Supplementary Table S3. Multivariable Cox Proportional Hazard Models for All-Cause Mortality Among California Differentiated Thyroid Cancers with Total or Near-Total Thyroidectomy, 1991–2008

Variables	Males			Females		
	HR	CI	p	HR	CI	p
Neck reoperation						
No	REF	_	_	REF	_	_
Yes	1.80	[1.45–2.23]	< 0.001	2.35	[1.94–2.85]	< 0.001
Initial treatment						
No radioiodine	REF		-0.001	REF		-0.001
Radioiodine	0.75	[0.66–0.85]	< 0.001	0.79	[0.72–0.88]	< 0.001
Race/ethnicity NH white	REF			REF		
NH African American	0.86	[0.59–1.25]	0.44	1.38	[1.10–1.72]	0.005
Hispanic	0.96	[0.81–1.13]	0.61	0.97	[0.85–1.10]	0.62
NH Asian/Pacific Islander	0.84	[0.69-1.02]	0.09	0.79	[0.68-0.91]	0.001
Other/unknown	1.56	[0.50-4.88]	0.45	0.88	[0.49-1.56]	0.66
Age at diagnosis (years)						
15–34	0.04	[0.03-0.05]	< 0.001	0.02	[0.01–0.02]	< 0.001
35–44 45–54	0.06 0.15	[0.05–0.09] [0.12–0.19]	<0.001 <0.001	0.05 0.11	[0.04–0.07] [0.09–0.13]	<0.001 <0.001
45–54 55–64	0.13	[0.12–0.19]	< 0.001	0.11	[0.09=0.13]	< 0.001
65–74	0.50	[0.42–0.61]	< 0.001	0.46	[0.40–0.53]	< 0.001
≥75	REF	_	_	REF	_	_
Year of diagnosis						
1991–1993	1.42	[1.03-1.96]	0.03	1.86	[1.40-2.46]	< 0.001
1994–1996	1.33	[1.03–1.72]	0.03	1.67	[1.34–2.07]	< 0.001
1997–1999	1.37	[1.08–1.75]	0.01 0.49	1.82	[1.49–2.22]	< 0.001
2000–2002 2003–2005	1.09 1.00	[0.85–1.39] [0.78–1.27]	0.49	1.37 1.15	[1.12–1.68] [0.93–1.41]	0.002 0.19
2006–2008	REF	[0.76-1.27]	<del></del>	REF	[0.75=1. <del>4</del> 1]	
Histology						
Papillary	0.76	[0.63-0.90]	0.002	0.78	[0.68-0.90]	< 0.001
Follicular	REF		-	REF	_	_
N stage						
Stage N0	REF		_	REF		
Stage N1 Unknown	1.19 1.25	[1.02–1.39]	0.03 0.05	1.28 1.23	[1.11–1.46] [1.04–1.44]	<0.001 0.01
	1.23	[1.00–1.54]	0.03	1.23	[1.04-1.44]	0.01
M stage Stage M0	REF			REF	_	
Stage M1	2.97	[2.34–3.76]	< 0.001	2.44	[1.96–3.04]	< 0.001
Unknown	0.87	[0.67–1.13]	0.31	0.93	[0.76–1.13]	0.46
Tumor size						
<1 cm	REF	_	_	REF	_	_
1–2 cm	1.02	[0.82–1.28]	0.84	0.96	[0.82–1.12]	0.59
2–3 cm 3–4 cm	1.13 1.33	[0.90–1.41]	0.29 0.02	1.06 1.34	[0.89–1.25] [1.11–1.62]	0.53 0.003
3–4 cm	1.56	[1.05–1.69] [1.26–1.93]	< 0.02	1.34	[1.11–1.62]	< 0.003
Unknown	1.57	[1.23–2.00]	< 0.001	1.39	[1.16–1.68]	< 0.001
Extrathyroidal extension						
No	REF	_	_	REF	_	_
Yes	1.69	[1.46–1.96)	< 0.001	1.88	[1.68–2.11]	< 0.001
Unknown	1.44	[1.12-1.84)	0.004	1.26	[1.02-1.55]	0.03
Comorbidities at diagnosis <sup>a</sup>	1.20	F1 07 1 70	0.000	1.20	F1 11 1 107	0.00:
No admission ≤2 years of diagnosis	1.30	[1.07-1.59)	0.009	1.29	[1.11–1.49]	< 0.001
0 1–2	REF 1.63	[1.33–2.00)	<0.001	REF 1.50	 [1.29–1.75]	< 0.001
1-2 ≥3	3.34	[2.60–4.30)	< 0.001	3.33	[2.78–4.00]	< 0.001
Neighborhood socioeconomic status		[			r	
Low	1.33	[1.17–1.51)	< 0.001	1.20	[1.08–1.33]	< 0.001
High	REF	′		REF		_

(continued)

SUPPLEMENTARY TABLE S3. (CONTINUED)

Variables	Males			Females		
	HR	CI	p	HR	CI	p
Marital status						
Never married	1.33	[1.10–1.60)	0.003	1.15	[0.98-1.34]	0.08
Previously married	1.23	[1.01–1.50)	0.04	1.24	[1.11–1.39]	< 0.001
Married	REF		_	REF		
Unknown marital status	1.45	[0.92-2.28]	0.11	1.31	[0.94–1.82]	0.11
Health insurance at diagnosis						
No insurance/self-pay	1.13	[0.66–1.91]	0.66	1.09	[0.70-1.70]	0.69
Private	REF		_	REF		_
Medicaid/government	1.47	[1.13–1.91]	0.004	1.69	[1.40-2.04]	< 0.001
Medicare	1.16	[0.97–1.39]	0.10	1.32	[1.15–1.52]	0.001
Unknown insurance	0.99	[0.78-1.26]	0.94	1.11	[0.91–1.36]	0.31
Hospital thyroidectomy volume <sup>b</sup>						
Low	REF			REF	_	
High	0.98	[0.86–1.12]	0.79	0.92	[0.83-1.03]	0.14
Unknown	1.05	[0.85-1.30]	0.66	1.07	[0.91-1.26]	0.39

 $<sup>^{</sup>a}$ Exlihauser comorbidity index diagnosis or two years prior to diagnosis, cancer was excluded as a comorbidity.  $^{b}$ High-volume thyroidectomy hospital defined as the top 10% of hospitals performing thyroidectomies.