**Supplemental Table 1** Comparison of background data at progression between each patientaccording to subsequent therapy

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | 2nd line MTA treatment(n=28) | TACE or HAIC(n=5) | BSC(n=20) | *P value\**  | *P value\*\** |
| Age (range), yr  | 75 (46-88) | 77 (72-85) | 75 (54-84) | 0.302 | 0.793 |
| Gender, Male/Female, n | 20/8 | 3/2 | 18/2 | 0.627 | 0.161 |
| Performance status, 0/1/2/3, n | 11/11/4/2 | 1/3/0/1 | 6/7/6/1 | 0.564 | 0.438 |
| Etiology, Viral/NBNC, n | 15/13 | 3/2 | 9/11 | 0.335 | 0.772 |
| Total bilirubin (range), mg/dL\*\*\* | 0.8 (0.4-1.9) | 1.2 (0.3-4.2) | 1.2 (0.3-4.2) | 0.046 | 0.062 |
| Albumin (range), g/dL\*\*\* | 3.5 (2.8-4.2) | 3.2 (2.3-4.4) | 3.2 (2.3-4.4) | 0.911 | 0.194 |
| Prothrombin activity (range), % | 94 (46-133) | 83 (61-130) | 83 (61-130) | 0.498 | 0.357 |
| Child-Pugh class, A/B/C, n | 20/8/0 | 4/0/1 | 10/8/2 | 0.164 | 0.127 |
| ALBI grade, 1/2/3, n | 4/24/0 | 0/4/1 | 3/13/4 | 0.241 | 0.047 |
| mALBI grade, 1/2a/2b/3, n | 4/8/16/0 | 0/2/2/1 | 3/4/9/4 | 0.188 | 0.114 |
| Size of hepatic tumor (range), mm\*\*\* | 34 (0-150) | 19 (10-35) | 50 (10-150) | 0.041 | 0.124 |
| MVI, present/absent, n | 6/22 | 0/5 | 6/14 | 0.556 | 0.521 |
| Relative tumor size, <50%/≥50%, n | 25/3 | 5/0 | 16/4 | 1 | 0.429 |
| EHM, present/absent, n | 16/12 | 2/3 | 5/15 | 0.639 | 0.039 |
| AFP (range) ng/mL\*\*\* | 346 (1.4-250000) | 95 (40.7-1037) | 553 (1.5-239700) | 0.514 | 0.992 |
| DCP (range), mAU/mL\*\*\* | 1328 (60-244750) | 459 (61-12792) | 2718 (23-227500) | 0.116 | 0.877 |

\* 2nd line MTA treatment vs TACE or HAIC

\*\* 2nd line MTA treatment vs BSC

\*\*\*median

MTA, molecular targeted agent; TACE, transcatheter arterial chemo embolization; HAIC, hepatic arterial infusion chemotherapy; BSC, best supportive care; NBNC, non-hepatitis B virus and non-hepatitis C virus; mALBI, modified albumin-bilirubin; MVI, macroscopic vascular invasion; EHM, extra hepatic metastasis; AFP, -fetoprotein; DCP, des-γ-carboxy prothrombin.