

**Supplemental Table S3.** UIC and Thyroid Function for the Likelihood of Aggressive Overall PTC<sup>a</sup> in Case-Only Study

	BRAF mutation			LN metastasis			ETE		
	Yes	No	OR (95% CI) <sup>b</sup>	Yes	No	OR (95% CI) <sup>b</sup>	Yes	No	OR (95% CI) <sup>b</sup>
UIC, µg/gCr									
<85	1	0	1.77 (0.07–47.14) <sup>c</sup>	0	1	0.28 (0.01–7.36) <sup>c</sup>	1	0	2.31 (0.09–61.41) <sup>c</sup>
85–219	19	11	1.00	18	15	1.00	17	13	1.00
≥220	197	103	1.06 (0.48–2.35)	123	215	0.52 (0.25–1.10)	158	133	0.88 (0.40–1.90)
UIC, µg/L									
20–99	4	0	8.14 (0.39–72.1) <sup>c</sup>	1	4	0.57 (0.05–6.40)	2	2	0.74 (0.08–7.18)
100–199	10	9	1.00	7	12	1.00	8	6	1.00
200–299	10	7	1.25 (0.32–4.89)	7	10	1.24 (0.31–4.97)	12	5	1.53 (0.34–6.93)
≥300	193	98	1.86 (0.70–4.92)	126	205	0.85 (0.32–2.28)	154	133	0.77 (0.26–2.33)
UIC, µg/L									
100–299	20	16	1.00	14	22	1.00	20	11	1.00
≥300	193	98	1.67 (0.80–3.49)	126	205	0.77 (0.37–1.60)	154	133	0.62 (0.28–1.37)
TSH, µIU/mL									
0.4–2.15	128	59	1.00	84	137	1.00	101	82	1.00
≥2.16	83	45	0.91 (0.55–1.51)	51	84	1.10 (0.68–1.76)	69	58	1.04 (0.64–1.69)
Free T4, ng/dL									
0.7–1.24	57	35	1.00	36	72	1.00	53	43	1.00
≥1.25	159	79	1.28 (0.76–2.18)	105	158	1.22 (0.74–2.01)	122	103	1.03 (0.62–1.71)
T3, ng/mL									
0.87–1.19	108	47	1.00	71	106	1.00	81	70	1.00
≥1.20	102	64	0.70 (0.43–1.13)	66	116	0.80 (0.52–1.25)	89	72	1.08 (0.68–1.71)

UIC, urinary iodine concentration; PTC, papillary thyroid cancer; BRAF, v-raf murine sarcoma viral oncogene homolog B1; LN, lymph node; ETE, extra-thyroidal extension; OR, odds ratio; CI, confidence interval; TSH, thyroid stimulating hormone; T4, thyroxine; T3, triiodothyronine.

<sup>a</sup>Overall PTC meant PTC+papillary thyroid microcarcinoma (PTMC); <sup>b</sup>Adjusted for age, sex, total energy intake, education level, family history of cancer, and each past history of dyslipidemia and benign thyroid disease; <sup>c</sup>Logit estimation in Cochran-Mantel-Haenszel method.