### SUPPLEMENTARY TABLES

Supplementary Table 1. RT-PCR, ChIP primer sets and siRNA/shRNA sequences used in this study.

| Primer sequences for RT-PCR                      |  |
|--------------------------------------------------|--|
| **IGF-1R**                                       |  |
| 5′-ACC CGG AGT ACT TCA GCG CT - 3′ (forward)     |  |
| 5′-CAC AGA AGC TTC GTT GAG AA - 3′ (reverse)     |  |
| **GAPDH**                                        |  |
| 5′ - AAAGGGCCCTGACAACCTTT - 3′ (forward)        |  |
| 5′ - GGTGGTCCAGGGGTCTTACT - 3′ (reverse)        |  |
| **SMYD3**                                        |  |
| 5′-CCATATGCTCACTCAGATGATGT-3′ (forward)         |  |
| 5′-GTGTATCATCTCCACAGAGTT-3′ (reverse)           |  |
| **β-actin**                                      |  |
| 5′-AGTTGCGTTACACCCTTTCTTG-3′ (forward)          |  |
| 5′-CACCTCACCCTTTCCAGTTT-3′ (reverse)            |  |

| Primer sequences for ChIP assay                  |  |
|--------------------------------------------------|--|
| **GAPDH**                                        |  |
| 5′ - AAA GGG CCC TGA CAA CTC TT - 3′ (forward)   |  |
| 5′ - GGT GGT CCA GGG GTC TTA CT - 3′ (reverse)   |  |
| **IGF-1R**                                       |  |
| 5′ - TAG CCT TTC CCT GGC TAC CCA- 3′ (forward)   |  |
| 5′ - GGT TTC CCA AGA CTC GCG GA- 3′ (reverse)    |  |

| **siRNA sequences**                              |  |
|--------------------------------------------------|--|
| E2F-1 siRNA 1 5′-AUG CUA CGA AGG UCC UGA CAC GUC A-3′ |  |
| E2F-1 siRNA 2 5′-AAA GUU CUC CGA AGA GUC CAC GGC U-3′ |  |
| Scramble siRNA: 5′ - CCU ACA UCC CGA UCG AUG AUG UUG A - 3′ |  |

| **SMYD3 shRNA targets**                          |  |
|--------------------------------------------------|--|
| shRNA #1 5′ - AGC CTG ATT GAA GAT TTG ATT - 3′    |  |
| shRNA #2 5′ - GCT TCC CGA TAT CAA CAT CTA - 3′   |  |
| Control: 5′ - CCU ACA UCC CGA UCG AUG AUG UUG A - 3′ |  |
Supplementary Table 2. SMYD3 expression in relation to clinicopathologic variables in 70 BC patients undertaken TURBT.

| Variable                  | Total | SMYD3 staining (%) | P-value |
|---------------------------|-------|--------------------|---------|
|                           | 0–1   | 2–3                |         |
| Sex                       |       |                    |         |
| Male                      | 47 (67.1) | 40 (57.1) | 7 (10.0) | 1.000 |
| Female                    | 23 (32.9) | 19 (27.1) | 4 (5.7)  |       |
| Age, years (median 67)    |       |                    |         |
| < 67                      | 39 (55.7) | 34 (48.6) | 5 (7.1)  | 0.456 |
| ≥ 67                      | 31 (44.3) | 25 (35.7) | 6 (8.6)  |       |
| Muscle invasive           |       |                    |         |
| No                        | 46 (65.7) | 43 (61.4) | 3 (4.3)  | 0.010 |
| Yes                       | 24 (34.3) | 16 (22.9) | 8 (11.4) |       |
| Histological grade        |       |                    |         |
| G1                        | 29 (41.4) | 28 (40.0) | 1 (1.4)  |       |
| G2                        | 25 (35.7) | 21 (30.0) | 4 (5.7)  | 0.006 |
| G3                        | 16 (22.9) | 10 (14.3) | 6 (8.6)  |       |

0–1: low-SMYD3 expression; 2–3: high-SMYD3 expression. Associations between SMYD3 immunostaining level and clinicopath-oncogical parameters were analyzed with $\chi^2$-test.