

## Supplementary Materials

### Performance Evaluation of a Novel Non-Invasive Test for the Detection of Advanced Liver Fibrosis in Metabolic Dysfunction-Associated Fatty Liver Disease

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Table S1 : Cost comparison table

| Total costs per test  |            |
|---|------------|
| FIB-4   | 6 euros    |
| LFRI test   | 36 euros   |
| FibroScan test  | 79 euros   |
| Scenario A: FIB-4 and FibroScan as a second line test                     |            |
| Cost per 100 subjects: 2654 euros   |            |
| Scenario B: FIB-4 and LFRI with the manufacturer's recommended thresholds |            |
| Cost per 100 subjects   | 1536 euros |
| Correctly classified  | 84.0%      |
| Scenario C: FIB-4 and LFRI with ROC-derived thresholds                    |            |
| Cost per 100 subjects   | 1536 euros |
| Correctly classified  | 87.5%      |

FIB-4, Fibrosis-4; LFRI, Liver Fibrosis Risk Index

Table S2. Performance of LFRI with TE as reference method

| LSM/TE<br>(Metavir score) | AUC<br>(95% CI)     | Threshold<br>value                | Sensitivity (95%CI)/<br>Specificity (95%CI)      | NPV (%)/<br>PPV (%) |
|---------------------------|---------------------|-----------------------------------|--|---------------------|
| 7.9-9.6 kPa<br>(F2)       | 0.65<br>(0.56-0.73) | $\geq 0.073^*$<br>$\geq 0.028^\#$ | 63 (25-95)/72 (63-79)<br>62 (25-92)/48 (39-57)   | 97/12<br>95/7       |
| >9.6 kPa<br>(F3-F4)       | 0.73<br>(0.65-0.80) | $> 0.238^*$<br>$> 0.362^\#$       | 48 (27-69)/95 (90-98)<br>98 (83-100)/2 (0.5-6.7) | 91/65<br>98/16      |

\*The LFRI threshold values modified according to ROC curves with the highest value of Youden index; # the LFRI threshold values established for Asian population and proposed by the manufacturer, we adapted these values to our ROC curves; NPV, negative predictive value; PPV, positive predictive value; AUC-area under the curve; LSM/TE, liver stiffness measurement using transient elastography

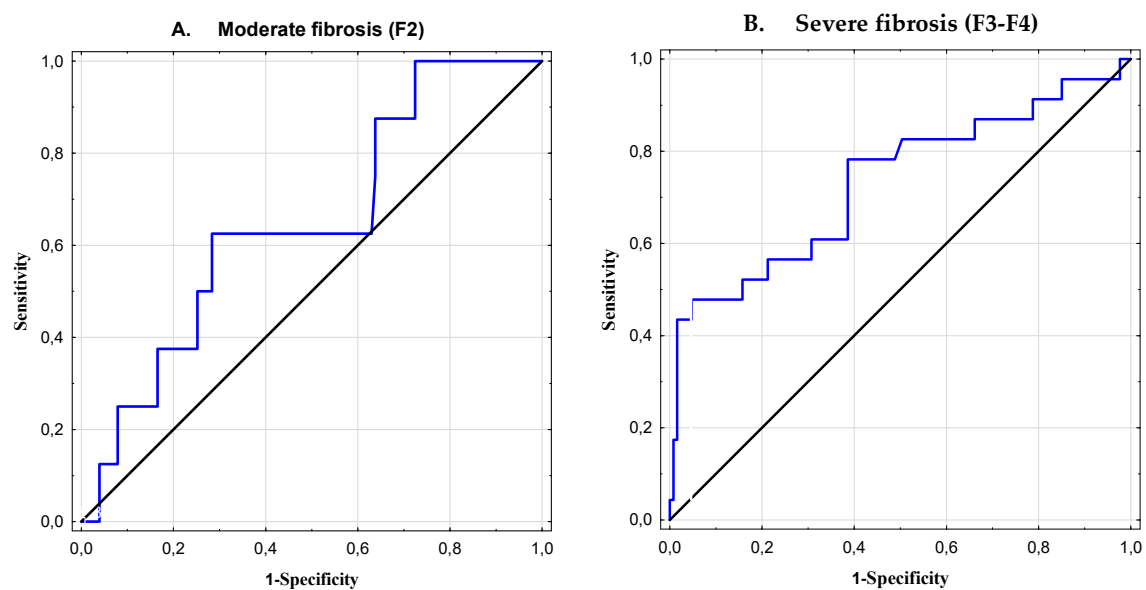


Figure S1. Diagnostic accuracy of LFRI. Area under the receiver operating characteristics curve for discriminative accuracy for liver fibrosis in MAFLD subjects with TE as reference method (A) Moderate fibrosis. (B) Severe fibrosis. LFRI, Liver Fibrosis Risk Index; TE, transient elastography