

Supplementary Table 1: Clinical and pathologic data for control and cancer patients of the testing set (n=248)

| | No. of Cases | Gender | | Mean Age±STDEV |
|--|--------------|--------|----|----------------|
| | | F | M | |
| Controls | 148 | 83 | 65 | 66.17±11.21 |
| Healthy individuals | 92 | 50 | 42 | 64.97±10.42 |
| Benign disorders | 56 | 33 | 23 | 67.68±11.94 |
| Urine incontinence | 27 | 21 | 6 | 67.34±12.81 |
| BPH* | 10 | 0 | 10 | 71.40±7.79 |
| Kidney stone | 8 | 4 | 4 | 60.5±12.17 |
| Neurogenic bladder | 5 | 5 | 0 | 55.00±11.60 |
| Chronic renal failure | 2 | 1 | 1 | |
| Hydroureter | 2 | 1 | 1 | |
| Cystitis | 1 | 1 | 0 | |
| Proteinuria | 1 | 0 | 1 | |
| Tumor patients | 100 | 16 | 84 | 68.07±11.46 |
| LGPTCC (grade 1 and 2) | 37 | 7 | 30 | 66.97±12.01 |
| HGIN/CIS** | 5 | 1 | 4 | 68.33±8.43 |
| HGPTCC (grade 3) | 7 | 0 | 7 | 65.50±8.69 |
| HGNPTCC (grade 3) | 51 | 8 | 43 | 69.12±11.41 |
| Superficial TCC (T _a -T _{1a}) | 49 | 8 | 41 | 66.95±11.12 |
| Invasive TCC (T _{1b} -higher) | 51 | 8 | 43 | 69.12±11.41 |

* BPH - benign prostatic hyperplasia

** High-grade intraurothelial neoplasia/carcinoma *in situ*