## **Supplementary material**

## Table S1. A copy of the questionnaire translated from Swedish.

After the biopsy, did you notice (circle your answer)					
1. Fever above 38°C? YES NO					
2. Increased problems with discharge of urine YES NO urgency, burning sensation of pain?					
The following question are only to be completed if you answered YES to question 1 or 2.					
3. Did you see a doctor for these symptoms? YES NO					
4. Did you receive antibiotics for your symptoms? YES NO					
5. What antibiotics?					
For how many days?					
6. Were you admitted to a hospital? YES NO					
if YES, where?and when?					

**Table S2.** Logistic regression model of the primary outcome.

	Bivariate	Multivariate			
	Outcome	OR (95% CI)	р	OR (95% CI)	р
Age	-	0.99 (0.97-1.01)	.16	0.99 (0.97-1.01)	.19
Time Period					
2003-2007	33/2218 (1.5%)	1		1	
2008-2012	51/2798 (1.8%)	1.23 (0.80-1.93)	.36	1.20(0.74-1.98)	.47
2013-2017	103/3957 (2.6%)	1.77 (1.21-2.67)	.005	1.78(1.14 - 2.87)	.01
PSA					
< 3	10/494 (2.1%)	0.84 (0.41-1.54)	.61	1.02(0.47-1.94)	.95
3-10	111/5258 (2.0%)	1		1	
10-20	37/1817 (2.0%)	0.97(0.65-1.41)	.88	1.03(0.69-1.52)	.88
>20	29/1387 (2.1%)	0.95(0.60-1.43)	.81	1.32(0.80 - 2.11)	.26
Volume					
0-40	77/4355 (1.8%)	1		1	
40-100	95/4143 (2.3%)	1.30 (0.96-1.77)	.09	1.28(0.94-1.77)	.12
≥100	10/298 (3.4%)	1.93 (0.93-3.59)	.054	1.88 (0.88 - 3.64)	.08
Biopsy cores					
0-6	25/1825 (1.4%)				
7-10	117/5444 (2.2%)	1.58(1.04 - 2.50)	.04	1.48(0.91 - 2.51)	.13
≥11	44/1696 (2.6%)	1.92(1.18 - 3.19)	.01	1.51 (0.85 - 2.72)	.17
Prophylaxis					
Standard	148/7141(2.1%)	1		1	
Prolonged/other	38/1795 (2.1%)	1.02(0.70-1.45)	.91	0.91(0.62 - 1.32)	.64
Repeated biopsy					
first	142/6507 (2.2%)	1		1	
repeated	45/2466 (1.8%)	0.83(0.59-1.16)	.29	0.74 (0.51 - 1.04)	.09
PSA density					
< 0.10	35/1347 (2.6%)	ref		NA	
0.10 - 0.15	46/1845 (2.5%)	0.96 (0.62 - 1.50)	0.85	NA	
> 0.15	101/5595 (1.8%)	0.69 (0.47 - 1.03)	0.06	NA	

**Table S3.** Results of the questionnaires during the study period 2003–2017.

	no infection, $n = 8786$	infection, $n = 187$
Questionnaires submitted	4786 (55%)	109 (58%)
Side effect reported*	887 (17%)	102 (94%)
Fever*	114 (2%)	88 (81%)
Urinary urgency*	413 (8%)	64 (55%)
Saw a doctor within 2 weeks*	142 (3%)	89 (76%)
Prescribed additional antibiotics*	122 (2%)	82 (70%)

<sup>\*</sup> The denominator for percentage is submitted questionnaires

**Table S4.** Subgroup analysis of the final period 2013-2017 divided into two terms.

	2013-2014	2015-2017
Biopsies performed, n	1696	2261
Blood culture taken (%)	55 (3)	65 (3)
- Positive blood	29 (2)	26 (1)
Urine culture taken (%)	57 (3)	83 (4)
- Positive urine	18 (1,0)	30 (1,3)
Age, median years (range)	67 (28-96)	67 (31-95)
Prophylaxis, n (%)		
Single dose ciprofloxacin	1354 (80)	1597 (71)
Extended course of ciprofloxacin	313 (19)	629 (28)
Other type of antibiotic	29 (2)	35 (2)
Missing, n	-	-
Positive nitrite, n (%)	33 (1)	32 (1)
Missing, n	-	-
PSA level, median μg/l (range)	7.70 (0.11-23666)	7.1 (0.1-17000)
Missing, n	-	2
Volume of prostate, median ml (range)	39 (1-300)	42 (1-999)
Missing, n	30	43
T-Stage, n (%)		
T0/T1	1198 (71)	1453 (64)
T2-T4	498 (29.4)	808 (36)
Missing, n	-	-
Biopsies cores taken, median (range)	10 (1-18)	10 (1-22)
Missing, n	-	1

**Figure S1.** Annual trends for total number of biopsies, covariates and the primary outcome (blood and/or urine positivity rate). *p* values are from Mann-Kendall tests for continuous variables and from Cochrane-Armitage tests for proportions.

