**Supplementary Table 3** Univariable logistic regression analysis of risk factors for further decompensation within 1 year post-TIPS

| **Variables** | **β** | **S.E** | **Z** | ***P*** | **OR (95% CI)** |
| --- | --- | --- | --- | --- | --- |
|
| Age | -0.02 | 0.02 | -1.30 | 0.195 | 0.979 (0.949~ 1.011) |
| Sex |  |  |  |  |  |
| female |  |  |  |  | 1.000 (Reference) |
| male | 0.07 | 0.35 | 0.19 | 0.848 | 1.069(0.541 ~ 2.113) |
| Etiology |  |  |  |  |  |
| Hepatitis B virus |  |  |  |  | 1.000 (Reference) |
| Hepatitis C virus | -0.89 | 0.86 | -1.03 | 0.303 | 0.413 (0.08 ~ 2.22) |
| Alcohol-associated | -0.59 | 0.48 | -1.22 | 0.223 | 0.556 (0.22 ~ 1.43) |
| AIH/PBC | -0.69 | 0.51 | -1.34 | 0.179 | 0.502 (0.18 ~ 1.37) |
| Other | 0.12 | 0.47 | 0.25 | 0.804 | 1.123 (0.45 ~ 2.82) |
| TIPS indication |  |  |  |  |  |
| Variceal bleeding |  |  |  |  | 1.00 (Reference) |
| Refractory ascites | -0.53 | 0.41 | -1.27 | 0.203 | 0.59 (0.26 ~ 1.33) |
| Combined indications (bleeding and ascites) | -0.92 | 0.56 | -1.64 | 0.101 | 0.40 (0.13 ~ 1.20) |
| DM |  |  |  |  |  |
| No |  |  |  |  | 1.000 (Reference) |
| Yes | -0.42 | 0.40 | -1.04 | 0.299 | 0.657 (0.297 ~ 1.452) |
| CHD |  |  |  |  |  |
| No |  |  |  |  | 1.000 (Reference) |
| Yes | -0.04 | 0.73 | -0.06 | 0.954 | 0.959 (0.230 ~ 4.001) |
| Hypertension |  |  |  |  |  |
| No |  |  |  |  | 1.000 (Reference) |
| Yes | -0.81 | 0.47 | -1.75 | **0.080** | 0.443 (0.178 ~ 1.103) |
| Spontaneous Portosystemic Shunt |  |  |  |  |  |
| No |  |  |  |  | 1.00 (Reference) |
| Yes | 0.41 | 0.37 | 1.11 | 0.268 | 1.507(0.730~ 3.112) |
| Portal Vein Thrombosis |  |  |  |  |  |
| No |  |  |  |  | 1.000 (Reference) |
| Yes | 0.42 | 0.35 | 1.21 | 0.226 | 1.524 (0.771 ~ 3.011) |
| Portal Vein Cavernous Transformation |  |  |  |  |  |
| No |  |  |  |  | 1.000 (Reference) |
| Yes | 0.68 | 0.84 | 0.82 | 0.414 | 1.980 (0.385 ~ 10.172) |
| WBC | -0.14 | 0.10 | -1.51 | 0.132 | 0.866 (0.718 ~ 1.044) |
| Hemoglobin | 0.00 | 0.01 | 0.04 | 0.970 | 1.000 (0.985 ~ 1.016) |
| Platelets | -0.02 | 0.01 | -3.14 | **0.002** | 0.980 (0.968 ~ 0.993) |
| Albumin | -0.02 | 0.03 | -0.78 | 0.433 | 0.976 (0.920 ~ 1.037) |
| ALT | -0.00 | 0.01 | -0.46 | 0.649 | 0.995 (0.975 ~ 1.016) |
| AST | -0.00 | 0.01 | -0.31 | 0.754 | 0.997 (0.979 ~ 1.016) |
| ALP | 0.00 | 0.00 | 0.18 | 0.857 | 1.001 (0.994 ~ 1.008) |
| GGT | -0.01 | 0.00 | -1.31 | 0.190 | 0.994 (0.985 ~ 1.003) |
| Total Bilirubin | 0.03 | 0.01 | 2.18 | **0.029** | 1.026 (1.003 ~ 1.051) |
| PTA | -0.03 | 0.01 | -2.63 | **0.008** | 0.971 (0.950 ~ 0.993) |
| Blood Glucose | -0.04 | 0.06 | -0.76 | 0.448 | 0.959 (0.859 ~ 1.069) |
| Urea | 0.03 | 0.04 | 0.82 | 0.413 | 1.035 (0.954 ~ 1.123) |
| Creatinine | 0.00 | 0.00 | 0.04 | 0.967 | 1.000 (0.991 ~ 1.010) |
| Blood Ammonia | 0.00 | 0.01 | 0.54 | 0.591 | 1.003 (0.992 ~ 1.015) |
| Pre-Shunt PP | 0.06 | 0.03 | 1.86 | **0.063** | 1.063 (0.997 ~ 1.133) |
| Pre-Shunt IVC | -0.02 | 0.06 | -0.35 | 0.723 | 0.978 (0.866 ~ 1.105) |
| Pre-Shunt PPG | 0.07 | 0.03 | 2.07 | **0.038** | 1.072 (1.004 ~ 1.145) |
| Post-Shunt PP | 0.12 | 0.04 | 2.94 | **0.003** | 1.126 (1.041 ~ 1.219) |
| Post-Shunt IVC | 0.02 | 0.06 | 0.40 | 0.691 | 1.024 (0.913 ~ 1.148) |
| Post-Shunt PPG | 0.17 | 0.05 | 3.37 | **<.001** | 1.190 (1.076 ~ 1.317) |
| Reduction of PPG by  TIPS | -0.04 | 0.02 | -2.62 | **0.009** | 0.960 (0.931 ~ 0.990) |
| Left Hepatic Lobe Volume | -0.01 | 0.01 | -0.84 | -0.009 | 0.991 (0.970 ~ 1.012) |
| Right Hepatic Lobe Volume | -0.28 | 0.09 | -3.04 | **0.002** | 0.754 (0.628 ~ 0.904) |
| Caudate Lobe Volume | -0.57 | 0.94 | -0.61 | 0.543 | 0.564 (0.089 ~ 3.575) |
| Spleen Volume | 0.34 | 0.07 | 5.22 | **<.001** | 1.406 (1.237 ~ 1.598) |
| OR: Odds Ratio, CI: Confidence. AIH:Autoimmune hepatitis; PBC:Primary biliary cholangitis; DM:Diabetes Mellitus; CHD: Coronary Heart Disease; WBC: White blood cell count; ALT, alanine aminotransferase; AST, aspartate aminotransferase; ALP: Alkaline phosphatase; GGT: Gamma-glutamyl transferase; PTA: prothrombin time activity; Urea: Urea nitrogen urea. PP: Portal Pressure; IVC: Inferior Vena Cava Pressure; PPG: Portal Pressure Gradient. | | | | | |