

Supplemental Table S5. Hazard Ratios of Subsequent Primary Cancer Risk in Thyroid Cancer Patients Undergoing Unilateral Lobectomy according to Levothyroxine Dosage ($n = 79,733$)

Variable	Total no.	Non-levothyroxine		Levothyroxine		Levothyroxine dosage							
		No.	HR	No.	HR (95% CI) ^a	Q1 (<100 µg/day)		Q2 (100–123 µg/day)		Q3 (124–149 µg/day)		Q4 (≥ 150 µg/day)	
						No.	HR (95% CI) ^a	No.	HR (95% CI) ^a	No.	HR (95% CI) ^a	No.	HR (95% CI) ^a
No.	79,733	16,911	1.00	62,822	1.00	15,706	1.00	15,698	1.00	15,711	1.00	15,707	1.00
Total SPCs	2,731	599	1.00	2,132	1.01 (0.92–1.10)	414	1.00 (0.88–1.14)	448	0.93 (0.82–1.05)	548	0.98 (0.88–1.11)	722	1.12 (1.00–1.26)
Head and neck (C00–C14, C30–C32)	131	37	1.00	94	0.71 (0.48–1.05)	12	0.42 (0.21–0.82)	14	0.52 (0.28–0.96)	27	0.82 (0.49–1.36)	41	1.14 (0.71–1.82)
Digestive system (C15–C26)	776	162	1.00	614	1.12 (0.94–1.34)	97	0.93 (0.72–1.21)	117	0.97 (0.76–1.24)	154	1.05 (0.84–1.31)	246	1.52 (1.24–1.87)
GI tract (C15–C20)	493	103	1.00	390	1.17 (0.94–1.45)	65	1.04 (0.75–1.44)	83	1.13 (0.84–1.52)	97	1.05 (0.79–1.39)	145	1.44 (1.11–1.87)
Esophagus (C15)	19	5	1.00	14	0.91 (0.33–2.54)	4	1.16 (0.31–4.41)	2	0.62 (0.12–3.22)	3	0.71 (0.17–3.00)	5	1.30 (0.37–4.57)
Stomach (C16)	229	52	1.00	177	1.04 (0.76–1.42)	31	1.04 (0.65–1.66)	45	1.23 (0.81–1.85)	42	0.90 (0.60–1.36)	59	1.09 (0.74–1.61)
Colon and rectum (C18–C20)	237	43	1.00	194	1.40 (1.00–1.95)	30	1.12 (0.69–1.82)	35	1.12 (0.71–1.77)	53	1.34 (0.89–2.02)	76	1.89 (1.29–2.78)
Hepato-biliary-pancreatic (C22–C25)	208	40	1.00	168	1.25 (0.88–1.77)	30	1.16 (0.71–1.89)	29	1.01 (0.62–1.65)	41	1.16 (0.75–1.79)	68	1.67 (1.11–2.51)
Liver and biliary tract (C22–C24)	150	28	1.00	122	1.27 (0.84–1.93)	22	1.20 (0.68–2.12)	19	0.92 (0.51–1.66)	33	1.32 (0.80–2.20)	48	1.64 (1.00–2.68)
Pancreas (C25)	60	13	1.00	47	1.13 (0.60–2.09)	9	1.11 (0.46–2.70)	10	1.16 (0.50–2.71)	8	0.73 (0.30–1.76)	20	1.62 (0.79–3.35)
Lung (C34)	311	74	1.00	237	0.97 (0.74–1.26)	42	0.95 (0.64–1.41)	56	1.05 (0.74–1.50)	57	0.93 (0.66–1.31)	82	1.04 (0.74–1.45)
Skin (C43–C44)	82	26	1.00	56	0.66 (0.41–1.06)	12	0.73 (0.36–1.47)	11	0.52 (0.25–1.06)	19	0.84 (0.46–1.53)	14	0.49 (0.25–0.98)
Breast (C50)	776	152	1.00	624	1.02 (0.86–1.22)	128	1.01 (0.79–1.28)	145	0.96 (0.77–1.21)	171	1.08 (0.87–1.34)	180	1.01 (0.81–1.26)
