

**Table S1.** The clinical characteristics of patients undergoing cTACE or DEB-TACE in short-term LEN-TACE.

| Characteristic                 | cTACE (n = 19)   | DEB-TACE (n = 6) | P value |
|--------------------------------|------------------|------------------|---------|
| Age, median (range), years     | 79 (63-90)       | 84.5 (68-89)     | 0.48    |
| Weight, median (range), kg     | 59.2 (44.5-89.8) | 57.3 (45.0-65.1) | 0.23    |
| Sex Male, %                    | 13 (68.4)        | 5 (83.3)         | 0.64    |
| Etiology, %                    |                  |                  |         |
| Hepatitis B                    | 1 (5.3)          | 1 (16.7)         | 0.18    |
| Hepatitis C                    | 7 (36.8)         | 0 (0)            |         |
| Non-B non-C                    | 11 (57.9)        | 5 (83.3)         |         |
| Child-Pugh stage, %            |                  |                  |         |
| A                              | 18 (94.7)        | 4 (66.7)         | 0.13    |
| B                              | 1 (5.3)          | 2 (33.3)         |         |
| mALBI grade, %                 |                  |                  |         |
| 1,2a                           | 13 (68.4)        | 3 (50.0)         | 0.63    |
| 2b                             | 6 (5.3)          | 3 (50.0)         |         |
| AFP, %                         |                  |                  |         |
| <200 ng/mL                     | 16 (84.2)        | 4 (66.7)         | 0.73    |
| ≥200 ng/mL                     | 3 (15.8)         | 2 (33.3)         |         |
| tumor size, median (range), mm | 21 (11-63)       | 73.5 (12-108)    | <0.05*  |
| tumor number, median(range)    | 1 (1-4)          | 1 (1-15)         | 0.78    |
| Liver cancer staging, %        |                  |                  |         |
| early                          | 14 (73.7)        | 1 (16.7)         | <0.05*  |
| intermeidate                   | 5 (26.3)         | 5 (83.3)         |         |

**Table S2.** Univariate analyses of clinical characteristics associated with CR rate and PFS.

| Variable                                   | CR rate (4 weeks after the first TACE) |                | PFS                  |                |
|--|--|----------------|----------------------|----------------|
|  | OR(95%CI)                              | <i>p</i> value | HR(95%CI)            | <i>p</i> value |
| Etiology(virus / non-virus)                | 0.875(0.116-6.579)                     | 0.897          | 2.021(0.225-18.146)  | 0.530          |
| Child-Pugh(A / B)                          | 0.471(0.034-6.568)                     | 0.575          | 0.408(0.045-3.706)   | 0.426          |
| mALBI(1,2a / 2b)                           | 0.875(0.116-6.579)                     | 0.897          | 0.390(0.065-2.350)   | 0.304          |
| AFP(<200ng/ml / ≥200ng/ml)                 | 1.067(0.092-12.401)                    | 0.959          | 0.226(0.035-1.452)   | 0.117          |
| Tumor size(<50mm / ≥50mm)                  | 0.078(0.008-0.792)                     | 0.031          | 0.438(0.043-4.463)   | 0.486          |
| Tumor number(1 / ≥2)                       | 0.917(0.123-6.825)                     | 0.932          | 1.702(0.283-10.240)  | 0.561          |
| Liver cancer staging(early / intermediate) | 0.089(0.008-1.002)                     | 0.050          | 0.680(0.112-4.123)   | 0.675          |
| TACE(cTACE / DEB-TACE)                     | 3.556(0.405-31.233)                    | 0.253          | 0.3872(0.623-24.047) | 0.146          |