**Supplementary Table 10** Impact of etiology-specific therapy on decompensation prediction

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Variable** | **Model 1b OR (95% CI)** | **Model 2c OR (95% CI)** | **ΔOR (absolute change)** | ***P*** |
| Right hepatic lobe volume | 0.863 (0.677-1.100) | 0.863 (0.677-1.100) | <0.001 |  |
| Spleen Volume | 1.432 (1.177-1.743) | 1.435 (1.177-1.750) | 0.003 |  |
| Reduction of PPG by TIPS | 0.964 (0.917-1.014) | 0.964 (0.916-1.014) | <0.001 |  |
| Elimination-amenable therapya  | - | 1.151(0.200-6.613) | - |  |
| Model AUC | 0.825 | 0.828 | 0.003 | 0.19 |

a Elimination-amenable therapy: antiviral treatment for viral cirrhosis and sustained abstinence for alcohol-associated cirrhosis.

bModel 1: Multivariable logistic regression model incorporating three core predictors (right hepatic lobe volume, spleen volume, PPG reduction) in patients with elimination-amenable etiologies (HBV, HCV, alcohol-associated cirrhosis with documented abstinence status).

 cModel 2: Model 1 + adjustment for etiology-specific therapy (antiviral treatment for viral hepatitis/sustained abstinence for alcohol-associated cirrhosis).

PPG: Portal Pressure Gradient;

ΔOR: Absolute change in odds ratio after adding etiology-specific therapy; P value for AUC comparison by DeLong's test.