**Supplemental Table 1**

**Clinicopathological findings of HCC patients**

|  |  |
| --- | --- |
| Resection group | K19 expression |
| Positive 　　　 (n=11) | Negative (n=93) | *P* value |
| Age (years, mean ± SD) | 66.2 ± 6.0 | 66.8 ± 9.1 | 0.638 |
| Gender (male/female) | 9/2 | 74/19 | 0.825 |
| Total bilirubin (> 1.0 mg/dl) | 3 | 24 | 0.283 |
| Albumin (< 3.5 g/dl) | 7 | 17 | 0.003 |
| Platelet (< 10.0×104/μl) | 5 | 21 | 0.392 |
| AFP (> 100 ng/ml) | 9 | 29 | 0.002 |
| PIVKA-II (> 400 mAU/ml)  | 7 | 39 | 0.208 |
| HBs Ag positive | 4 | 9 | 0.052 |
| HCV Ab positive | 8 | 57 | 0.632 |
| Tumor size (> 5 cm) | 7 | 34 | 0.097 |
| Tumor differentiation |  |  | 0.635 |
| Well | 1 | 22 |  |
| Moderate | 6 | 52 |  |
| Poorly | 2 | 15 |  |
| Unknown | 2 | 4 |  |
| UICC Stage (III-IV/I-II) | 8/3 | 43/50 | 0.665 |
| Serosal invasion | 3 | 11 | 0.663 |
| Portal invasion | 6 | 30 | 0.183 |
| Liver cirrhosis | 5 | 28 | 0.319 |
| Type of operation |  |  | 0.724 |
| Anatomic resection | 9 | 65 |  |
| Limited resection | 2 | 28 |  |
| Transplantation group | K19 expression |
| Positive 　　　 (n=7) | Negative (n=55) | *P* value |
| Age (years, mean ± SD) | 54.2 ± 6.7 | 57.9 ± 4.8 | 0.158 |
| Gender (male/female) | 6/1 | 41/14 | 0.516 |
| Laboratory data |  |  |  |
| AFP (> 100 ng/ml) | 5 | 17 | 0.105 |
| PIVKA (> 400 mAU/ml)  | 1 | 8 | 0.301 |
| HBs Ag positive | 2 | 18 | 0.825 |
| HCV Ab positive | 3 | 35 | 0.288 |
| Pathology |  |  |  |
| Tumor size (> 5 cm) | 3 | 0 | 0.104 |
| Tumor differentiation |  |  | 0.012 |
| Poorly | 3 | 5 |  |
| Others | 4 | 50 |  |
| Portal invasion | 3 | 15 | 0.392 |
| Transplantation criteria |  |  |  |
| within Milan | 3 | 31 | 0.691 |

Abbreviation: AFP, alpha-fetoprotein; PIVKA-II, protein induced by vitamin K absence or antagonists-II; HBs Ag, hepatitis B antigen; HCV Ab, hepatitis C antibody; UICC, union for international cancer control.