| <b>Clinical variables</b> <sup>1</sup> | HBV-HCC                      | Public HBV-<br>HCC <sup>2</sup>  | Public HCV-<br>HCC <sup>2</sup> | <b>P-value</b> <sup>3</sup> |
|--|------------------------------|----------------------------------|---------------------------------|-----------------------------|
| Age (year)                             | 51.8±9.5                     | 50.7±10.8                        | 66.5±7.9                        |                             |
| Male number                            | 117 (82.4%)                  | 205 (86.9%)                      | 32 (74.4%)                      |                             |
| Viral infection                        |                              |                                  |                                 |                             |
| HCV infection                          | 0 (0%)                       | 0 (0%)                           | 43 (100%)                       |                             |
| HBV infection                          | 142 (100%)                   | 236 (100%)                       | 0 (0%)                          |                             |
| Total bilirubin (mg/dl)                | $1.05 \pm 1.28$              | -                                | 0.80±0.35                       |                             |
| Alanine aminotransferase (IU/l)        | 44.8±26.0                    | >50 IU/L<br>No. 99 (41.9%)       | 51.7±33.1                       |                             |
| Alpha-fetoprotein (ng/ml)              | >300 ng/ml<br>No. 48 (34.0%) | >300 ng/ml<br>No. 107 (46.1%)    | 345±962                         |                             |
| Tumor diameter (cm)                    | 5.85±3.74                    | >5cm<br>No. 84 (35.7%)           | 2.95±1.37                       |                             |
| Number of tumors                       | 1.14±0.35                    | Single nodule<br>No. 184 (78.0%) | 1.30±0.51                       |                             |
| Tumor differentiation                  |                              |                                  |                                 | 0.112                       |
| Well differentiated                    | 11 (8.02%)                   | -                                | 6 (14.0%)                       |                             |
| Moderately differentiated              | 79 (57.7%)                   | -                                | 29 (67.4%)                      |                             |
| Poorly differentiated                  | 47 (34.3%)                   | -                                | 8 (18.6%)                       |                             |
| Tumor stage                            |                              |                                  |                                 | 1.064×10 <sup>-1</sup>      |
| Ι                                      | 32 (23.5%)                   | 92 (42.0%)                       | 8 (18.6%)                       |                             |
| II                                     | 57 (41.9%)                   | 77 (35.2%)                       | 24 (55.8%)                      |                             |
| III                                    | 37 (27.2%)                   | 50 (22.8%)                       | 10 (23.3%)                      |                             |
| IV                                     | 10 (7.35%)                   | 0 (0%)                           | 1 (2.3%)                        |                             |
| Fibrosis stage                         |                              |                                  |                                 | 0.566                       |
| 0                                      | 8 (2.1%)                     | -                                | 0 (0%)                          |                             |
| 1                                      | 11 (10.5%)                   | -                                | 3 (7.0%)                        |                             |
| 2                                      | 21 (13.7%)                   | -                                | 6 (14.0%)                       |                             |
| 3                                      | 40 (26.3%)                   | -                                | 12 (27.9%)                      |                             |
| 4                                      | 61 (47.4%)                   | 218 (92.4%)                      | 22 (51.2%)                      |                             |
| Recurrence rate (within 2 yr)          | 69/142 (48.6%)               | 91/236 (38.6%)                   | 4/43 (9.30%)                    |                             |

## Table S2. Clinicopathological information on three HCC datasets

<sup>1</sup>Continuous variables are presented as mean values  $\pm$  standard deviation or percentage of cases.

<sup>2</sup>Values in public HBV-HCC and HCV-HCC were obtained by modifying previously published tables [3,4].

 $^{3}p$ -values were calculated using  $\chi^{2}$  test.