysfunction in derivation cohort; b P<0.001, Compared with the rates of ≤1 organ dysfunction in validation cohort.