Female genital system (C51–C58)	187	33	1.00	154	1.19 (0.81–1.73)	32	1.41 (0.85–2.34)	36	1.19 (0.73–1.92)	36	1.05 (0.65–1.68)	50	1.27 (0.81–1.99)
Cervix (C53)	63	11	1.00	52	1.20 (0.63–2.31)	10	1.34 (0.55–3.28)	9	0.89 (0.37–2.19)	12	1.07 (0.47–2.43)	21	1.79 (0.85–3.76)
Uterus (C54–C55)	61	11	1.00	50	1.12 (0.58–2.17)	9	1.20 (0.49–2.96)	15	1.51 (0.69–3.31)	12	1.00 (0.44–2.27)	14	0.92 (0.40–2.10)
Ovary (C56–C57)	71	13	1.00	58	1.16 (0.64–2.13)	15	1.76 (0.80–3.85)	12	1.00 (0.45–2.21)	13	0.99 (0.46–2.15)	18	1.17 (0.57–2.4)
Male genital system (C60–C63)	109	29	1.00	80	1.03 (0.67–1.58)	18	1.39 (0.76–2.54)	14	1.08 (0.57–2.06)	18	0.83 (0.46–1.50)	30	0.93 (0.53–1.61)
Prostate (C61)	105	28	1.00	77	1.03 (0.66–1.60)	17	1.35 (0.73–2.50)	13	1.04 (0.54–2.03)	18	0.86 (0.48–1.57)	29	0.93 (0.53–1.64)
Urinary system (C64–C68)	152	41	1.00	111	0.82 (0.57–1.19)	28	1.26 (0.77–2.08)	23	0.84 (0.50–1.42)	22	0.61 (0.36–1.03)	38	0.76 (0.48–1.22)
Kidney (C64)	101	22	1.00	79	1.05 (0.65–1.70)	22	1.84 (0.99–3.42)	16	1.02 (0.53–1.97)	15	0.75 (0.39–1.46)	26	0.92 (0.51–1.69)
Bladder (C67)	42	14	1.00	28	0.67 (0.35–1.29)	7	1.08 (0.42–2.78)	6	0.78 (0.29–2.06)	6	0.51 (0.20–1.34)	9	0.51 (0.20–1.27)
Brain, CNS (C70–C72)	47	9	1.00	38	1.11 (0.53–2.32)	9	1.41 (0.54–3.65)	4	0.50 (0.15–1.64)	11	1.25 (0.52–3.04)	14	1.05 (0.42–2.61)
Brain (C71)	36	8	1.00	28	0.92 (0.41–2.04)	8	1.46 (0.53–4.02)	2	0.30 (0.06–1.41)	7	0.88 (0.32–2.44)	11	0.96 (0.36–2.59)
Hematologic system (C81–C96)	183	43	1.00	140	0.99 (0.70–1.40)	28	1.06 (0.64–1.74)	26	0.77 (0.47–1.26)	38	0.99 (0.64–1.53)	48	1.04 (0.68–1.60)
Non-Hodgkin's lymphoma (C82–C86)	86	20	1.00	66	1.02 (0.61–1.68)	12	0.84 (0.41–1.75)	12	0.71 (0.35–1.47)	20	1.11 (0.60–2.07)	22	1.17 (0.63–2.17)
Multiple myeloma (C90)	25	6	1.00	19	0.95 (0.38–2.41)	5	1.19 (0.35–4.07)	3	0.60 (0.15–2.43)	5	0.95 (0.29–3.14)	6	0.93 (0.28–3.11)
Leukemia (C91–C95)	45	12	1.00	33	0.85 (0.43–1.65)	8	1.36 (0.52–3.56)	4	0.48 (0.15–1.54)	8	0.74 (0.30–1.82)	13	0.95 (0.42–2.13)

HR, hazard ratio; CI, confidence interval; SPC, subsequent primary cancer; C, diagnostic code by International Classification of Diseases (ICD)-10; GI, gastrointestinal; CNS, central nervous system.

^aHR estimated by Cox proportional hazard models adjusted for age, sex, and cumulative doses of radioactive iodine therapy.