**Supplementary Table 1:** Risk of death due to any cause among  $\geq$ 1-year Caucasian adult survivors of specific lymphoid neoplasms who developed a second primary cutaneous melanoma, by cutaneous melanoma stage, in comparison to the risk of death among those who did not develop a second primary cutaneous melanoma, 17 SEER Program registries, 2000-2014\*

First primary LN subtype	Alive	Dead	HR	95% CI	
CLL/SLL					
No CM	26,108	10,389	ref		
Second primary CM with localized and ≤1.0mm thick disease	115	40	1.00	(0.73,	1.36)
Second primary CM with localized and >1.0mm thick disease	45	24	1.58	(1.06,	2.36)
Second primary CM with regional/distant disease	16	32	5.00	(3.53,	7.07)
Second primary CM with unknown stage	11	<5†	-	-	-
DLBCL					
No CM	24,358	8,957	ref		
Second primary CM with localized and $\leq 1.0$ mm thick disease	62	11	0.91	(0.50,	1.64)
Second primary CM with localized and >1.0mm thick disease	18	<5†	-	-	-
Second primary CM with regional/distant disease	6	18	7.87	(4.96,	12.51)
Second primary CM with unknown stage	8	<5†	-	-	-
FL					
No CM	20,735	5,358	ref		
Second primary CM with localized and ≤1.0mm thick disease	62	11	0.90	(0.50,	1.63)
Second primary CM with localized and >1.0mm thick disease	17	9	1.97	(1.03,	3.80)
Second primary CM with regional/distant disease	7	8	5.30	(2.65,	10.61)
Second primary CM with unknown stage	<5†	<5†	-	-	-
PCN					
No CM	13,078	13,380	ref		
Second primary CM with localized and $\leq 1.0$ mm thick disease	38	12	0.70	(0.40,	1.23)
Second primary CM with localized and >1.0mm thick disease	11	8	1.32	(0.66,	2.63)
Second primary CM with regional/distant disease	6	8	1.62	(0.81,	3.24)
Second primary CM with unknown stage	5	<5†	-	-	-

Abbreviations: CLL/SLL - chronic lymphocytic leukemia/small lymphocytic leukemia; CI - confidence interval; CM - cutaneous melanoma; DLBCL - diffuse large B-cell lymphoma; FL - follicular lymphoma; HL - Hodgkin lymphoma; HR - hazard ratio; LN - lymphoid neoplasm; MZL - marginal zone lymphoma; PCN - plasma cell neoplasm; ref - reference; SEER - Surveillance, Epidemiology and End Results; "-" - not applicable.

\* HRs were estimated from multivariable Cox regression models using age as the underlying time scale and adjusting for sex and year of first primary diagnosis (2000-2004, 2005-2009, 2010-2013). Diagnosis of a second primary CM was modeled as a time-dependent variable. In order to protect patient confidentiality, SEER does not provide exact day of diagnosis, which resulted in survival dates slightly different from the SIR analysis and the following missing cases: CLL/SLL (n=4), DLBCL (n=1), FL (n=1), and PCN (n=16). HRs for death following second primary CM among survivors of MZL and HL are not presented because all stages of CM after MZL or HL had fewer than 5 cases per category.

† HRs are not presented when the number of deceased cases was <5.