

Supplement 1. *Quantification of transcripts of AMACR, PCA3 in urinary sediments by qPCR*

No:	CaP specimens				Non-CaP specimens			
	Sample ID	Serum PSA	PCA3	AMACR	Sample ID	Serum PSA	PCA3	AMACR
1	1004	9.8	580.0	420.3	1003	2.2	42.3	5.5
2	1005	4.5	43.1	35.8	1008	3	0.5	13.3
3	1006	8.4	49.9	12.5	1010	2.2	19.2	3.6
4	1007	4.4	36.0	86.2	1011	0.6	66.6	24.7
5	1012	48.7	0.1	11.0	1015	7.7	14.7	3.0
6	1013	4.5	18.3	1.2	1016	5.2	10.6	9.1
7	1014	4.3	1162.4	346.9	1017	5.2	1.0	2.5
8	1019	3.3	55.7	33.9	1023	6.8	9.4	72.0
9	1021	6.4	73.1	209.8	1026	6.8	1.0	0.3
10	1022	9.4	10.6	37.4	1027	5.2	31.7	1.5
11	1024	6.4	245.1	171.8	1028	5.9	16.9	3.4
12	1025	6.8	82.8	58.7	1029	2.5	61.6	9.4
13	1031	5.6	19.9	12.4	1032	1	72.3	9.3
14	1035	4.5	53.6	11.5	1033	2.8	25.3	6.0
15	1038	0.3	38.8	42.4	1036	6	37.0	2.6
16	1041	4	25.5	1.4	1037	3.6	27.6	47.0
17	1042	4.2	21.6	2.6	1039	5.9	12.6	5.5
18	1044	111	25.6	1.6	1040	8.4	14.9	7.0
19	1045	0.5	69.5	1.7	1043	4.4	8.2	6.7
20	1046	0.7	20.9	1.3	1050	0.8	7.8	14.1
21	1048	4.9	26.9	17.7	1051	8	6.4	1.6
22	1049	4.3	6.5	2.4	1052	3.5	29.7	22.8
23	1055	1.4	96.2	23.7	1053	4.9	8.0	2.5
24	1057	6.4	44.8	12.7	1056	1.1	74.6	22.9
25	1062	6.3	102.4	14.0	1059	4.2	46.4	4.7
26	1064	4.3	5.6	1.4	1060	6.4	31.2	59.4
27	1070	4.91	14.4	2.0	1061	0.6	3.4	7.6
28	1073	2.9	9.9	1.6	1063	3.9	90.5	5.2
29	1074	4.8	20.3	13.9	1066	0.8	0.4	0.6
30	1075	6	149.8	15.4	1067	4.7	0.0	24.4
31	1081	2.9	78.4	12.6	1068	5.7	1.4	1.1
32	1083	7.8	63.0	10.8	1069	4.7	0.1	1.0
33	1093	20	2027.7	10.7	1071	7.6	122.2	25.4
34	1094	7.6	1.0	12.3	1072	2.8	7.5	3.4
35	1095	11.6	38.6	35.0	1076	3.3	129.0	14.9
36	1096	7.2	5.8	2.1	1077	1.3	21.4	3.4
37	1099	8.6	148.2	36.6	1078	6	15.3	20.0
38	1100	3.9	50.8	13.0	1080	7.98	3.3	0.6
39	1102	4.6	8.2	3.1	1086	3	52.7	3.1
40	1105	5	2.5	1.6	1087	6.89	158.8	2.6
41	1106	3.1	6.1	23.9	1088	2.3	17.2	35.6
42	1107	5.8	37.5	13.8	1089	5.4	4.8	0.5
43	1111	0.1	412.3	150.2	1090	9.4	44.8	7.7
44					1103	12.4	0.5	0.5
45					1104	4.9	0.9	0.6
46					1108	3.2	154.1	14.9
47					1110	5.8	0.5	3.6
48					1112	3	14.2	2.9
49					1113	3.6	2.7	1.8

Note: Scores for PCA3 and AMACR in opposite to the cutoff point are shaded.

Supplement 2. *Sensitivity and specificity of biomarker assays in different age groups*

Age group (years)	PCA3 mRNA score % (95% CI)		AMACR mRNA score % (95% CI)		Serum PSA level % (95% CI)	
	Sensitivity	Specificity	Sensitivity	Specificity	Sensitivity	Specificity
≤59	64 (35-92)	61 (41-81)	64 (35-92)	74 (56-92)	82 (59-100)	57 (36-77)
60-69	73 (46-99)	57 (36-78)	64 (35-92)	76 (58-94)	64 (35-92)	29 (16-41)
≥70	76 (58-94)	60 (17-100)	76 (58-94)	40 (0-83)	76 (58-94)	40 (0-83)
All ages	72 (59-85)	59 (45-73)	70 (56-83)	71 (59-84)	77 (64-89)	45 (31-59)