**Supplementary Table 1. Characteristics of the study population**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Phase** | **Discovery** | | **Training** | | **Validation** | |
| sAPE1 levels | High | Low | High | Low | High | Low |
| Number of patients | 8 | 10 | 12 | 12 | 33 | 34 |
| Age (mean, 95%CI) | 66.9 (59-74.8) | 71.5 (67.3-75.7) | 67.9 (61.7-74.1) | 72.3 (68.2-76.5) | 71.7 (68.7-74.78) | 70.6 (67.9-73.3) |
| sAPE1 pg/mL (median, 95% CI) | 126.6 (85.4-161.9 | 42.4 (29.7-71.2) | 161.5 (141.5-208.2) | 32.3 (19-40.4) | 115.34 (104.14-126.54) | 55.98 (51.06-60.9) |
| Sex (M/F) | 7/1 | 8/2 | 8/4 | 2/10 | 27/6 | 28/6 |
| Etiology |  |  |  |  |  |  |
| Alcohol, metabolic | 4 | 8 | 2 | 10 | 17 | 24 |
| Alcohol, metabolic, viral | 1 |  | 3 | 1 | 8 | 3 |
| Viral | 3 | 1 | 5 | 1 | 8 | 7 |
| Disease scores |  |  |  |  |  |  |
| CTP A/B/C | 7/1/0 | 6/4/0 | 11/1/0 | 10/2/0 | 22/6/3 | 22/9/1 |
| BCLC 0/A/B/C,D | 2/5/1/0 | 1/6/3/0 | 2/9/1/0 | 1/8/3/0 | 2/18/7/4 | 0/22/8/2 |
| AFP (95%CI) (ng/mL) | 13.6 (1.9-51.6) | 3.8 (2.9-16.5) | 35 (7.5-587.7) | 6.55 (2.9-29) | 5.3 (3.9-15) | 5.6 (3.7-18.6) |

\*Autoimmune, hemochromatosis, cryptogenic, usually in combination with other. AFP, alpha fetoprotein median; BCLC, Barcelona Clinic Liver Cancer staging system; CI, confidence interval; CTP, Child-Turcotte-Pugh disease score.