

**Supplementary Table 1 |** Clinical features of patients with BPH and PCa.

| Characteristic              | PCa<br>n=33           | BPH<br>n=15         | P-value       |
|-----------------------------|-----------------------|---------------------|---------------|
| Age (year), median (range)  | 78 (74.5, 82.5)       | 71 (65, 78)         | <b>0.0162</b> |
| PSA (ng/mL), median (range) | 56.00 (26.26, 260.20) | 17.60 (8.48, 40.00) | <b>0.0016</b> |
| Smoking status              |                       |                     | 0.2096        |
| Yes, n (%)                  | 2 (6.1)               | 1 (6.7)             |               |
| No, n (%)                   | 25 (75.8)             | 14 (93.3)           |               |
| Unknown, n (%)              | 6 (18.2)              | 0 (0.0)             |               |
| Hypertension                |                       |                     | 0.5240        |
| Yes, n (%)                  | 12 (36.4)             | 8 (53.3)            |               |
| No, n (%)                   | 17 (51.5)             | 6 (40.0)            |               |
| Unknown, n (%)              | 4 (12.1)              | 1 (6.7)             |               |
| Diabetes Mellitus           |                       |                     | 0.8476        |
| Yes, n (%)                  | 4 (12.1)              | 2 (13.3)            |               |
| No, n (%)                   | 25 (75.8)             | 12 (80.0)           |               |
| Unknown, n (%)              | 4 (12.1)              | 1 (6.7)             |               |
| Symptoms                    |                       |                     | 0.1773        |
| LUTS, n (%)                 | 9 (27.3)              | 9 (60.0)            |               |
| Hematuria, n (%)            | 4 (12.1)              | 1 (6.7)             |               |
| Other symptoms, n (%)       | 6 (18.2)              | 0 (0.0)             |               |
| Asymptomatic, n (%)         | 10 (30.3)             | 4 (26.7)            |               |
| Unknown, n (%)              | 4 (12.1)              | 1 (6.7)             |               |
| Laboratory test             |                       |                     |               |
| Hemoglobin                  |                       |                     | 0.1165        |
| Anemia (<120g/L), n (%)     | 6 (18.2)              | 0 (0.0)             |               |
| Normal, n (%)               | 22 (66.7)             | 14 (93.3)           |               |
| Unknown, n (%)              | 5 (15.2)              | 1 (6.7)             |               |
| Creatin                     |                       |                     | 0.3089        |
| High (>137μmol/L), n (%)    | 3 (9.1)               | 0 (0.0)             |               |
| Normal, n (%)               | 25 (75.8)             | 14 (93.3)           |               |
| Unknown, n (%)              | 5 (15.2)              | 1 (6.7)             |               |
| Albumin                     |                       |                     | 0.3760        |
| Low (<40g/L), n (%)         | 4 (12.1)              | 4 (26.7)            |               |
| Normal, n (%)               | 24 (72.7)             | 10 (66.7)           |               |
| Unknown, n (%)              | 5 (15.2)              | 1 (6.7)             |               |
| Fasting blood glucose       |                       |                     | 0.1909        |
| High (>6.1mmol/L), n (%)    | 4 (12.1)              | 5 (33.3)            |               |
| Low (<3.9mmol/L), n (%)     | 0 (0.0)               | 0 (0.0)             |               |
| Normal, n (%)               | 24 (72.7)             | 9 (60.0)            |               |
| Unknown, n (%)              | 5 (15.2)              | 1 (6.7)             |               |
| Microscopic hematuria       |                       |                     | 0.2465        |
| Yes, n (%)                  | 11 (33.3)             | 2 (13.3)            |               |

|               |           |           |
|---------------|-----------|-----------|
| No, n (%)     | 16 (48.5) | 11 (73.3) |
| Unkown, n (%) | 6 (18.2)  | 2 (13.3)  |

Contingency tables were analyzed using the chi-square test. Numerous data chosen from the normal population were analyzed using Student's *t*-test. Numerous data that were not chosen from the normal population were analyzed using the Mann-Whitney test. BMI, body mass index; BPH, Benign prostatic hyperplasia; LUTS, lower urinary tract symptoms; n, number of cases; PCa, prostate cancer; PSA, prostate-specific antigen.