

**Table S1.** Clinical Characteristics of Patients

Parameter	Healthy Controls (n = 233)	PCa Patients (n = 236)	P value
Age, years	69.3±5.2	68.2±5.8	0.32
BMI, kg/m <sup>2</sup>	23.11±1.27	23.32±1.52	0.69
DBP, mmHg	75.13±8.16	76.44±8.21	0.49
SBP, mmHg	147.10±22.31	145.09±23.38	0.66
Serum FBG, mmol/L	5.7±1.3	5.9±1.5	0.19
Serum TG, mmol/L	1.5±0.2	1.6±0.3	0.54
Serum TC, mmol/L	4.7±0.6	4.8±0.7	0.53
PSA (ng/ml mean ± SD)	1.2±0.34	9.8±5.6	0.0019

Note: BMI, body mass index; DBP, diastolic blood pressure; FBG, fasting (2 hours postprandial) blood glucose; SBP, systolic blood pressure; TC, total cholesterol; TG, triglycerides; PSA, serum prostate-specific antigen. Parameter values of patients and healthy control were compared using t-test. The p values less than 0.05 were considered significant.

**Table S2.** ROC curve analysis of potential biomarkers in PCa.

No	Metabolite	AUC	Sensitivity (%)	Specificity (%)
1	Glycocholic acid	0.973	97.2	96.3
2	Hippurate	0.967	94.1	92.0
3	5-Hydroxy-L-tryptophan	0.958	88.7	78.2
4	Taurocholic acid	0.826	85.4	83.9
5	Chenodeoxycholic acid	0.871	78.8	69.7