

**Table 3. Association between urinary biomarkers of circadian hormone dichotomized by medians and clinical staging of prostate cancer**

		Control I n=240	Localized <sup>a</sup> n=76	Advanced <sup>a</sup> n=104	Localized <sup>a</sup> vs. control		Advanced <sup>a</sup> vs. control		Advanced <sup>a</sup> vs. localized <sup>a</sup>	
		n (%)			aOR <sup>b</sup>	95% CI	aOR <sup>b</sup>	95% CI	aOR <sup>b</sup>	95% CI
Melatonin <sup>c</sup>										
Low		108 (45.0)	40 (52.9)	69 (66.7)	1.0	(Ref)	1.0	(Ref)	1.0	(Ref)
High		132 (55.0)	36 (47.1)	35 (33.3)	0.72	0.38 – 1.36	0.49	0.26– 0.89	0.61	0.27– 1.28
Cortisol <sup>c</sup>										
Low		129 (53.7)	36 (47.1)	39 (37.7)	1.0	(Ref)	1.0	(Ref)	1.0	(Ref)
High		111 (46.3)	40 (52.9)	65 (62.3)	1.28	0.68 – 2.41	1.96	1.07– 3.57	1.87	0.87– 4.01
*MT/C <sup>c</sup>										
Low		105 (43.8)	40 (52.9)	72 (69.6)	1.0	(Ref)	1.0	(Ref)	1.0	(Ref)
High		135 (56.2)	36 (47.1)	32 (30.4)	0.63	0.33 – 1.20	0.33	0.17– 0.62	0.44	0.20– 0.99
Preoperative PSA										
< 10 ng/mL		120 (52.4)	28 (36.8)	12 (11.5)	1.0	(Ref)	1.0	(Ref)	1.0	(Ref)
≥ 10 ng/mL		109 (47.6)	48 (63.2)	92 (88.5)	2.13	1.10 – 4.15	8.17	3.77– 17.72	3.88	1.49– 10.09
MT/C <sup>c</sup>	PSA**									
High	< 10	63 (26.3)	12 (16.0)	3 (2.9)	1.0	(Ref)	1.0	(Ref)	1.0	(Ref)
Low	< 10	57 (23.7)	15 (20.0)	9 (8.7)	1.44	0.52 – 3.97	3.71	0.71– 19.44	2.57	0.40– 16.64
High	≥ 10	61 (25.4)	23 (30.0)	29 (27.8)	2.16	0.85 – 5.46	9.36	2.04– 42.91	4.34	0.79– 23.93
Low	≥ 10	48 (24.6)	26 (34.0)	63 (60.6)	3.41	1.34 – 8.69	32.06	7.17– 143.2 9	9.41	1.77– 50.07
P for multiplicative interaction					0.888		0.930		0.871	

<sup>a</sup> Localized PCa defined as stage T1 or T2; Advanced PCa defined as stage T3 or T4 and or distant metastases; <sup>b</sup> Adjusting for the same variables in Table 2; <sup>c</sup> Medians of 42.83 ng/mg creatinine for melatonin, 23.92 ng/mg creatinine for cortisol, and 1.81 for MT/C ratio. \*<sup>c</sup>Melatonin/Cortisol ratio; \*\*Prostate-specific antigen (ng/dL).