

**Supplementary Table S1.** Measurement of agreement of each of the 4 PF screening tools with SPPB

| Physical Frailty tool  | Measurement of agreement K cohen | p value |
|------------------------|----------------------------------|---------|
| Liver Frailty Index    | 0.568                            | <0.001  |
| Fried Phenotype        | 0.383                            | <0.001  |
| Clinical Frailty-Scale | 0.537                            | <0.001  |
| 6-min Walk Test        | 0.659                            | <0.001  |

Individuals with LFI  $\geq 4.5$  were considered as Frail

**Supplementary Table S2.** Area under the curve of the ROC curves of the 5 physical frailty tools for the prediction of 18 months mortality

| Variable | AUC   | Standard error | 95% CI         |
|----------|-------|----------------|----------------|
| LFI      | 0.729 | 0.053          | 0.633 to 0.811 |
| SPPB     | 0.736 | 0.054          | 0.641 to 0.818 |
| FFP      | 0.751 | 0.050          | 0.657 to 0.830 |
| CFS      | 0.834 | 0.041          | 0.749 to 0.900 |
| 6-min-WT | 0.780 | 0.055          | 0.689 to 0.855 |

LFI, Liver Frailty Index; SPPB, Short Physical Performance-Battery; FFP, Fried phenotype; CFS, Clinical Frailty-Scale; 6-min-WT 6-min walk test

**Supplementary Table S3.** Pairwise comparison of ROC curves between the 5 physical frailty tools for the prediction of 18 months mortality

|                  |          | Difference between areas | Standard error | P value |
|------------------|----------|--------------------------|----------------|---------|
| LFI compared to  | SPPB     | 0.008                    | 0.045          | 0.882   |
|                  | FFP      | 0.022                    | 0.057          | 0.698   |
|                  | CFS      | 0.106                    | 0.049          | 0.032   |
|                  | 6-min-WT | 0.518                    | 0.053          | 0.331   |
| SPPB compared to | FFP      | 0.014                    | 0.051          | 0.785   |
|                  | CFS      | 0.097                    | 0.036          | 0.006   |
|                  | 6-min-WT | 0.043                    | 0.027          | 0.106   |
| FFP compared to  | CFS      | 0.083                    | 0.039          | 0.032   |
|                  | 6-min-WT | 0.029                    | 0.043          | 0.491   |
| CFS compared to  | 6-min-WT | 0.053                    | 0.033          | 0.111   |

LFI, Liver Frailty Index; SPPB, Short Physical Performance-Battery; FFP, Fried phenotype; CFS, Clinical Frailty-Scale; 6-min-WT 6-min walk test

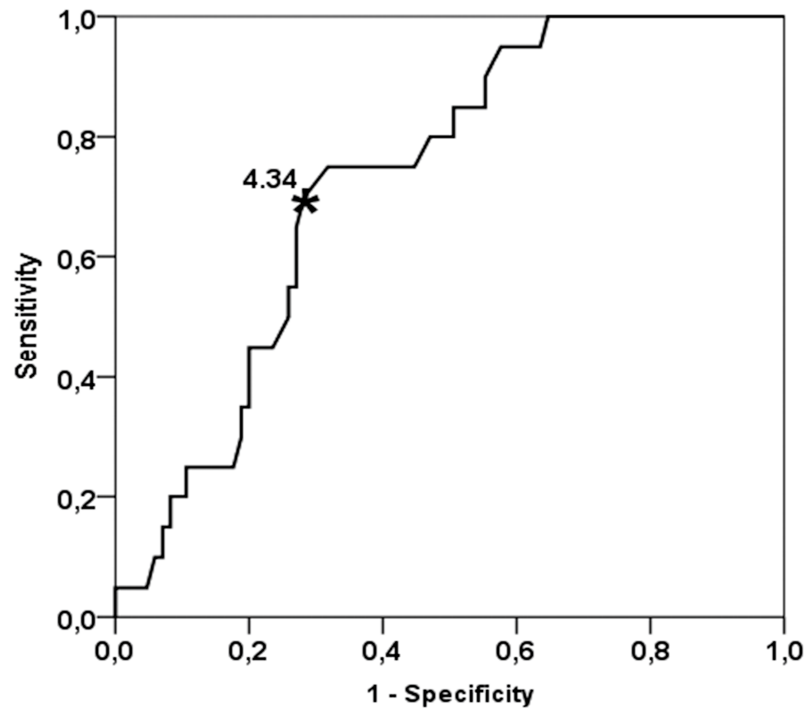
**Supplementary Table S4.** Estimated hazard ratio for 12-month mortality of patients diagnosed with physical frailty in univariate analysis and after adjustment for age, gender, and MELD score

|                                    | Univariate analysis  | p value | Multivariate analysis   | p value  |
|------------------------------------|----------------------|---------|---|--|
|                                    | HR (95% CI)          |         | HR (95% CI)   |  |
| Age (per year)                     | 1.015 (0.976-1.055)  | 0.458   |   |  |
| Gender (Male)                      | 0.913 (0.354-2.355)  | 0.850   |   |  |
| MELD score                         | 8.168 (3.052-21.860) | <0.001  | 6.302 (2.087-19.033)*<br>6.788 (2.496-18.461)**<br>6.785 (2.502-18.402)***<br>8.168 (3.052-21.860)****<br>6.085 (2.182-16.968)***** | 0.001*<br><0.001**<br><0.001**<br><0.001**<br>0.001*** |
| Liver Frailty Index                | 4.649 (1.479-14.608) | 0.009   | 3.130 (0.966-10.140)  | 0.057  |
| Short Physical Performance Battery | 3.816 (1.505-9.676)  | 0.005   | 2.940 (1.141-7.572)   | 0.025  |
| Fried phenotype**                  | 4.270 (1.521-11.985) | 0.006   | 3.001 (1.054-8.546)   | 0.040  |
| Clinical Frailty-Scale***          | 5.020 (1.942-12.977) | 0.001   | NS  | NS   |
| 6-min walk test***                 | 4.566 (1.769-11.788) | 0.002   | 2.783 (1.036-7.477)   | 0.042  |

**Supplementary Table S5.** Log Rank tests from Kaplan Meier survival curves for frail versus non-frail patients with 5 screening tools for frailty

| Physical Frailty tool                 | 3 months<br>Long Rank p<br>value | 6 months<br>Long Rank p<br>value | 12 months<br>Long Rank p<br>value | 18 months<br>Long Rank p<br>value |
|---------------------------------------|----------------------------------|----------------------------------|-----------------------------------|-----------------------------------|
| Liver Frailty Index                   | 0.004                            | 0.008                            | 0.004                             | <0.001                            |
| Short Physical<br>Performance Battery | 0.005                            | 0.006                            | 0.002                             | 0.001                             |
| Fried Frailty<br>Phenotype            | 0.002                            | 0.002                            | 0.003                             | <0.001                            |
| Clinical Frailty Scale                | 0.004                            | <0.001                           | <0.001                            | <0.001                            |
| 6-Min Walk Test                       | 0.007                            | 0.009                            | 0.001                             | <0.001                            |

**Supplementary Figure S1.** Receiver operating characteristic (ROC) curve of the Liver Frailty Index measurement for differentiating survivors from non-survivors. The cut-off point of 4.34 yielded a sensitivity of 70% and specificity of 71.8%.



**Supplementary Figure S2.** Comparison of predictive ability of the AUROCs corresponding to Liver Frailty Index, Short Physical Performance Battery, Fried Frailty Phenotype, Clinical Frailty Scale, and 6-Min Walk Test for 18-month mortality

