

Supplementary Table 1: Clinico-pathological features of the HNSCC and NSCLC patient groups.

| Clinical Parameters | HNSCC (n=50) | NSCLC (n=50) |
|-----------------------------|---------------------|---------------------|
| Average age (years) | 64 | 65 |
| Gender | | |
| Men | 31 | 25 |
| Women | 19 | 25 |
| Smokers | 37 | 29 |
| Tumor Classification | | |
| T1 | 16 | 21 |
| T2 | 16 | 26 |
| T3 | 8 | 1 |
| T4 | 10 | 2 |
| Lymph node status | | |
| N0 | 25 | 40 |
| N1 | 5 | 8 |
| N2 | 18 | 2 |
| N3 | 2 | 0 |
| Stage | | |
| I | 9 | 6 |
| II | 11 | 31 |
| III | 10 | 12 |
| IV | 20 | 0 |
| Unknown | 0 | 1 |
| Histologic Grade | | |
| WD | 6 | 7 |
| MD | 34 | 34 |
| PD | 10 | 9 |

WD=well differentiated; MD=moderately differentiated;
PD=poorly differentiated

Supplementary Table 2: Average signal of RRM2 and Bcl-2 in tumor tissues from HNSCC patients.

| Patient ID | RRM2 (Average Signal) | Bcl-2 (Average Signal) |
|------------|-----------------------|------------------------|
| P1 | 26.30 | 18.29 |
| P2 | 6.53 | 5.15 |
| P3 | 20.09 | 17.62 |
| P4 | 9.56 | 7.20 |
| P5 | 16.11 | 11.85 |
| P6 | 83.87 | 69.43 |
| P7 | 10.68 | 12.02 |
| P8 | 7.19 | 7.06 |
| P9 | 6.42 | 10.04 |
| P10 | 12.81 | 11.41 |
| P11 | 56.89 | 51.75 |
| P12 | 19.42 | 18.78 |
| P13 | 73.99 | 48.82 |
| P14 | 66.58 | 44.71 |
| P15 | 143.60 | 117.44 |
| P16 | 69.21 | 43.00 |
| P17 | 107.77 | 71.44 |
| P18 | 14.11 | 12.94 |
| P19 | 9.55 | 7.16 |
| P20 | 18.78 | 17.49 |
| P21 | 28.83 | 22.53 |
| P22 | 15.34 | 13.89 |
| P23 | 2.94 | 6.27 |
| P24 | 4.73 | 2.62 |
| P25 | 29.75 | 24.77 |
| P26 | 42.07 | 30.13 |
| P27 | 38.12 | 29.73 |
| P28 | 4.54 | 7.03 |
| P29 | 8.53 | 16.20 |
| P30 | 13.21 | 18.48 |
| P31 | 98.88 | 65.99 |
| P32 | 31.87 | 24.37 |
| P33 | 143.18 | 102.02 |
| P34 | 79.35 | 47.38 |
| P35 | 95.81 | 64.18 |
| P36 | 118.49 | 91.08 |
| P37 | 109.65 | 85.22 |
| P38 | 43.13 | 40.32 |

| | | |
|-----|--------|--------|
| P39 | 26.94 | 19.68 |
| P40 | 141.34 | 139.20 |
| P41 | 25.70 | 17.91 |
| P42 | 37.74 | 34.38 |
| P43 | 86.91 | 62.44 |
| P44 | 30.43 | 30.83 |
| P45 | 11.96 | 14.42 |
| P46 | 37.46 | 28.35 |
| P47 | 23.58 | 16.94 |
| P48 | 23.91 | 20.22 |
| P49 | 28.67 | 23.41 |
| P50 | 33.23 | 29.05 |

Supplementary Table 3: Average signal of RRM2 and Bcl-2 in tumor tissues from NSCLC patients.

| Patient ID | RRM2 (Average Signal) | Bcl-2 (Average Signal) |
|------------|-----------------------|------------------------|
| P1 | 28.71594071 | 24.7982375 |
| P2 | 22.86258635 | 15.01462365 |
| P3 | 31.51778571 | 23.80506 |
| P4 | 27.09079714 | 19.10001429 |
| P5 | 46.30242571 | 33.63964 |
| P6 | 27.58784143 | 15.33757 |
| P7 | 49.11832095 | 44.30994714 |
| P8 | 45.027525 | 37.33005766 |
| P9 | 121.599239 | 74.97379825 |
| P10 | 44.06265067 | 39.966246 |
| P11 | 51.97170333 | 32.70336667 |
| P12 | 54.5984161 | 36.16492114 |
| P13 | 18.3218061 | 18.72284476 |
| P14 | 58.02658667 | 28.7110181 |
| P15 | 74.123554 | 40.787156 |
| P16 | 29.75200779 | 23.05144607 |
| P17 | 25.96462 | 16.49501143 |
| P18 | 35.28259679 | 22.06889679 |
| P19 | 16.431764 | 22.71050133 |
| P20 | 87.13786257 | 46.74077371 |
| P21 | 133.770461 | 68.22222 |
| P22 | 9.923973238 | 17.71428257 |
| P23 | 23.78479681 | 30.17260429 |
| P24 | 96.32699286 | 53.62513114 |
| P25 | 70.68993886 | 64.25393371 |
| P26 | 54.45232667 | 39.70418333 |
| P27 | 103.9142057 | 46.1967619 |
| P28 | 64.81723 | 42.71096929 |
| P29 | 38.46408357 | 22.15541445 |
| P30 | 42.6534545 | 27.5342186 |
| P31 | 54.17631417 | 27.75444167 |
| P32 | 28.65904 | 20.04529143 |
| P33 | 50.69424671 | 31.59638413 |
| P34 | 26.682444 | 19.870548 |
| P35 | 26.27468238 | 20.07794714 |
| P36 | 31.22586111 | 23.84079841 |
| P37 | 27.60624857 | 19.64535571 |
| P38 | 38.859274 | 22.10491133 |

| | | |
|-----|-------------|-------------|
| P39 | 25.11659333 | 15.93511952 |
| P40 | 24.31249429 | 17.87705286 |
| P41 | 23.68338048 | 17.2796551 |
| P42 | 95.14262714 | 47.65935667 |
| P43 | 73.52551867 | 43.72173133 |
| P44 | 64.33212867 | 40.87865876 |
| P45 | 48.74285857 | 32.02594095 |
| P46 | 77.62825 | 57.44852629 |
| P47 | 148.7428452 | 70.36840476 |
| P48 | 111.6444375 | 63.744545 |
| P49 | 123.4509019 | 58.77112248 |
| P50 | 28.48291048 | 21.75961131 |